

**Environmental Impact Statement/
Overseas Environmental Impact Statement
Point Mugu Sea Range
TABLE OF CONTENTS**

APPENDIX G	AGENCY CORRESPONDENCE	G-1
G.1	Cooperating Agency Status.....	G-2
G.1.1	Navy Request Letter to the National Marine Fisheries Service	G-2
G.1.2	National Marine Fisheries Service Response Letter	G-5
G.1.3	Navy Request Letter to the U.S. Fish and Wildlife Service	G-6
G.2	Marine Mammal Protection Act	G-9
G.2.1	Navy Transmittal Letter to the National Marine Fisheries Service for Letter of Authorization Application	G-9
G.3	Endangered Species Act.....	G-10
G.3.1	Navy Request Letter to the National Marine Fisheries Service	G-10
G.4	Essential Fish Habitat Assessment	G-12
G.4.1	Navy Transmittal Letter to the National Marine Fisheries Service	G-12
G.4.2	National Marine Fisheries Service Response Letter to the Navy	G-14
G.4.3	Navy Response Letter to the National Marine Fisheries Service	G-28
G.5	National Historic Preservation Act Compliance	G-30
G.5.1	Government-to-Government Tribal Consultations.....	G-30
G.5.1.1	Navy Invitation Letter to Tribes for Consultation (Example)	G-30
G.5.1.2	Navy Invitation Letter to Tribes for Consultation (Recipient List)	G-33
G.5.1.3	Rincon Band of Luiseño Indians Response Letter	G-34
G.5.1.4	Navy Response Letter to Rincon Band of Luiseño Indians.....	G-35
G.5.1.5	Pechanga Band of Luiseño Mission Indians Response Letter	G-42
G.5.1.6	Navy Response Letter to Pechanga Band of Luiseño Mission Indians	G-44
G.5.1.7	Navy Follow-Up Invitation Letter to Tribes for Consultation (Example).....	G-51
G.5.1.8	Navy Follow-Up Invitation Letter to Tribes for Consultation (Recipient List)	G-54
G.5.1.9	Navy Invitation Letter to Tribes for Section 106 Consultation (Examples)	G-55
G.5.1.10	Navy Invitation Letter to Tribes for Section 106 Consultation (Recipient List)	G-69
G.5.1.11	Pala Band of Mission Indians Section 106 Response Letter	G-70

G.5.1.12	Rincon Band of Luiseño Indians Section 106 Response Letter	G-71
G.5.1.13	Pechanga Band of Luiseño Mission Indians Section 106 Response Letter	G-72
G.5.1.14	Navy Finding of No Adverse Effects to Historic Properties for Activities Associated with the Point Mugu Sea Range (Example)	G-78
G.5.1.15	Navy Finding of No Adverse Effects to Historic Properties for Activities Associated with the Point Mugu Sea Range (Recipient List)	G-92
G.5.1.16	Rincon Band of Luiseño Indians Response Letter to Navy Finding of No Adverse Effects to Historic Properties Associated with the Point Mugu Sea Range	G-93
G.5.1.17	Santa Ynez Band of Chumash Indians Response Letter to Navy Finding of No Adverse Effects to Historic Properties Associated with the Point Mugu Sea Range	G-98
G.5.1.18	Pechanga Band of Luiseño Mission Indians Response Letter to Navy Finding of No Adverse Effects to Historic Properties Associated with the Point Mugu Sea Range	G-99
G.5.1.19	Navy Request for Rincon Band of Luiseño Indians to Review Navy's Proposed Modification of the Undertaking to Include Pre-and Post-Event Visitation, San Nicolas Island Associated with the Point Mugu Sea Range	G-101
G.5.1.20	Rincon Band of Luiseño Indians Response Letter to the Proposed Modification of the Undertaking to Include Pre-and Post-Event Visitation, San Nicolas Island Associated with the Point Mugu Sea Range	G-104
G.5.1.21	Summary of Tribal Correspondence and Communication	G-108
G.5.2	State Historic Preservation Officer Consultations	G-118
G.5.2.1	Navy Consultation Letter to the State Historic Preservation Officer for Section 106 Process	G-118
G.5.2.2	State Historic Preservation Officer Response Letter to the Navy	G-129
G.5.2.3	Navy Consultation Letter to the State Historic Preservation Officer for Section 106 Process	G-131
G.5.2.4	Navy Concurrence Request Letter to the State Historic Preservation Officer for Finding of No Adverse Effect for Activities Associated with the Point Mugu Sea Range	G-140
G.5.2.5	California Office of Historic Preservation Response Letter to Navy Request for Concurrence on Finding of No Adverse Effects to Historic Properties Associated with the Point Mugu Sea Range	G-157
G.5.3	Advisory Council on Historic Preservation Correspondence	G-159

	G.5.3.1	Advisory Council on Historic Preservation Letter to the Navy for Finding of No Adverse Effect Associated with the Point Mugu Sea Range	G-159
	G.5.3.2	Navy Response Letter to the Advisory Council on Historic Preservation Letter to the Navy for Finding of No Adverse Effect Associated with the Point Mugu Sea Range.....	G-162
G.6		Coastal Zone Management Act	G-184
	G.6.1	Navy Consistency Determination Letter to the California Coastal Commission.....	G-184
	G.6.2	California Coastal Commission Adopted Findings	G-186
	G.6.3	California Coastal Commission Concurrence Letter to the Navy	G-239

List of Figures

There are no figures in this appendix.

List of Tables

Table G-1: Navy and Tribal Correspondence Summary	G-108
---	-------

This page intentionally left blank.

Appendix G Agency Correspondence

Appendix G contains correspondence sent between the Navy and government agencies with respect to cooperating agency status, Marine Mammal Protection Act, Endangered Species Act, Essential Fish Habitat Assessment, National Historic Preservation Act, and Coastal Zone Management Act.

G.1 Cooperating Agency Status

G.1.1 Navy Request Letter to the National Marine Fisheries Service



DEPARTMENT OF THE NAVY
Office of the Chief of Naval Operations
2000 Navy Pentagon
Washington DC 20350-2000

5090
Ser N45/18U132371
May 7, 2018

Mr. Eric Schwaab
Assistant Administrator
Office of Protected Resources
National Marine Fisheries Service
1315 East West Highway
Silver Spring, MD 20910-6233

Dear Mr. Schwaab:

SUBJECT: COOPERATING AGENCY REQUEST FOR THE POINT MUGU SEA RANGE
ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL
IMPACT STATEMENT

In accordance with the National Environmental Policy Act (NEPA) and Executive Order 12114, the Department of the Navy (Navy) is initiating the preparation of an Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) for the Point Mugu Sea Range (PMSR) to evaluate the potential environmental effects associated with military activities. Military activities include Research Development Testing and Evaluation (RDT&E) and training within the PMSR Study Area. The Study Area includes the PMSR and an offshore temporary operating area to cover larger operations such as hypersonic activities off the PMSR. RDT&E activities include the use of aircraft, vessels, targets, ordnance, electronic warfare, biodegradable polymer vessel stopping payloads, direct energy systems/weapons, laser systems/weapons, radar and microwave systems, electromagnetic railgun/systems/weapons, and unmanned systems within the in-water and airspace areas of the PMSR Study Area.

PMSR is located 60 miles northwest of Los Angeles offshore of Ventura County, California, and consists of 36,000 square miles of controlled sea and airspace designated for testing and training activities. Naval Air Systems Command Naval Air Warfare Center Weapons Division Point Mugu meets the established mission to conduct state-of-the-art weapons systems testing and evaluation, and maintains military operational readiness, by providing a safe, operationally realistic, and thoroughly instrumented sea range.

This EIS/OEIS will support authorization and consultation requirements under the Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA). To complete the analysis required by the MMPA and ESA in an efficient and effective way, the Navy believes that participation by the NMFS as a cooperating agency would be beneficial. Therefore, in accordance with the Council on Environmental Quality's (CEQ's) regulations implementing NEPA (specifically 40 CFR § 1501.6), and CEQ's 2002 guidance on cooperating agencies, the Navy requests that NMFS serve as a cooperating agency for the development of the PMSR EIS/OEIS.

5090
Ser N45/18U132371
May 7, 2018

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

- a. Gathering all necessary background information, including the most up-to-date scientific research, and preparing the EIS/OEIS and all necessary permit applications associated with the proposed action;
- b. Working with NMFS personnel to determine the method of estimating potential effects to protected marine species, including threatened and endangered species;
- c. Determining the scope of the EIS/OEIS, including the alternatives evaluated;
- d. Circulating the NEPA document with the public, including any other interested parties;
- e. Scheduling and supervising meetings held in support of the NEPA process and compiling any comments received from the public; and
- f. Maintaining an administrative record and responding to any Freedom of Information Act (FOIA) requests relating to the EIS/OEIS.

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

- a. Providing timely comments on working drafts of the EIS/OEIS. The Navy requests that comments on draft EIS/OEIS documents be provided in accordance with approved project schedules and commenting protocols;
- b. Responding to Navy requests for information, in particular related to review of the acoustic effects analysis and evaluation of the effectiveness of protection and mitigation measures;
- c. Participating, as necessary, in public engagement hosted by the Navy for discussion of issues related to the EIS/OEIS, including public meetings;
- d. Adhering to the overall schedule as set forth by the Navy in coordination with NMFS;
- e. Preparing any NMFS-specific documents, such as a Record of Decision, required to support the NMFS decision-making process;
- f. Maintaining an administrative record and responding to any FOIA requests relating to the EIS/OEIS; and

5090
Ser N45/18U132371
May 7, 2018

g. Providing a formal, written response to this request.

The Navy views NMFS' participation as an important element to the successful completion of the environmental planning process for the Point Mugu Sea Range EIS/OEIS. My point of contact for this action is Dawn Schroeder, (703) 602-4769, email: dawn.schroeder@navy.mil.

Sincerely,



C. A. Lahti
Rear Admiral, U.S. Navy
Director, Energy and Environmental
Readiness Division

Enclosure: 1. Notional schedule for PMSR EIS/OEIS MMPA, and ESA

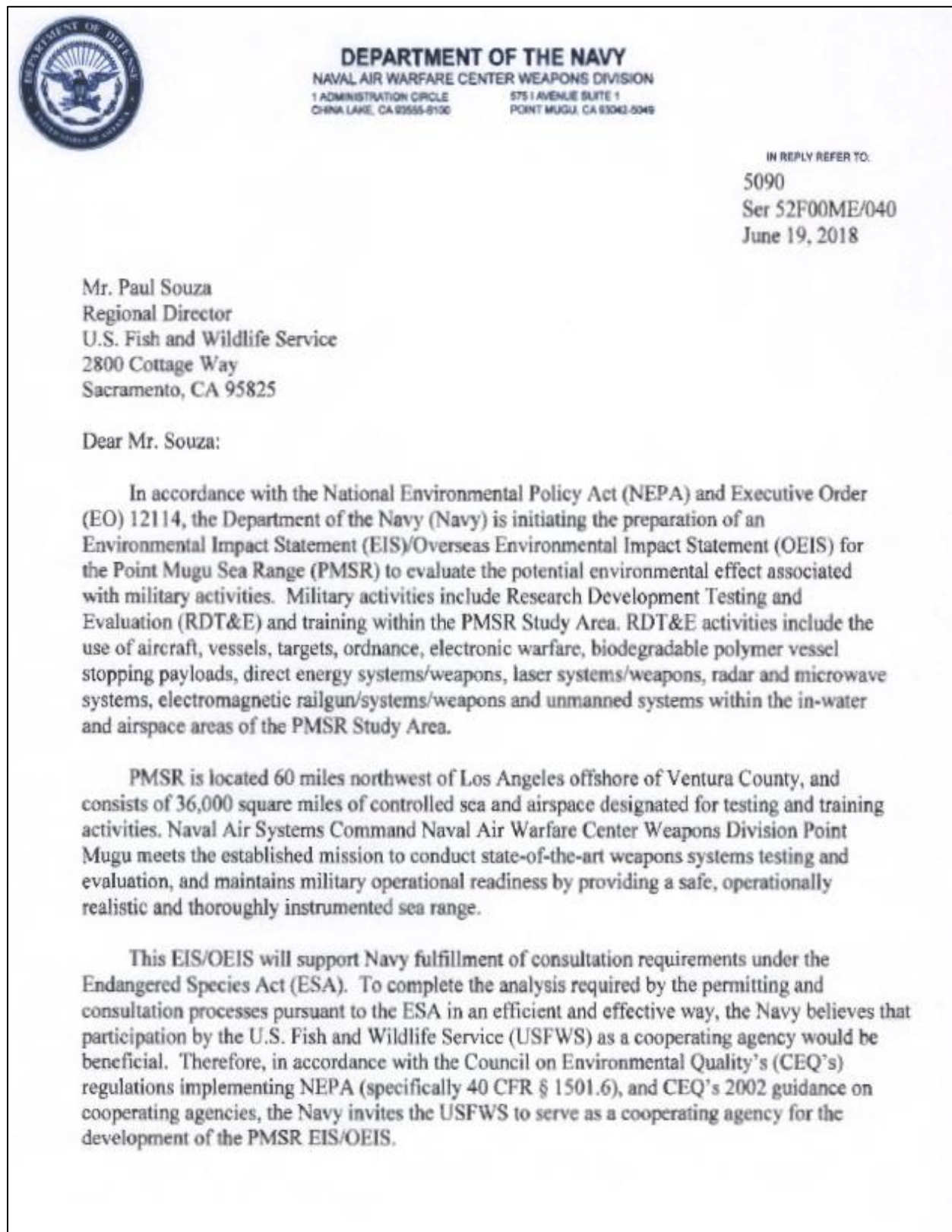
Copy to:

Assistant Secretary of the Navy (EI&E))
Deputy Assistant Secretary of the Navy (Environment)
Office of the Assistant General Counsel (EI&E)
Commander, Pacific Fleet (N465)
Commander, U.S. Fleet Forces Command (N465)
Commander, Navy Region Southwest
Commander, Naval Air Systems Command
Naval Facilities Engineering Command, Southwest
Commander, Navy Region Hawaii
Naval Facilities Engineering Command, Pacific

G.1.2 National Marine Fisheries Service Response Letter

	UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE 1315 East-West Highway Silver Spring, Maryland 20910 THE DIRECTOR
Captain C.A. Lahti Director, Energy and Environmental and Readiness Division Department of the Navy 2000 Navy Pentagon Washington, DC 20350-2000	
SEP 05 2019	
Dear Captain Lahti:	
Thank you for your letter requesting the National Marine Fisheries Service (NOAA Fisheries) be a cooperating agency in the preparation of an Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) to evaluate potential environmental effects in the Department of the Navy's (Navy) Point Mugu Sea Range (PMSR) Study Area. Activities conducted in the PMSR Study Area are military activities including Research Development Testing and Evaluation (RDT &E) and training. We support the Navy's decision to prepare an EIS/OEIS on this activity and agree to be a cooperating agency, due, in part, to our responsibilities under section 101(a)(5)(A) of the Marine Mammal Protection Act and under section 7 of the Endangered Species Act. NOAA Fisheries will make every effort to support the Navy in the development of an EIS/OEIS, including:	
▪ Participating, as necessary (and as funding is available where travel is required), in meetings hosted by the Navy for the discussion of issues related to the EIS/OEIS; ▪ Providing timely comments on working drafts of the EIS/OEIS in accordance with the agreed-upon project schedule and commenting protocols; ▪ Responding to Navy requests for information, in particular, those related to review of the acoustic effects analysis and evaluation of the effectiveness of protection and mitigation measures; ▪ Adhering to the overall schedule as set forth by the Navy in coordination with NMFS.	
If you need any additional information, please contact Jolie Harrison at (301) 427-8420.	
Sincerely,	
 Samuel D. Rauch III Deputy Assistant Administrator for Regulatory Programs National Marine Fisheries Service	
cc: Barry Thom, NMFS WCRO Vicki Wedell, NMFS HQ NMS Steve Leathery, NMFS HQ NEPA Dawn Schroeder, Navy	THE ASSISTANT ADMINISTRATOR FOR FISHERIES
 Printed on Recycled Paper	

G.1.3 Navy Request Letter to the U.S. Fish and Wildlife Service



5090
Ser 52F00ME/040
June 19, 2018

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

- Gathering all necessary background information, including the most up-to-date scientific research, and preparing the EIS/OEIS and all necessary permit applications associated with the proposed action;
- Working with USFWS personnel to determine the method of estimating potential effects to threatened and endangered species;
- Determining the scope of the EIS/OEIS, including the alternatives evaluated;
- Circulating the NEPA document with the general public, including any other interested parties;
- Scheduling and supervising meetings held in support of the NEPA process and compiling any comments received from the public; and
- Maintaining an administrative record and responding to any Freedom of Information Act requests relating to the EIS/OEIS.

Should USFWS agree to participate as a cooperating agency, the Navy requests the following support:

- Providing timely comments on working drafts of the EIS/OEIS documents. The Navy requests that comments on draft EIS/OEIS documents be provided in accordance with approved project schedules and commenting protocols;
- Responding to Navy requests for information, in particular related to evaluation of the effectiveness of protection and mitigation measures;
- Participating, as necessary, in public engagement hosted by the Navy for discussion of issues related to the EIS/OEIS, including public meetings;
- Adhering to the overall schedule as set forth by the Navy in coordination with USFWS;
- Preparing any USFWS-specific documents, such as a Record of Decision, required to support the USFWS decision-making process;
- Maintaining an administrative record and responding to any Freedom of Information Act requests relating to the EIS/OEIS; and

5090
Ser 52F00ME/040
June 19, 2018

- Providing a formal, written response to this request.

The point of contact for this action is Kenneth R. Seeley, (805)989-0927, email: kenneth.seeley@navy.mil.

Sincerely,

A handwritten signature in blue ink, appearing to read "D.A. Deakin", followed by a stylized flourish.

DWIGHT A. DEAKIN
By Direction

Copy to:
COMNAVAIR
OPNAV (N45)
CNRSW (N40)
NBVC CO
NBVC N45V
NAVFAC SW (L. Megliola)

G.2 Marine Mammal Protection Act

G.2.1 Navy Transmittal Letter to the National Marine Fisheries Service for Letter of Authorization Application



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER WEAPONS DIVISION
1 ADMINISTRATION CIRCLE 575 I AVENUE SUITE 1
CHINA LAKE, CA 93555-6100 POINT MUGO, CA 93041-5044

IN REPLY REFER TO:

5090
Ser EB2R00M/677
2 Mar 20

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

Dear Ms. Wieting:

On behalf of Commander, Naval Air Warfare Center Weapons Division (NAWCWD), a Letter of Authorization (LOA) application is being submitted pursuant to the Marine Mammal Protection Act requirement for the taking of marine mammals incidental to Navy testing and training activities in the NAWCWD Point Mugu Sea Range (PMSR) from October 2021 to October 2028. These activities are a continuation of the NAWCWD launch program for missiles and targets at San Nicolas Island and at-sea activities to support testing and training associated with operations on the PMSR.

Analysis supporting the application is contained within the PMSR LOA application and in the Navy's 2020 PMSR Draft Environmental Impact Statement/ Overseas Environmental Impact Statement. Due to the large file size and page count (~250 pages), the Navy will be electronically submitting the PMSR LOA application directly to the appropriate National Marine Fisheries Service staff.

Please extend my thanks to your staff for their continued support of the U.S. Navy's compliance process. We are available to meet with you or your staff should you have comments on the enclosed report or recommendations for future reports. My point of contact for these matters is Mr. Greg Sanders at 805-989-4852 or gregory.s.sanders@navy.mil.

Sincerely,


KENNETH SEELEY
By direction

G.3 Endangered Species Act

G.3.1 Navy Request Letter to the National Marine Fisheries Service



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER WEAPONS DIVISION
1 ADMINISTRATION CIRCLE 575 I AVENUE SUITE 1
CHINA LAKE, CA 93555-6100 POINT MUGO, CA 93042-5049

IN REPLY REFER TO:

5090
Ser EB2R00M/3399
November 25, 2020

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

SUBJECT: REQUEST FOR INITIATION OF ENDANGERED SPECIES ACT
SECTION 7 FORMAL CONSULTATION FOR COMMANDER, NAVAL AIR
WARFARE CENTER WEAPONS DIVISION

On behalf of Commander, Naval Air Warfare Center Weapons Division (NAWCWD) and in accordance with section 7 of the Endangered Species Act, the U.S. Navy requests initiation of formal consultation on testing and training activities in the NAWCWD Point Mugu Sea Range (PMSR). These activities are a continuation of activities to support military readiness operations on the PMSR. The PMSR is located adjacent to Los Angeles, Ventura, Santa Barbara, and San Luis Obispo Counties along the Pacific Coast of Southern California and includes a 36,000-square-mile Sea Range.

The proposed action may affect listed species that may be present in the PMSR action area by exposing them to environmental stressors associated with testing and training activities. The enclosed Biological Assessment is the Navy's primary document that provides the required information pursuant to 50 C.F.R. §402.12(f). The Navy is requesting formal consultation on Alternative 1 identified within the PMSR Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS).

The Navy is requesting formal consultation on ESA-listed species addressed in this Biological Assessment including Blue whale (*Balaenoptera musculus*); Fin whale (*Balaenoptera physalus*); Gray whale (*Eschrichtius robustus*) Western North Pacific DPS; Humpback whale (*Megaptera novaeangliae*) Mexico and Central America DPSs; Sei whale (*Balaenoptera borealis*); Sperm whale (*Physeter macrocephalus*); Guadalupe fur seal (*Arctocephalus townsendi*); Leatherback sea turtle (*Dermochelys coriacea*); and Loggerhead sea turtle (*Caretta caretta*) North Pacific Ocean DPS.

5090
Ser EB2R00M/3399
November 25, 2020

The Navy is also requesting concurrence on our Not Likely to Adversely Affect determinations for Black abalone (*Haliotis cracherodii*); White abalone (*Haliotis sorenseni*); Steelhead (*Oncorhynchus mykiss*) Southern California DPS; Eastern North Pacific right whale (*Eubalaena japonica*); and critical habitat for Leatherback sea turtle. The Navy is aware critical habitat that overlaps the PMSR has been proposed for Humpback Whale and has determined that the proposed action is not likely to adversely affect critical habitat for this species.

Analysis supporting these determinations is contained within the Biological Assessment and in the Navy's PMSR DEIS/OEIS. Due to the large file size and COVID-19 conditions, the Navy is electronically submitting the Biological Assessment to the appropriate National Marine Fisheries Service staff.

Please extend my thanks to your staff for their continued support of the U.S. Navy's compliance process. We are available to meet with you or your staff should you have comments on the enclosed report or recommendations for future reports. My point of contact for these matters is Mr. Greg Sanders at 760-793-0788 or gregory.s.sanders@navy.mil.

Sincerely,



KENNETH SEELEY
By direction

Copy to:
Ms. Kris Peterson, NMFS Office of Protected Resources, F/PR5

G.4 Essential Fish Habitat Assessment

G.4.1 Navy Transmittal Letter to the National Marine Fisheries Service



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER WEAPONS DIVISION
1 ADMINISTRATION CIRCLE 575 1 AVENUE SUITE 1
CHINA LAKE, CA 93555-6100 POINT MUGU, CA 93042-5049

IN REPLY REFER TO:

5090
Ser EB2R00M/1902
July 14, 2020

National Marine Fisheries Service
Attn: Mr. Chris Yates
Assistant Regional Administrator
Protected Resources Division
501 West Ocean Blvd., Suite 4200
Long Beach, CA 90802

Dear Mr. Yates:

SUBJECT: ESSENTIAL FISH HABITAT CONSULTATION FOR THE POINT MUGU SEA RANGE ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT

In accordance with the Magnuson-Stevens Fisheries Conservation and Management Act (MSA), the United States Navy (Navy) has prepared an Essential Fish Habitat (EFH) assessment for Naval Air Warfare Center Weapons Division (NAWCWD) military readiness activities occurring on the Point Mugu Sea Range. The Navy's assessment concludes that EFH may be adversely affected by testing and training activities and requests initiation of the MSA consultation process.

The Point Mugu Sea Range is located adjacent to Los Angeles, Ventura, Santa Barbara, and San Luis Obispo counties along the Pacific Coast of Southern California and includes 36,000 square miles of controlled sea and airspace designated for testing and training activities.

Currently, the Navy is preparing an EIS/OEIS to cover activities beginning in fall 2021 and into the foreseeable future. The 2020 Draft PMSR EIS/OEIS is available electronically at: www.pmsr-eis.com.

We appreciate your ongoing support in helping the Navy meet its environmental responsibilities. If you need additional information or have questions, please feel free to contact Ms. Cory Scott at (619) 767-8215 or cory.l.scott@navy.mil.

Sincerely,

Kenneth Seeley
By direction

SUBJECT: ESSENTIAL FISH HABITAT CONSULTATION FOR THE POINT MUGU SEA
RANGE ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS
ENVIRONMENTAL IMPACT STATEMENT

Enclosure: 1. PMSR Essential Fish Habitat Assessment

Copy to: (w/enclosures)

Ms. Catheryn E. Tortorici, NMFS Office of Protected Resources

Dr. Mary Kelly Ebert, Chief of Naval Operations (N454)

G.4.2 National Marine Fisheries Service Response Letter to the Navy



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

October 14, 2020

Department of the Navy
ATTN: Kenneth Seeley
Branch Head, Sea Range Sustainability Office
Naval Air Warfare Center Weapons Division
575 I Avenue Suite 1
Point Mugu, California 93042-5049

Re: Essential fish habitat consultation response letter for the Point Mugu Sea Range Testing and Training

Dear Mr. Seeley:

NOAA's National Marine Fisheries Service (NMFS) received the U.S. Department of the Navy (Navy) letter via email on July 14, 2020, requesting initiation of essential fish habitat (EFH) consultation for the Point Mugu Sea Range (PMSR) Testing and Training (proposed project) in accordance with the Magnuson-Stevens Fishery Conservation and Management Act (MSA). In addition to the letter, NMFS also received the EFH Assessment for the proposed project and the website where the 2020 Draft PMSR Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) was available. After reviewing the EFH Assessment and relevant sections of the EIS/OEIS, NMFS requested additional information regarding measures to avoid, minimize, and/or offset adverse effects to EFH via emails on July 31 and August 5, 2020. The Navy responded to that request on August 12, 2020 via email and a conference call was held on August 19, 2020 to provide further details and clarification. As a result of that call, the Navy agreed to augment the effects analysis originally included in the EFH Assessment, and that was provided to NMFS via email on September 23, 2020. After considering the above information, NMFS provides this response pursuant to section 305(b)(4)(A) of the MSA and the Fish and Wildlife Coordination Act (FWCA).

The Navy is consulting separately with NMFS Office of Protected Resources pursuant to the Marine Mammal Protection Act (MMPA) and section 7(a)(2) of the Endangered Species Act (ESA). The MMPA consultation is underway, and the ESA consultation is expected to begin next month.

Proposed Action

The Navy's Proposed Action is to conduct military readiness testing and training activities (e.g., aviation, surface, submarine, and expeditionary) within the PMSR. The PMSR is the Navy's primary ocean testing area for guided missiles and related ordnance, and consists of 36,000 square miles (mi²) of controlled sea and associated airspace. Test operations on the PMSR are conducted under highly controlled conditions, allowing for the collection of empirical data to

evaluate the performance of a weapon system or subsystem. The Proposed Action includes current range activities, as well as an increase in overall operational tempo and activities. Testing and training activities would be conducted at sea and in designated airspace within the PMSR Action Area. Additionally, missile launch operations and Directed Energy (DE) activities originating from Naval Base Ventura County (NBVC) Point Mugu and San Nicolas Island (SNI) are analyzed as part of the Proposed Action. The Navy does not propose any changes from current support activity from NBVC Port Hueneme, which consists primarily of vessels or surface target transiting in and out of Port Hueneme. Collectively, the Proposed Action supports current and projected military readiness requirements into the foreseeable future, as shown in Table 2-1 below, taken from the EFH Assessment.

Activity	Activity Sub Category	Environmental Baseline	Proposed Action
Aerial Targets (# of targets)	-	104	176
Surface Targets (# of targets)	-	430	522
Ordnance (# of ordnance)	Bombs	22	30
	Gun Ammunition	11,670	281,230
	Missiles	231	584
	Rockets	30	40

Table 2-1 in the EFH Assessment: Representative Tempo of Current PMSR Annual Events Between the Baseline and the Proposed Action

PMSR activities addressed in this EFH consultation are categorized under three primary mission areas: 1) air warfare (air-to-air, surface-to-air); 2) electronic warfare (EW) [directed energy - lasers and high-powered microwave (HPM) systems]; and 3) surface warfare (surface-to-surface, air-to-surface, and subsurface-to-surface).

The increase in tempo under the Proposed Action is mostly a result of an increase in Combat Systems Ship Qualification Trials (CSSQT). CSSQT is a series of comprehensive tests and trials designed to show that equipment and systems meet combat system requirements. CSSQT may use live and inert weapons, chaff, flares, jammers, and lasers. Naval Sea Systems Command has recently developed two new reporting programs to test and evaluate combat and weapons system performance on new classes of ships, resulting in an increased tempo on the PMSR.

Weapons testing may contain both flight and surface elements (target, weapon, launch aircraft or vessel, or range support aircraft). Fixed-wing and rotary-wing aircraft, including both manned and unmanned systems, also conduct weapons tests. Tests may be captive carry (i.e., the weapon is not released from the aircraft) or involve the release of ordnance or other expendables, including non-explosive and Telemetry-only warheads and live-fire munition rounds. Chaff or flares may be used during weapons tests, with the restriction that they are expended offshore in compliance with environmental regulations.

Concurrent with testing, surface training typically available on the PMSR includes tracking exercises, missile-firing exercises, gun-firing exercises, high-speed anti-radiation missile exercises, and shipboard self-defense system training. These events are limited in scope and generally focus on one or two tasks. Missiles may be fired against sub-sonic, supersonic, and hypersonic targets. Certain training events designed for single ships are conducted to utilize unique targets only available for training at the PMSR.

Aviation warfare training conducted at PMSR, categorized as unit level training, is designed for a small number of aircraft up to a squadron of aircraft. These training events occur at PMSR as it is the only West Coast Navy venue to provide powered air-to-air targets. These events are limited in scope and generally focus on one or two tasks. These scenarios require planning and coordination to ensure safe and effective training.

Missiles, bombs, and projectiles that detonate at or near (within 10 meters [m] of) the water's surface are considered for the potential that they could result in an acoustic impact on marine animals that may be underwater and nearby. Table 2-2 below, taken from the EFH Assessment, includes the number of explosives and events annually by Primary Mission Area and by modeling bin.

Primary Mission Area	Bin	Number of HE Munitions Used Annually	
		Environmental Baseline	Proposed Action
Surface-Surface	E1	808	28,600
	E3	1,121	5,530
	E5	110	1,666
Air-Surface; Surface-Air	E6	26	104
Air-Air, Air-Surface	E7	37	64
Air-Air, Air-Surface; Surface-Air	E8	26	71
Air-Surface; Surface-Surface	E9	49	63
Subsurface-Surface	E10	3	13

Notes:

- 1) HE = High Explosive
- 2) Explosive Bins for the Proposed Action range from E1 [0.1-0.25 Net Explosive Weight (NEW)] to E10 (>250-500 NEW)

Table 2-2 in the EFH Assessment: Explosives Detonating at or Near the Surface by Bins Supporting Primary Mission Areas for the Baseline and Proposed Action Annually.

Activities on the PMSR may include the use of a variety of platforms and systems (aircraft, support vessels and range craft, ships, submarines, targets, and munitions). Vessel types supporting the PMSR include tugs, target boats, range support boats based out of Port Hueneme (e.g., aviation rescue boats, Navy's Self Defense Test Ship), and ships (e.g., destroyers, cruisers, aircraft carriers, submarines) that are based elsewhere. A vessel activity is referred to as an event. An event may include a vessel entering the sea range, accomplishing its assigned mission, and then exiting the range. Events can last from a few hours to several days. The smaller support vessels are fuel limited and generally do not have crew accommodations to allow for an extended stay afloat on the PMSR. The larger vessels can remain on the range for extended periods supporting multi-day testing and training activities. Typical Navy vessels may include Guided Missile Cruiser, Guided Missile Destroyer, Amphibious Assault Ship, and Littoral Combat Ship.

Testing and training on the PMSR require a large array of representative targets, both airborne and surface targets. Typical airborne target systems include small jet-powered drones, supersonic missiles, and full-scale unmanned fighter aircraft, which can be flown via remote control from

the ground. Most target systems are not destroyed during testing or training and are recovered for reuse. Munition use is organized by type and includes bombs, projectile ammunition from various naval weapon systems, missiles, and rockets. Munitions may contain high explosives or be inert, depending on the mission objective.

Magnuson-Stevens Fishery Conservation and Management Act Comments

Action Area

The PMSR-controlled sea space parallels the California coast for approximately 225 nautical miles (NM) and extends approximately 180 NM seaward, aligning with the PMSR Warning Area airspace. NBVC is a regionalized naval installation composed of three operating facilities—Port Hueneme, Point Mugu, and SNI. All three installations provide support to the PMSR; however, for purposes of this EFH consultation, the Action Area only includes offshore areas of NBVC Point Mugu, NBVC Port Hueneme, and NBVC SNI. NBVC Port Hueneme provides port and docking facilities for PMSR support ships, target surface craft, the Navy's Self Defense Test Ship, and Fleet units using PMSR for testing and combat system qualification trials. The Action Area for this EFH consultation includes the port where support vessels and targets are located and transit to and from the PMSR. The Action Area includes the restricted waters extending from NBVC Point Mugu that underlie R-2519, due to activities conducted from the proposed DE Systems Integration Laboratory (DESIL); the Launch Complex Building 55; and the Alpha, Bravo, Charlie, and Nike Zeus launch pads. The Action Area for SNI activities analyzed as part of this EFH consultation includes DE testing areas associated with the proposed construction of a DE Test Facility and aerial target or missile launches at the existing Alpha Launch Complex and the Building 807 Launch Complex. The Alpha Launch Complex, comprised of Coyote and Upper Launch Pads, is typically used for launching the GQM-163A supersonic target. The Building 807 Launch Complex, comprised of the Tomahawk and Rolling Airframe Missile Launch Pads, is used to launch both targets and missiles.

The proposed project occurs within EFH for various federally managed fish species within the Coastal Pelagic Species, Pacific Coast Groundfish, and Highly Migratory Species Fishery Management Plans (FMPs). In addition, the project occurs within, or in the vicinity of, seagrass, canopy kelp, and rocky reef habitat, which are designated as habitat areas of particular concern (HAPC) for various federally managed fish species within the Pacific Coast Groundfish FMP. HAPC are described in the regulations as subsets of EFH which are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an environmentally stressed area. Designated HAPC are not afforded any additional regulatory protection under MSA; however, federal projects with potential adverse impacts to HAPC will be more carefully scrutinized during the consultation process.

In addition to HAPCs, other biogenic habitats, including deep-sea corals and sponges are known to occur within the Action Area. As noted in our email dated July 31, 2020, the following NOAA Deep-Sea Coral and Sponge Map Portal contains information regarding observed coral and sponge locations within the Action Area: <https://www.ncei.noaa.gov/maps/deep-sea-corals/mapSites.htm>.

Effects of the Action

Adverse effects to EFH from the Proposed Action would result due to the release of military expended materials (MEM), explosives and associated byproducts, acoustic impacts, direct physical disturbance, energy stressors, and potential strikes. Of particular concern to NMFS are impacts associated with the discharge of MEM and explosive detonations, especially given the presence of sensitive habitats, including HAPCs, deep-sea corals, and sponges in the action area.

The release of MEM, such as explosive fragments (e.g., from missiles, bombs, and other projectiles), expendable targets, other munitions, metals, flares, chaff, and plastics, would introduce marine debris into EFH. Marine debris resulting from the Proposed Action would consist of a wide variety of man-made materials, including steel, iron, concrete, glass, carbon fibers, rubber, and plastics. Impact pathways associated with marine debris include ingestion, entanglement, smothering/covering, and alteration of the benthic invertebrate community (Katsanevakis et al. 2007, Kuhn et al. 2015, Gregory 2009). Marine debris can also become snagged on and/or damage sensitive habitats, such as reefs (Carvalho-Souza et al. 2018). In addition to the deleterious biological ramifications, there are also substantial negative economic impacts from marine debris, especially for fishing and tourism industries (Provencher et al. 2017, UNEP 2011, Botterell et al. 2018). Due to its contamination of virtually all coastal and marine environments worldwide and the increasing number of species for which negative interactions with debris have been demonstrated, marine debris has been identified as a problem on a global scale (Carvalho-Souza et al. 2018, Eriksen et al. 2014, Provencher et al. 2017, Kuhn and van Franeker 2020, Parton et al. 2019, Courtené-Jones et al. 2017, 2019). Marine environments in southern California are no exception. For instance, Moore et al. (2016) found that approximately one third of the seafloor in the Southern California Bight contained trash, and the amount of macro-debris nearly doubled from 1994 to 2013.

NMFS is especially concerned about the negative effects associated with marine plastic pollution, which is ubiquitous throughout the marine environment and represents one of the most difficult current environmental challenges (Eriksen et al. 2014, Botterell et al. 2018, UNEP 2011). Locally, monitoring efforts reported a threefold increase in the amount of plastic debris in the Southern California Bight seafloor in the period from 1994 to 2013 (Moore et al. 2016). Ingestion of plastics can cause a wide range of deleterious effects through various physical and biochemical pathways (Gregory 2009, Rochman et al., 2013, 2014, Talley et al. 2020, Provencher et al. 2017), including internal wounds, digestive tract blockage, satiation, potential starvation, impaired feeding behavior, reduced reproduction, concentration of toxic chemicals, liver stress, endocrine system disruption, behavioral impacts, and impairments to growth, reproduction, and respiration (Gregory 2009, Rochman et al., 2013, 2014, Talley et al. 2020, Provencher et al. 2017). A variety of species, ranging from plankton and small prey organisms to marine megafauna, including commercially important species, have been documented to ingest plastics (Botterell et al. 2018, Provencher et al. 2017, Kuhn and van Franeker 2020, Markic et al. 2019, Courtené-Jones et al. 2017, 2019). For instance, Markic et al. (2019) conducted a review of papers evaluating plastic ingestion by wild marine fish and found that 65% of fish species and 67% of commercial fish species examined had ingested plastic. Moreover, studies have indicated that certain species, including filter feeding *Clupeiformes*, such as those managed under the Coastal Pelagic Species FMP, are likely more susceptible to plastic ingestion due to their gill

structures and feeding behavior (Moore et al. 2001, Collard et al. 2017). Therefore, marine plastic pollution is a widespread problem that is likely having a cascading effect throughout the ecosystem, affecting multiple trophic levels, including humans (Talley et al. 2020, Tanaka and Takada 2016, Markic et al. 2019, Collard et al. 2017, UNEP 2014, Botterell et al. 2018). Plastics are non-biodegradable, can travel large distances, are widely distributed throughout the world's oceans, and provide hard surfaces for opportunistic colonizers (Gregory 2009, Thiel and Gutow 2005). Because pelagic plastics can be colonized by a variety of organisms (Gregory 2009), they can facilitate the transport and expansion of non-native species, including aggressive invasives, via increased rafting opportunities (Gregory 2009, Derraik 2002). In fact, Barnes (2002) found that this potential means of introducing non-native species to new areas was more than doubled due to input of plastic litter to the marine environment. These invasions can have severe consequences, with some estimating a potential decrease in marine biodiversity as high as 58% as a result (Derraik 2002).

Estimates of the quantities of various types of materials that would be discharged as MEM (e.g., steel, concrete, plastic, chemicals) were not provided in the EFH Assessment. However, Appendix B of the EFH Assessment does include calculations of the potential MEM impact footprints to bottom habitat from an instantaneous impact of MEM or explosions on the ocean surface for training and testing activities in a single year. Footprints were calculated for the current environmental baseline and the two alternatives analyzed in the EIS/OEIS. Appendix B notes, "*The actual instantaneous impact on the surface will depend on the number and location of MEM expended and not recovered, which is likely much lower and more concentrated than the worst-case scenario described here.*" The amount of bottom habitat EFH that may be impacted by MEM was calculated using the maximum quantity of every expended item rather than the actual numbers of expended material based on historic expenditures, which are not tracked. Data for numbers of MEM and underwater explosions were multiplied by an estimate of the footprint size for representative MEM items in each material category (e.g., missiles – surface-to-air, missiles – long range weapons, etc.). These values were added up to calculate a total annual projected MEM impact footprint. The results indicate potential annual MEM impact footprints of 4.7868 acres (current environmental baseline), 8.6538 acres (Alternative 1 – Preferred Alternative/Proposed Action), and 8.2785 acres (Alternative 2). Although we realize these estimates are relatively conservative and the action area is expansive, the proposed project is intended to support military readiness requirements "into the foreseeable future." Therefore, the impact footprints from MEM would increase over time (e.g., as much as 86.5 acres over 10 years), resulting in greater cumulative impacts to EFH.

Impacts resulting from explosive detonations of missiles, bombs, and projectiles at or near the water's surface can include: disturbance, injury or death from the shock/pressure wave; acoustic impacts; disruption of habitat; exposure to chemical by-products; behavioral effects; and indirect effects such as those on prey species or other components of the food web. The type and severity of the impact varies greatly depending upon several factors, including the magnitude of the explosion, proximity of habitat or fish to the explosion, marine community characteristics, size and body type of fish, type of water body (e.g., enclosed bay, open ocean, etc.), position of detonation within the water column, etc. Despite the inherent variability in determining impacts

associated with underwater explosives, there are a few general conclusions that can be made based on empirical studies. Specifically, underwater explosives are lethal to most fish species in the immediate vicinity of the explosion regardless of size, shape, or internal anatomy. As the distance from the explosion increases, fish with gas-filled swim bladders are more susceptible to the blast and suffer a higher mortality than those without swim bladders (Hastings and Popper 2005, Baxter et al. 1982, Keevin and Hempen 1997). In addition, as noted in the EFH Assessment, adult fishes, and larger species would generally be less susceptible to injury and mortality from sound and energy associated with explosive activities than small, juvenile, or larval fishes.

One particularly relevant study by Dahl *et al.* (2020), also cited in the EFH Assessment, evaluated the physical effects from underwater explosions on Pacific sardines (*Sardinops sagax*) within the Navy's Silver Strand Training Complex. Pacific sardines, managed under the CPS FMP, contain physostomous swim bladders with a direct connection to the gut that allows for the easy transfer of gasses in and out of the swim bladder (Dahl et al. 2020). The Pacific sardines were caged roughly 5 kilometers offshore of San Diego over primarily sandy bottom at a consistent depth of approximately 19.5 m, and exposed to a single detonation of C4 explosive at distances varying from 18 to 246 m from the source. The C4 explosive used in the study had a NEW of 4.66 kg, which is at the lower end of the E6 Bin identified in the EIS/OEIS, a Bin that includes a Hellfire missile as an example sound source. As noted previously, the explosive Bins for the Proposed Action range from E1 (0.1-0.25 NEW) to E10 (>250-500 NEW). Dahl et al. (2020) found that only 8 of the 209 fish exposed to the detonation died, with half of those mortalities occurring in the closest cage roughly 18 m from the explosion. It is worth noting that because the live fish were euthanized shortly after being brought to the surface, it is unclear whether any of those fish that initially survived the blast would have died from their injuries later on (Dahl et al. 2020). No external injuries were attributed to the blast. However, five types of internal injuries observed in one or more animals (i.e., burst capillaries, fat hematoma, reproductive blood vessel rupture, swim bladder rupture, kidney rupture), many of which are consistent with injuries observed in previous studies evaluating impulsive sound sources, were found to be statistically significant and thus were determined to be caused by the explosion (Dahl et al. 2020). Therefore, although the adverse effect to the habitats themselves (e.g., water column, substrate) from explosions would be temporary, detonation impacts could be severe enough to cause mortality in a variety of fish species, including Federally managed species, and would be expected to disproportionately affect fishes with swim bladders, smaller fishes, and earlier life stages.

The inherent environmental (e.g., fish populations and spatial distributions) and project-related (e.g., location and number of detonations) variability makes it is infeasible to accurately assess the total mortality associated with a detonation, or the cumulative impacts of these exercises over time (e.g., one year or into the foreseeable future). Therefore, in an attempt to provide some assessment of the mortality effects on fish, the Navy provided an analysis based on Young (1991) that calculated a 10% mortality distance (i.e., 90% survival) for fish of varying sizes due to the detonation of explosives of varying charge weights. This analysis is based on underwater detonations whereas detonations from PMSR activities would typically occur above, at, or very

near the water's surface. Thus adverse effects from PMSR detonations would be expected to be less severe than the analysis results may indicate. It is also important to note that lethal and sub-lethal effects to fish, as well as behavioral effects similar to those associated with sound noted previously, would be expected outside of the 10% mortality distance. The analysis revealed a 10% mortality distance of 317 feet for a fish weighing 1 ounce and a detonation of a 10 pound explosive at 3.3 feet depth. The calculations showed the same detonation would result in 10% mortality distances of 221 feet and 142 feet for fish weighing 1 pound and 30 pounds, respectively. The largest 10% mortality distance (660 feet) was reported for a 1 ounce fish from a 109.7 pound bomb being detonated at 3.3 feet depth. These 10% mortality range estimates are useful for providing a general idea of the area of impact associated with individual detonations of varying sizes. As noted in the EFH Assessment, the number of fish potentially killed by an in-water explosion would depend on a number of factors, including the population density near the blast, size of the explosive (i.e., NEW), depth of the explosion, and fish size. For example, if an explosion occurred in the middle of a dense school of sardines, anchovy, or other schooling fish, a large number of fish could be killed. However, the probability of this occurring is low based on the patchy distribution of dense schooling fish. In addition, the majority of explosions will occur upon impact with above-water targets and at the water's surface, resulting in less of an impact compared to underwater detonations. Moreover, as noted previously, although detonations will occur at various locations throughout the 36,000 mi² of controlled sea and associated airspace comprising the PMSR, most detonations will occur outside 12 NM in deeper water and away from sensitive nearshore habitats. Therefore, given the detonations will occur primarily at or above the water's surface and in deeper water away from sensitive habitats, and the expansive size of the area over which these detonations may occur, NMFS does not believe they will result in substantial adverse effects to EFH.

EFH Conservation Recommendations

As described in the above effects analysis, NMFS has determined that the proposed action would adversely affect EFH for various federally managed fish species within the Pacific Coast Groundfish, Coastal Pelagic Species, and Highly Migratory Species FMPs. Therefore, pursuant to section 305(b)(4)(A) of the MSA, NMFS offers the following EFH Conservation Recommendation to avoid, minimize, mitigate, or otherwise offset the adverse effects to EFH.

1. The discharge of marine debris associated with MEM would adversely affect EFH, and those effects would be expected to accumulate over time (i.e., years) from ongoing training and testing activities. Therefore, the Navy should implement conservation measures to offset those adverse effects to EFH. Options that address marine debris warrant special consideration, and previous projects associated with the military or its installations have included conservation measures to offset marine debris impacts. For instance, proposed SpaceX rocket launches with at-sea barge landings based out of Vandenberg Air Force Base included conservation measures to evaluate the amount of material discharged to the ocean and provide a corresponding monetary contribution to fund a program that removes lost fishing gear off California. In addition, the Navy's Ocean of Things project included a conservation measure to provide funding to expand

the San Clemente Island Sandy Beach project to include debris characterization and removal. NMFS is amenable to various approaches, especially those that include a marine debris removal component, and is willing to discuss these options with the Navy in more detail.

Statutory Response Requirement

Please be advised that regulations at section 305(b)(4)(B) of the MSA and 50 CFR 600.920(k) of the MSA require your office to provide a written response to this letter within 30 days of its receipt and at least 10 days prior to final approval of the action. A preliminary response is acceptable if final action cannot be completed within 30 days. Your final response must include a description of measures to be required to avoid, mitigate, or offset the adverse impacts of the activity. If your response is inconsistent with our EFH Conservation Recommendation, you must provide an explanation of the reasons for not implementing that recommendation. The reasons must include the scientific justification for any disagreements over the anticipated effects of the proposed action and the measures needed to avoid, minimize, mitigate, or offset such effects.

Supplemental Consultation

Pursuant to 50 CFR 600.920(l), the Navy must reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH Conservation Recommendation.

Fish and Wildlife Coordination Act Comments

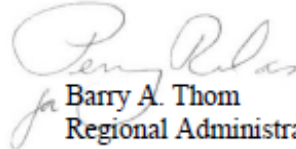
The purpose of the FWCA is to ensure that wildlife conservation receives equal consideration, and is coordinated with other aspects of water resources development [16 U.S.C. 661]. The FWCA establishes a consultation requirement for Federal departments and agencies that undertake any action that proposes to modify any stream or other body of water for any purpose, including navigation and drainage [16 U.S.C 662(a)]. Consistent with this consultation requirement, NMFS provides recommendations and comments to Federal action agencies for the purpose of conserving fish and wildlife resources. The FWCA allows the opportunity to offer recommendations for the conservation of species and habitats beyond those currently managed under the MSA.

As described in the EFH effects analysis, NMFS has determined that bottom habitat, potentially including biogenic and rocky reef habitats, will be negatively impacted by proposed project activities. Given the importance of this habitat to a variety of fish and wildlife species, the Conservation Recommendation provided above to avoid or minimize adverse effects to EFH is also considered necessary to address negative impacts to fish and wildlife resources managed under the FWCA.

11

Thank you for consulting with NMFS and considering our comments. If you have any questions regarding this letter, please contact Eric Chavez at (562) 980-4064 or Eric.Chavez@noaa.gov.

Sincerely,


Barry A. Thom
Regional Administrator

cc: Ms. Cory Scott, Environmental Protection Specialist, Sea Range Sustainability Office
Ms. Catheryn E. Tortorici, NMFS Office of Protected Resources
Administrative File: 150316WCR2020PR00151

References

- Barnes, D.K.A. 2002. Invasions by marine life on plastic debris. *Nature* 416, 808–809.
- Baxter, L. II, E.E. Hays, G.R. Hampson, and R.H. Backus. 1982. Mortality of fish subjected to explosive shock as applied to oil well severance on Georges Bank. Woods Hole Oceanographic Institution Report WHO-82-54.
- Botterell, Z.L.R., N. Beaumont, T. Dorrington, M. Steinke, R.C. Thompson, P.K. Lindeque. 2018. Bioavailability and effects of microplastics on marine zooplankton: A review. *Environmental Pollution* 245:98-110.
- Carvalho-Souza, G. F., M. Llope, M.S. Tinoco, D. V. Medeiros, R. Maia-Nogueira, C.L.S., Sampaio. 2018. Marine litter disrupts ecological processes in reef systems. *Marine Pollution Bulletin* 133, 464-471.
- Collard, F., B. Gilbert, G. Eppe, L. Roos, P. Compere, K. Das, E. Parmentier. 2017. Morphology of the filtration apparatus of three planktivorous fishes and relation with ingested anthropogenic particles. *Marine Pollution Bulletin* 116: 182-191.
- Courteney-Jones, W., B. Quinn, C. Ewins, S.F. Gary, B.E. Narayanaswamy. 2019. Consistent microplastic ingestion by deep-sea invertebrates over the last four decades (1976–2015), a study from the North East Atlantic
- Courteney-Jones, W., B. Quinn, S.F. Gary, A.O.M Mogg, B.E. Narayanaswamy. 2017. Microplastic pollution identified in deep-sea water and ingested by benthic invertebrates in the Rockall Trough, North Atlantic Ocean. *Environmental Pollution* 231(1):271-280.
- Dahl, P. H., A. Keith Jenkins, B. Casper, S. E. Kotecki, V. Bowman, C. Boerger, D. R. Dall'Osto, M. A. Babina, and A. N. Popper. (2020). Physical effects of sound exposure from underwater explosions on Pacific sardines (*Sardinops sagax*). *Journal of the Acoustical Society of America*, 147(4).
- Derraik, J.G.B. 2002. The pollution of the marine environment by plastic debris: a review. *Marine Pollution Bulletin* 44:842-852.
- Eriksen, M. L.C.M., Lebreton, H.S. Carson, M. Thiel, C.J. Moore, J.C. Borerro, F. Galgani, P.G. Ryan, and J. Reisser. 2014. Plastic pollution in the world's oceans: more than 5 trillion plastic pieces weighing over 250,000 tons afloat at sea. *PLoS ONE* 9(12): e111913.
- Gregory, M.R. 2009. Environmental implications of plastic debris in marine settings – entanglement, ingestion, smothering, hangers-on, hitch-hiking and alien invasions. *Phil. Trans. R. Soc. B* 364, 2013-2025.
- Hastings, M.C. and A.N. Popper. 2005. Effects of Sound on Fish. Report to California Department of Transportation. January. 82pp. <http://www.dot.ca.gov/hg/env/bio/files/EffectsofSoundonFish23Au05.pdf>.

- Katsanevakis, S., Verriopoulos, G., Nicolaidou, A. & Thessalou-Legaki, M. 2007. Effect of marine litter on the benthic megafauna of coastal soft bottoms: a manipulative field experiment. *Marine Pollution Bulletin* 54, 771-778.
- Keevin, T.M., and G.L. Hempen. 1997. The Environmental Effects of Underwater Explosions with Methods to Mitigate Impacts. U.S. Army Corps of Eng. St. Louis, MO. 118p.
- Kühn S. and J.A. van Franeker. 2020. Quantitative overview of marine debris ingested by marine megafauna. *Marine Pollution Bulletin* 151. 13 pp.
- Kühn S., Bravo Rebolledo E.L., van Franeker J.A. 2015. Deleterious Effects of Litter on Marine Life. In: Bergmann M., Gutow L., Klages M. (eds) *Marine Anthropogenic Litter*. Springer, Cham.
- Markic, A., J. Gaertner, N. Gaertner-Mazouini, A.A. Koelmans. 2019. Plastic ingestion by marine fish in the wild. *Critical Reviews in Environmental Science and Technology* 50(7):657-697.
- Moore, S., Sutula, M., Von Bitner, T., Lattin, G., & Schiff, K. 2016. Southern California Bight 2013 regional monitoring program: Volume III. Trash and marine debris. Southern California Coastal Water Research Project (SCCWRP) Technical Report 928.
ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/928_B13_Debris.pdf
- Moore, C.J., S.L. Moore, M.K. Leecaster, and S.B. Weisberg. 2001. A comparison of plastic and plankton in the North Pacific Central Gyre. *Marine Pollution Bulletin* Vol. 42(12): 1297-1300.
- Parton, K.J., T.S. Galloway, B.J. Godley. 2019. Global review of shark and ray entanglement in anthropogenic marine debris. *Endang Species Res.* 39:173-190.
- Provencher, J.F., A.L. Bond, S. Avery-Gomm, S.B. Borrelle, E.L. Bravo Rebolledo, S. Hammer, S. Kuhn, J.L. Lavers, M.L. Mallory, A. Trvial, and J.A. van Franeker. 2017. Quantifying ingested debris in marine megafauna: a review and recommendations for standardization. *Anal. Methods* 9, 1454.
- Rochman, C.M., T. Kurobe, I. Flores, S.J. Teh. 2014. Early warning signs of endocrine disruption in adult fish from the ingestion of polyethylene with and without sorbed chemical pollutants from the marine environment. *Sci. Total Environ.* 493:656-661.
- Rochman C.M., E. Hoh, T. Kurobe, S.J. Teh. 2013. Ingested plastic transfers contaminants to fish and induces hepatic stress. *Sci. Rep.* 3, 3263.
- Talley, T.S., N. Venuti, R. Whelan. 2020. Natural history matters: plastics in estuarine fish and sediments at the mouth of an urban watershed. *PLoS ONE* 15(3): e0229777.
- Tanaka, K. and Takada, H. 2016. Microplastic fragments and microbeads in digestive tracts of planktivorous fish from urban coastal waters. *Sci. Rep.* 6, 34351; doi: 10.1038/srep34351.
- Thiel, M. and L. Gutow. 2005. The ecology of rafting in the marine environment. II. The rafting organisms and community. *Oceanography and Marine Biology: An Annual Review* 43:279-418.

UNEP. 2014. *UNEP year book: Emerging issues in our global environment* (71 p). Nairobi: United Nations Environmental Programme.

United Nations Environment Programme (UNEP). 2011. *UNEP year book: Emerging issues in our global environment* (79 p). Nairobi: United Nations Environmental Programme.

Young, G.A. 1991. Concise methods for predicting the effects of underwater explosions on marine life. NAVSWC NO 91-220. Naval Surface Warfare Center. Silver Spring, MD.

G.4.3 Navy Response Letter to the National Marine Fisheries Service



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER WEAPONS DIVISION
1 ADMINISTRATION CIRCUIT 575 1 AVENUE SUITE 1
CHINA LAKE, CA 93555-6100 POINT MUGU, CA 93042-5049

IN REPLY REFER TO:

5090
Ser EB2R00M/3395
November 20, 2020

National Marine Fisheries Service
Attn: Mr. Barry A. Thom
Regional Administrator
Protected Resources Division
501 West Ocean Blvd., Suite 4200
Long Beach, CA 90802

Dear Mr. Thom:

SUBJECT: ESSENTIAL FISH HABITAT CONSULTATION FOR THE POINT MUGU SEA RANGE ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT

We are in receipt of your letter dated October 14, 2020 regarding the Navy's Point Mugu Sea Range (PMSR) Essential Fish Habitat (EFH) consultation for activities occurring within the PMSR beginning in late 2021. The Navy will be conducting these activities for the reasonably foreseeable future.

The Navy has taken National Marine Fisheries Service's (NMFS') conservation recommendation into consideration as a means to avoid, minimize, mitigate, or otherwise offset the adverse effects to EFH from military expended materials. The Navy proposes to establish a marine debris removal program at San Nicolas Island (SNI). The marine debris program includes annual clean ups of SNI beaches as part of the ongoing Navy's Integrated Natural Resources Management Program. Under the marine debris program, the Navy will record data collected during the cleanup efforts into the Ocean Conservancy database. Additionally, the Navy will implement a debris characterization and sampling project, including debris removal, using collection methods adapted from the NOAA Marine Debris Monitoring methodology (Lippiatt et. al, 2013). Sampling will be conducted twice during 2022 concurrent with ongoing biannual rocky intertidal surveys on SNI. This effort will be conducted for a period of one year only, and serves as a means for conducting rapid assessments of the debris material type and quantity present in a monitored location. A Draft and Final Technical Report will be developed and submitted to NMFS upon completion of the project.

The Magnuson-Stevens Fishery Conservation and Management Act and its regulations require a federal agency to reinitiate consultation with NMFS if the agency substantially revises its plan for action in a manner that may adversely affect EFH or new information becomes available that affects the basis for the NMFS EFH Conservation Recommendations (50 CFR 600.920(1)). The Navy will review the PMSR EFH consultation periodically to determine if updated science, modified regulations, or changes to Navy activities require supplemental consultation.

5090
Ser EB2R00M/3395
November 20, 2020

Your staff's coordination and advice during the consultation process was appreciated and helpful to the Navy in meeting its environmental responsibilities. If you need additional information or have questions, please feel free to contact Ms. Cory Scott at (760) 793-6443 or cory.l.scott@navy.mil.

Sincerely,



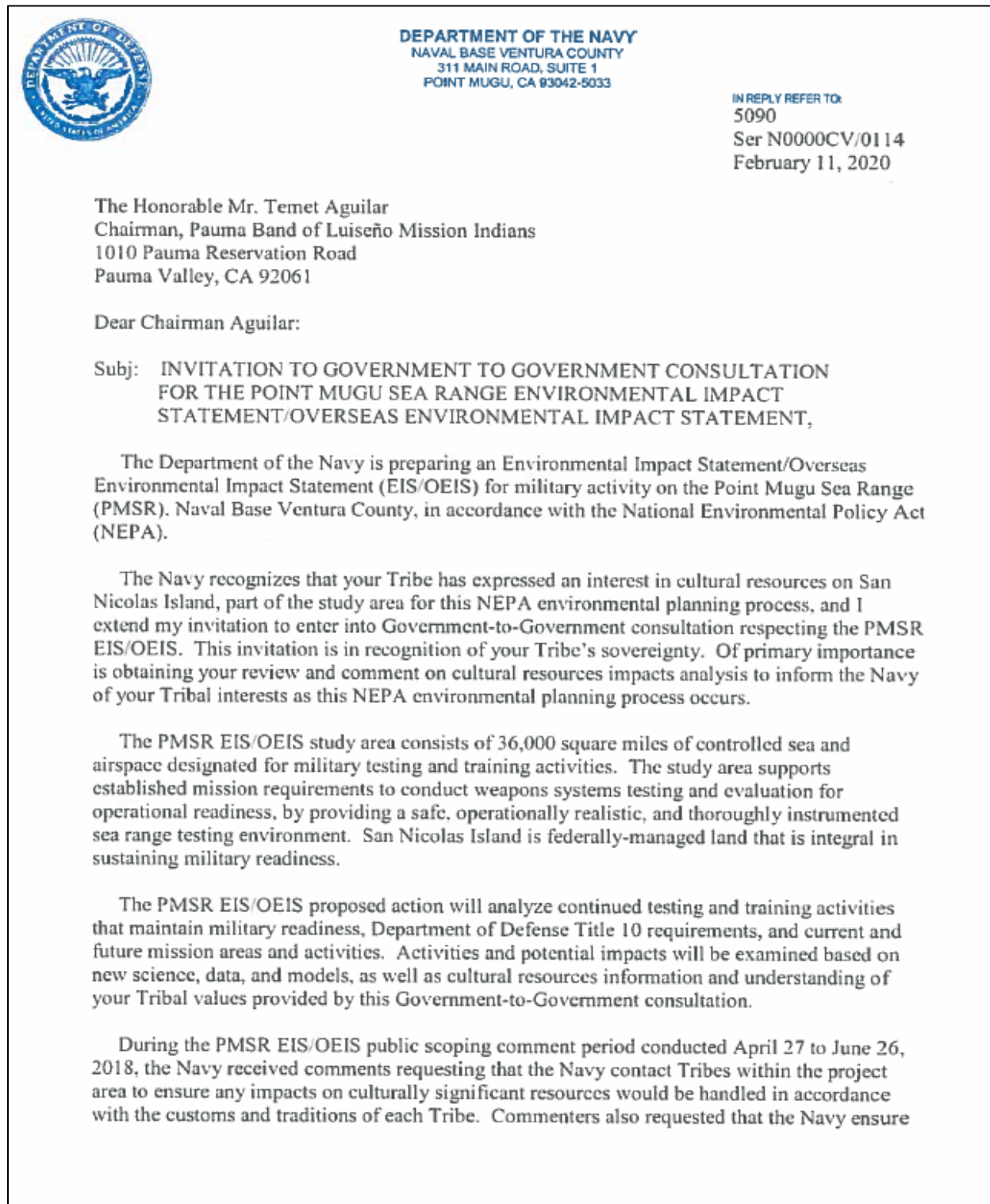
Kenneth Seeley
By direction

Copy to:
Eric Chavez, NOAA Fisheries West Coast Region
Ms. Catheryn E. Tortorici, NMFS Office of Protected Resources

G.5 National Historic Preservation Act Compliance

G.5.1 Government-to-Government Tribal Consultations

G.5.1.1 Navy Invitation Letter to Tribes for Consultation (Example)



5090
Ser N0000CV/0114
February 11, 2020

compliance with Section 106 of the National Historic Preservation Act. This consultation invitation is responsive to these NEPA public scoping comments. Your review and comment on the draft cultural resources impacts analysis provides the Navy with specific information on potentially affected Tribal interests.

Therefore, prior to release to the public, I am attaching copies of the EIS/OEIS's Draft Executive Summary, Draft Cultural Resources Chapter, and also maps of the Areas of Potential Effects (maps designed under the National Historic Preservation Act) for your review and comment. Our intention is that your Tribe will have a full opportunity to provide Tribal comments on these cultural resources specific analysis that inform the PMSR EIS/OEIS. Through your review and comment, the Navy may understand and address issues that concern your Tribal values, customs, and traditions in recognition of your historic relationship with San Nicolas Island.

Please share with my NBVC Environmental Division all comments, within 60 days, care of Mr. Joseph Montoya, NBVC Environmental Planning and Conservation Branch Manager, (805) 989-3804, joseph.l.montoya@navy.mil.

Sincerely,


J. E. CHISM
Captain, U.S. Navy
Commanding Officer

Enclosures: 1. EIS/OEIS Draft Executive Summary
2. EIS/OEIS Draft Cultural Resources Chapter
3. Draft APE Maps

Copy to:
The Honorable Mr. Fred Nelson
Chairman, La Jolla Band of Luiseño Mission Indians
22000 Highway 76
Pauma Valley, CA 92061

The Honorable Mr. Robert H. Smith
Chairman, Pala Band of Luiseño Mission Indians
12196 Pala Mission Road
Pala, CA 92059

5090
Ser N0000CV/0114
February 11, 2020

The Honorable Mr. Mark Macarro
Chairman, Pechanga Band of Luiseño Mission Indians
P.O. Box 1477
Temecula, CA 92593

The Honorable Mr. Bo Mazzetti
Chairman, Rincon Band of Luiseño Mission Indians
One Government Center Lane
Valley Center, CA 92082

The Honorable Mr. Kenneth Kahn
Chairman, Santa Ynez Band of Chumash Mission Indians
P.O. Box 517
Santa Ynez, CA 93460

The Honorable Mr. Scott Cozart
Chairman, Soboba Band of Luiseño Mission Indians
P.O. Box 487 San Jacinto, CA 92581

Admiral Bette Bolivar, United States Navy
Commander, Navy Region Southwest
937 North Harbor Drive
San Diego, CA 92132

Commander
NAVAIRWARCENWPNDIV
Code: EB2R00M
575 I Ave, Suite 1 M/S 0460
Point. Mugu, CA 93042-5049

NAVFAC Southwest
Attn: Diane Silva, NARA Certified Command Records Manager
1220 Pacific Highway, Code EV33
NBSD Bldg. 3519
San Diego, CA 92132

G.5.1.2 Navy Invitation Letter to Tribes for Consultation (Recipient List)

The Honorable Temet A. Aguilar, Chairman
Pauma Band of Luiseño Mission Indians

The Honorable Fred Nelson, Chairperson
La Jolla Band of Luiseño Indians

The Honorable Robert H. Smith, Chairperson
Pala Band of Luiseño Mission Indians

The Honorable Mark Macarro, Chairperson
Pechanga Band of Luiseño Mission Indians

The Honorable Bo Mazzetti, Chairperson
Rincon Band of Luiseño Mission Indians

The Honorable Kenneth Kahn, Chairperson
Santa Ynez Band of Chumash Mission Indians

The Honorable Scott Cozart, Chairperson
Soboba Band of Luiseño Indians

G.5.1.3 Rincon Band of Luiseño Indians Response Letter

Rincon Band of Luiseño Indians

CULTURAL RESOURCES DEPARTMENT

One Government Center Lane | Valley Center | CA 92082
(760) 749-1051 | Fax: (760) 749-8901 | rincon-nsn.gov



March 19, 2020

Sent via email: joseph.l.montoya@navy.mil

Department of the Navy
Joseph Montoya
311 Main Road, Suite 1
Point Mugu, CA 93042-5033

Re: Point Mugu Sea Range Environmental Impact Statement/Overseas Environmental Impact Statement

Dear Mr. Montoya,

This letter is written on behalf of the Rincon Band of Luiseño Indians. We have received your notification regarding the above referenced project and we thank you for the opportunity to consult on this project. The identified location is within the Territory of the Luiseño people, and is also within Rincon's specific area of Historic interest.

Embedded in the Luiseño territory are Rincon's history, culture and identity. We request consultation at this time in order to learn more about the project and any potential impacts to cultural resources.

If you have additional questions or concerns, please do not hesitate to contact our office at your convenience at (760) 297-2635 or via electronic mail at cmadrigal@rincon-nsn.gov. We look forward to working together to protect and preserve our cultural assets.

Sincerely,

Cheryl Madrigal
Tribal Historic Preservation Officer
Cultural Resources Manager

G.5.1.4 Navy Response Letter to Rincon Band of Luiseño Indians



DEPARTMENT OF THE NAVY
NAVAL BASE VENTURA COUNTY
311 MAIN ROAD, SUITE 1
POINT MUGU, CA 93042-5033

IN REPLY REFER TO:
5090
Ser N0000CV/0503
June 29, 2020

Ms. Cheryl Madrigal
Tribal Historic Preservation Officer
Cultural Resources Manager
Rincon Band of Luiseño Indians
One Government Center Lane
Valley Center, CA 92082

Dear Ms. Madrigal:

**SUBJECT: NATIONAL HISTORIC PRESERVATION ACT SECTION 106 CONSULTATION
FOR THE POINT MUGU SEA RANGE ENVIRONMENTAL IMPACT
STATEMENT AND OVERSEAS ENVIRONMENTAL IMPACT STATEMENT**

Thank you for your letter to the U.S. Navy dated March 19, 2020 regarding the Rincon Band of Luiseño Indians (Rincon) request for consultation pursuant to Section 106 of the National Historic Preservation Act of 1966 (54 USC 306108) for the Point Mugu Sea Range (PMSR) Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). Your letter was a response to the Navy's February 11, 2020 letter in which the Navy invited Rincon to enter into Government-to-Government consultation for the PMSR EIS/OEIS, which describes the proposed activities collectively termed the undertaking under Section 106. The Navy is committed to working with its Tribal Partners to ensure full and comprehensive environmental review of the undertaking's effects. Additionally, the Navy recognizes the important role our Tribal Partners play in this Section 106 process. Accordingly, the Navy looks forward to engaging in consultation with Rincon, pursuant to Section 106, to review this undertaking.

Your letter requested consultation between Rincon and the Navy in order to learn more about the undertaking. This letter is a response to your consultation request. The Navy sent Rincon a Notice of Availability Letter for the draft PMSR EIS/OEIS, dated April 6, 2020. This letter included a CD copy of the draft EIS/OEIS. The Navy welcomes the opportunity to meet with your Tribe to discuss further. Included below for your convenience are summaries of the undertaking, the area of potential effect (APE) for the undertaking, identification of known historic properties within the APE, and the determination of effect to historic properties from the undertaking.

UNDERTAKING

The PMSR is located adjacent to Los Angeles, Ventura, Santa Barbara, and San Luis Obispo counties along the Pacific Coast of Southern California and includes 36,000 square miles of controlled sea and airspace designated for testing and training activities. The Naval Air Warfare Center Weapons Division (NAWCWD) is the primary tenant at NBVC and the primary user of the PMSR. NAWCWD Point Mugu meets its mission to conduct state-of-the-art weapons systems testing and evaluation and to maintain operational readiness by providing a safe,

5090
Ser N0000CV/0503
June 29, 2020

realistic, and instrumented testing environment. Vessels, aircraft, and weapons systems must be able to perform in realistic marine environments and operate as intended, thus improving system accuracy and personnel safety.

The Navy's proposed undertaking is to conduct military readiness activities within the PMSR. The proposed undertaking includes testing and training activities previously analyzed in the 2002 PMSR EIS/OEIS and activities associated with the Environmental Assessments (EA) completed at PMSR since 2002. In addition to consolidating previously analyzed actions into one comprehensive document, the current EIS/OEIS also addresses proposed increases in activity frequency of military research, development, acquisition, testing, and evaluation (referred to as "testing") and scheduled training activities at the PMSR. The testing and training activities subject to the current EIS/OEIS would be conducted at sea and in designated airspace within the PMSR Study Area, as well as missile launch operations and directed energy activities originating from NBVC Point Mugu and NBVC San Nicolas Island (SNI). The proposed undertaking would continue military readiness activities and increase testing and training activities that are the same as or similar to those currently occurring within the PMSR and have been occurring for decades. The proposed undertaking will allow for continued testing and training in support of military readiness and Department of Defense mission requirements as required by Title 10 and to provide combat-ready forces. The purpose of the proposed action is to provide modern instrumented airspace, sea space, testing and training areas, testing and training facilities, and range infrastructure to fully support current, emerging, and foreseeable future testing and training requirements, and ensure the long-term viability of the PMSR while protecting human health and the environment.

At Point Mugu, the Navy proposes testing activities associated with the Directed Energy Systems Integration Laboratory and launch activities associated with the Launch Complex Building (PM-55), including the Alpha (PM-715 and PM-717), Bravo (PM-727, PM-728 and PM-729), Charlie (PM-748 and PM-749), and Nike Zeus (PM-751) launch complexes. Missiles can also be launched from a truck within the launch complex area. The truck is self-contained and is only onsite for the launch duration.

For SNI, the Navy proposes the continued use of the Land Impact Site, a 10.5-acre target area located on the northwest portion of the island historically associated with the Standoff Land Attack Missile (SLAM) testing program. The Land Impact Site is used for air-to-surface tests with inert weapon systems. The proposed tempo for the continued use of the Land Impact Site will not exceed what was previously analyzed in the 1998 Environmental Assessment (EA) for Non-warhead SLAM and Future Model SLAM Firings. In addition, the Navy proposes the continued use of the existing Alpha Launch Complex (N-193 and N-315). The Alpha Launch Complex is typically used for launching the GQM-163A supersonic target. The proposed tempo for the use of the launch complex would not exceed what was previously analyzed in the 2002 PMSR EIS/OEIS. The Navy also proposes to conduct testing activities associated with the Directed Energy facility on SNI. Construction and use of the Directed Energy facility on SNI was previously analyzed in

5090
Ser N0000CV/0503
June 29, 2020

the 2015 Directed Energy Test Facility at SNI. There is no change in tempo proposed for Directed Energy activities on SNI from what was analyzed in the 2015 EA for the Directed Energy facility.

AREA OF POTENTIAL EFFECT

Consistent with 36 CFR 800.16(d), the APE for this project is defined as the geographic area within which the proposed undertaking may directly cause effects to historic properties. The APE for the proposed undertaking includes the PMSR, the areas associated with land-based launch and land impact facilities, and sites on NBVC Point Mugu and SNI, as detailed in Enclosures 2 and 3.

IDENTIFICATION OF HISTORIC PROPERTIES

Most of the activities for the proposed undertaking will take place within the open ocean areas in the PMSR, with additional activities occurring at land-based launch and land impact facilities and sites on NBVC Point Mugu and SNI. The Study Area contains one National Register eligible architectural resource and three eligible archaeological sites.

On NBVC Point Mugu, the vast majority of architectural resources have been inventoried. Additionally, most of the non-developed and non-wetland acreage has been surveyed for archaeological sites. There are no recorded archaeological sites within the APE on NBVC Point Mugu.

Building PM-55 and its associated Launch Complex are located within the APE on NBVC Point Mugu. The building and launch complex is considered an exceptionally significant Cold War-era resource and was determined eligible for listing on the National Register of Historic Places (NRHP) under criteria A and C (JRP Historical Consulting Services, 1998). The Navy typically launches 50 to 70 missiles or targets annually from Building PM-55 and its associated beach launch pads. The majority of launches entail jet-assisted takeoff (JATO) or rocket-assisted takeoff (RATO) bottles to assist the launch of missiles. These bottles primarily fall into the wetland immediately in front of the launch pad (the drop zone) if the event occurs at Building PM-55. If the launch occurs from an operational pad adjacent to the beach (Pad Alpha, Pad Bravo, Pad Charlie, or Pad Nike Zeus), JATO/RATO bottles may expend into the near shore environment. The RATO and JATO bottles are retrieved during periodic clean-up processes.

San Nicolas Island has been the subject of archaeological investigations for at least 100 years, including a complete pedestrian survey resulting in the identification of approximately 600 archaeological sites. Within the APE on SNI, three eligible archaeological sites were identified: CA-SNI-12, CA-SNI-41, and CA-SNI-168.

Site CA-SNI-12 is identified as a highly disturbed habitation site comprised of a large deflating and eroding midden complex with stabilized areas containing buried deposits and human skeletal remains. The human remains are within two areas identified as cemeteries. These areas are

5090
Ser N0000CV/0503
June 29, 2020

located in the northwestern and eastern portions of the site. As analyzed in the 2015 Directed Energy Test Facility EA, The Directed Energy Test Facility would be positioned at the far northern extent of site CA-SNI-12 (Enclosure 4). Components of the Directed Energy Test Facility, which are within or near CA-SNI-12, consist of a concrete pad sited on bedrock and a graded road to the pad. The concrete pad is located outside of the site boundary to the immediate west of CA-SNI-12, while the road bisects the northern portion of the site. At CA-SNI-12, the proposed activities analyzed for the Directed Energy Test Facility in this Draft EIS/OEIS involve the directed energy system (e.g., laser or high-powered microwave) at the shooter site being aimed and shot at one or more of the calibration target sites. Once the system is calibrated, it would be aimed at a target in order to conduct system tests. The "shooter" systems siting would allow a directed energy system to attack airborne or seaborne targets as well as land-based targets. The proposed tempo will not exceed what was previously analyzed in the 2015 Directed Energy Test Facility EA.

Site CA-SNI-41 is a habitation site with a large, dense midden complex. Early site investigations resulted in the removal of seven burials from the site; no additional remains have been identified. The western portion of site CA-SNI-41 may overlap the Rock Crusher Site Launch Complex. However, archival research suggests the Rock Crusher Site Launch Complex is located to the immediate northwest and outside of the site CA-SNI-41 boundary and an updated boundary may be required. The Navy constructed two launchers near Rock Crusher; however, the launchers were removed. The launch pads still exist and are each typically used three-to-five times per year to launch missiles via mobile or temporary launchers. The Rock Crusher Site Launch Complex is used to launch missiles such as Tactical Tomahawk, rolling airframe missiles (RAM), and Standard Missiles. Missiles are launched westward, over the ocean, within a 60-degree azimuth.

Site CA-SNI-168 is a multiple locus habitation site with a large lithic and shell scatter and buried midden areas. One cemetery area was identified at the site. The cemetery area is located approximately ninety meters east of the Land Impact Site, which is located within site CA-SNI-168. The Land Impact Site consists of structures on an elevated, irregularly-shaped single access road with an adjacent platform constructed of imported fill and gravel. The Land Impact Site is used for air-to-surface tests using inert weapon systems. While these weapons are considered inert, some do use small pyrotechnic devices (e.g., spotting charges, live fuses). Targets within the Land Impact Site may include empty Container Express (commonly known as CONEX) boxes configured to simulate buildings, helicopter or aircraft bodies, as well as other constructed simulated targets. The Land Impact Site is the only active impact site on SNI and has been in use since 1989. The proposed tempo for the continued use of the Land Impact Site will not exceed what was previously analyzed in the 1998 EA for Non-warhead SLAM and Future Model SLAM Firings, approximately 8–26 times annually.

During Section 106 consultation for the P-586 undertaking on SNI, the Navy was informed of two additional potential historic properties. These potential historic properties are a Traditional Cultural Property (TCP) and an archaeological district. An assertion was made that the TCP

5090
Ser N0000CV/0503
June 29, 2020

includes the entire island and that each archaeological site on the island is a contributing element to the overall archaeological district. In response to the identification of these potential historic properties, the Navy is preparing to contract both an ethnographic study and archaeological district study of SNI to identify and define the nature of both property types.

The only known submerged cultural resources within the study area are historic period shipwrecks and planes. To date, no systematic underwater survey has been undertaken within the waters of the PMSR; however, a submerged cultural resources assessment for the Channel Islands National Park and Channel Islands National Marine Sanctuary was conducted in 1996 which identified historic period resources in the waters near the study area.

DETERMINATION OF EFFECT

As described in the PMSR draft EIS/OEIS, training and testing activities are expected to continue at current or similar levels in existing localities. These activities are generally consistent with those analyzed in the 2002 PMSR EIS/OEIS and subsequent EAs completed for the PMSR since 2002 wherein the Navy received SHPO concurrence on determinations of no adverse effect to historic properties. The activities proposed in the current draft EIS/OEIS are representative of testing and training that the Navy has conducted in the PMSR for decades.

There are four historic properties identified within the APE for the PMSR: Building PM-55 and its associated Launch Complex on NBVC Point Mugu; and CA-SNI-12, CA-SNI-41, and CA-SNI-168 on SNI. Based on analysis of the proposed undertaking at each location, the Navy has determined the activities proposed in the PMSR draft EIS/OEIS will not adversely affect historic properties.

For activities associated with the proposed undertaking, building PM-55 and its Launch Complex would continue as a target and launch facility. This activity received analysis as part of the Navy's 2002 PMSR EIS/OEIS. Consistent with findings of the 2002 EIS/OEIS, recent analysis found that the current proposed undertaking would not adversely affect the historic property because the building's historic or current use would not be altered.

The Directed Energy Test Facility is sited at the far northern end of site CA-SNI-12. Potential impacts to CA-SNI-12 and the nearby site CA-SNI-157 were identified during the Navy's preparation of the Directed Energy Test Facilities at San Nicolas Island EA. Through consultation with the SHPO, the project's construction plans were adjusted to avoid CA-SNI-157 and to minimize effects to CA-SNI-12. Archaeological testing was conducted within the portion of site CA-SNI-12 that would be affected by widening the existing road in the northern portion of the site to support the Directed Energy Test Facility. This area was found to be highly disturbed and consisted of a surface deposit that had washed down from the top of a dune. The area was found to be a non-contributing element of the site. Additionally, measures were developed to avoid or

5090
Ser N0000CV/0503
June 29, 2020

minimize adverse effects to other portions of the site. A physical barrier was installed to prevent sea mammals from accessing the concrete pad adjacent to the site boundary for haul out and to prevent people from driving onto CA-SNI-12. Signage was also installed to direct people to walk on paved and graded areas only. Accordingly, the EA determined there would be no impacts to the archaeological site associated with testing and personnel training at the site. CA SHPO concurrence was received for these findings in a letter dated December 2, 2014.

The Rock Crusher Launch site (PM-807, PM-807a, and PM-813) contains the Tomahawk Launch Pad and the RAM Launch Pad. These concrete pads were constructed between 1970 and 1996 and are located within or near the western portion of site CA-SNI-41. Although the site boundary is currently depicted within the Rock Crusher Launch Site, a comparison of site records, reports, and GIS data suggest the site is located outside of the launch site. In fact, the 1998 EA for the Tomahawk Flight Test Operations on the West Coast of the United States notes the site is located approximately 65 meters east of the launch area (Enclosure 4). During recordation and investigation of CA-SNI-41 by California State University, Los Angeles in 1997, the western portion of the site was found to be disturbed by the construction of the Rock Crusher Launch site. In spite of this disturbance, the investigators concluded that remaining portions of site CA-SNI-41 retain integrity for listing in the NRHP under criterion D. Under the current draft EIS/OEIS, no additional construction is proposed in this area, and testing and training activities will be confined to existing launch pads and access roads. Project activities which are limited to use of the existing facilities and infrastructure are consistent with current use of the Rock Crusher Launch site and would not adversely affect CA-SNI-41.

In 1998, the Navy prepared an EA for the development and use of the SLAM Impact Site (now referred to as the Land Impact Site) which is located within CA-SNI-168. Environmental analysis conducted for that EA determined impacts to CA-SNI-168 would result from the construction of the SLAM site. In support of the EA, consultation ensued between the Navy and CA SHPO in 1996, which resulted in the mitigation through data recovery of the parts of CA-SNI-168 that would be affected by the SLAM site (Enclosure 6). Additionally, the Navy developed procedures to avoid or minimize potential adverse effects to other portions of the site not subject to the data recovery efforts. These measures include aircrew briefings prior to each flight and ongoing ground crew briefings, restricted access areas at target sites, including access routes, reporting new discoveries, prohibiting collection of artifacts, minimizing off-road travel and avoiding marked areas, coordination between missile recovery crews and range environmental representatives prior to recovering any missile outside a target APE. Since the types of activities included in the proposed undertaking are similar in nature to those analyzed during the development of the 1998 EA, the Navy has determined that continued use of the Land Impact Site would not have an adverse effect on site CA-SNI-168.

5090
Ser N0000CV/0503
June 29, 2020

Based on the above analyses, the Navy has determined that the activities proposed in the PMSR draft EIS/OEIS would have no adverse effect to historic properties, consistent with 36 CFR 800.5(b).

The 2002 Final PMSR EIS/OEIS and subsequent EAs completed since 2002 can be accessed via the project website at <https://pmsr-eis.com/documents/>. A CD-ROM or printed copy of these documents can be made available by request.

CONSULTATION MEETING

The Rincon Tribe's March 19, 2020 letter requested to consult with NBVC to discuss the proposed undertaking. Due to current federal and state guidance on social distancing in response to COVID-19, the Navy is unable to meet in-person to discuss the draft EIS/OEIS. The Navy proposes an initial consultation meeting with your Tribe via teleconference. If the Tribe is amenable to this form of communication, three date and time options are provided for your convenience:

7/20/2020; 1:00 PM – 3:00 PM
7/23/2020; 10:00 AM – 12:00 PM
7/24/2020; 1:00 PM – 3:00 PM

Please select a date and time and notify Mr. Joseph Montoya, NBVC Environmental Planning and Conservation Branch Manager at (805) 989-3804 or joseph.l.montoya@navy.mil. Should you or your staff have any questions or concerns, please contact Mr. Montoya.

Sincerely,


J. E. CHISM
Captain, U.S. Navy
Commanding Officer

- Enclosures:
1. Notice of Availability of the PMSR Draft EIS/OEIS Letter
 2. APE at NBVC Point Mugu
 3. APE at NBVC SNI
 4. Archaeological Sites within or near APE at NBVC SNI
 5. SHPO Consultation Package Reference No. USN_2013_0814_001
 6. SHPO Consultation and Concurrence Letter Reference No. USN9691

G.5.1.5 Pechanga Band of Luiseño Mission Indians Response Letter



PECHANGA CULTURAL RESOURCES
Temecula Band of Luiseño Mission Indians

Post Office, Box 2183 • Temecula, CA 92593
Telephone (951) 770-6300 • Fax (951) 506-9491

April 10, 2020

VIA E-MAIL and USPS

Mr. Joseph Montoya
Department of the Navy
Naval Base Ventura County
Environmental Planning and Conservation Branch Manager
311 Main Road, Suite 1
Point Mugu, CA 93042-5033

Re: Pechanga Tribe Request for Consultation Pursuant to Section 106 for the Point Mugu Sea Range Environmental Impact Statement/Overseas Environmental Impact Statement

Dear Mr. Montoya,

This letter is written on behalf of the Pechanga Band of Luiseño Indians (hereinafter, "the Tribe"), a federally recognized Indian tribe and sovereign government in response to the Section 106 National Historic Preservation Act Consultation notice dated February 11, 2020, regarding the above referenced Undertaking. This letter serves as the Tribe's formal request for consultation with the Naval Base Ventura County (NBVC) under Section 106 for this Undertaking. It is the Tribe's understanding that the Department of Navy is preparing an Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) for 36,000 square miles of controlled sea and airspace designated for military testing and training activities, which include San Nicolas Island, in accordance with National Environmental Policy Act. To better understand the Undertaking, we request additional detailed information about the proposed Undertaking and further request to meet with the NBVC to discuss further. As you are aware, the entirety of San Nicolas Island is extremely culturally sensitive, including a substantial number of human remains, funerary objects, and tribal cultural resources¹. As previously identified by Pechanga, San Nicolas is both a Traditional Cultural Property and an Archaeological District, both of which the Tribe maintains are eligible under all four Register criteria.

The Tribe formally requests to be notified and involved in the entire environmental review process for the duration of the above referenced Undertaking. Please add the Tribe to your distribution list(s) for public notices and circulation of all documents, including environmental review documents, archaeological reports, and all documents pertaining to this Project. Please also incorporate these comments into the record of approval.

¹ Please note that while the NHPA incorporates cultural resources into the rubric of "historic properties," the Tribe takes a much more expansive view of the nature of these resources, which we can discuss further in our Section 106 consultation. For purposes of this letter, the Navy should read the term "tribal cultural resources" to be included within the definition of "historic properties."

Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need

Chairperson:
Neal Ibanez

Vice Chairperson:
Bridgett Barcello

Committee Members:
Darlene Miranda
Richard B. Seearce, III
Robert Villalobos
Shevon Torres
Juan Rodriguez

Director:
Gary DuBois

Coordinator:
Paul Macarro

Cultural Analyst:
Tuha Ebru Ozdil

Planning Specialist:
Molly Escobar

Pechanga Comment Letter to the Naval Base Ventura County
Re: Pechanga Tribe Section 106 Consultation for Point Mugu Sea Range EIS/OEIS
April 9, 2020
Page 2

The Pechanga Tribe asserts that San Nicolas Island is part of 'Atáaxum (Luiseño), and therefore the Tribe's, Aboriginal territory as evidenced by the existence of cultural resources, place names, *tóota yixélval* (rock art, pictographs, petroglyphs), and an extensive 'Atáaxum artifact record on the Island. This culturally sensitive location is affiliated with the Pechanga Band of Luiseño Indians because of the Tribe's cultural ties to San Nicolas Island, including extensive documentation of the Tribe's ancestors living on the Island. Further, the Pechanga Band ('Atáaxum/Luiseño) was determined by the Navy to be culturally affiliated with the Island pursuant to the Native American Graves Protection and Repatriation Act on February 26, 2015.

Under both NEPA and Section 106, we look forward to working closely with the NBVC on ensuring that a full, comprehensive environmental review of the Undertaking's effects is completed, which includes analysis and discussion of any sensitive tribal cultural resources, including human remains and funerary objects, that could potentially be affected by this and any future Undertakings, whether they be direct, indirect, or cumulative effects. Further, we hope to assist the NBVC with ensuring that the Undertaking will provide every effort to avoid effects to human remains, funerary objects, and tribal cultural resources. As such, we request a consultation meeting with the NBVC to receive additional information about the Project and to further discuss our concerns.

As required by the NHPA and Section 106, the Tribe must be included during the identification, evaluation, adverse effects determinations, and resolution of such effects during phases of the environmental review process. The Tribe reserves the right to fully participate in the environmental review process, as well as to provide future comment on the Undertaking's effects to tribal cultural resources and for the potential resolution of such effects at the appropriate time in the Section 106 process.

The Pechanga Tribe looks forward to working together with the Naval Base Ventura County in protecting the invaluable Pechanga cultural resources that could be effected by the issuance of the requested permits. Please contact Michele Fahley, Deputy General Counsel at mfahley@pechanga-nsn.gov or at 951-770-6179 or Ebru Ozdil, Cultural Analyst at 951-770-6313 or at eozdil@pechanga-nsn.gov once you have had a chance to review these comments so that we can schedule our consultation. Thank you.

Sincerely,



Gary DuBois, JD, MSW
Director, Cultural Resources Department
Tribal Historic Preservation Officer

cc: Pechanga Office of the General Counsel

*Pechanga Cultural Resources • Temecula Band of Luiseño Mission Indians
Post Office Box 2183 • Temecula, CA 92592*

Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need

G.5.1.6 Navy Response Letter to Pechanga Band of Luiseño Mission Indians



DEPARTMENT OF THE NAVY
NAVAL BASE VENTURA COUNTY
311 MAIN ROAD, SUITE 1
POINT MUGU, CA 93042-5033

IN REPLY REFER TO:
5090
Ser N0000CV/0496
June 29, 2020

Ms. Michele Fahley
Deputy General Counsel
Pechanga Band of Luiseño Indians
P.O. Box 2183
Temecula, CA 92593

Dear Ms. Fahley:

SUBJECT: NATIONAL HISTORIC PRESERVATION ACT, SECTION 106
CONSULTATION FOR THE POINT MUGU SEA RANGE ENVIRONMENTAL
IMPACT STATEMENT AND OVERSEAS ENVIRONMENTAL IMPACT
STATEMENT

Thank you for your letter to the U.S. Navy dated April 10, 2020 regarding the Pechanga Band of Luiseño Indians (Pechanga) request for consultation pursuant to Section 106 of the National Historic Preservation Act of 1966 (54 USC 306108) for the Point Mugu Sea Range (PMSR) Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). Your letter was a response to the Navy's February 11, 2020 letter in which the Navy invited Pechanga to enter into Government-to-Government consultation for the PMSR EIS/OEIS, which describes the proposed activities collectively termed the undertaking under Section 106. The Navy is committed to working with its Tribal Partners to ensure full and comprehensive environmental review of the undertaking's effects. Additionally, the Navy recognizes the important role our Tribal Partners play in this Section 106 process. Accordingly, the Navy looks forward to engaging in consultation with Pechanga, pursuant to Section 106, to review this undertaking.

Your letter requested additional information about involvement in the environmental review process, including: project notifications; the proposed undertaking; and, a consultation meeting between Pechanga and the Navy. This letter is a response to those requests.

The Navy recognizes Pechanga as a consulting party for this undertaking. As such, the Navy will ensure your Tribe is appropriately involved in the entire environmental review process and will receive related notifications and documents. To ensure receipt of notification and documents, Pechanga is included on the Navy's distribution list for public notices, as well as the distribution list for consulting parties – with additional access to cultural resources documents.

The Navy sent Pechanga a Notice of Availability Letter for the draft PMSR EIS/OEIS, dated April 6, 2020. This letter included a CD copy of the draft EIS/OEIS. Included below are summaries of the undertaking, the area of potential effect (APE) for the undertaking, identification of known historic properties within the APE and the determination of effect to historic properties from the undertaking. More detailed information can be found in the electronic copy of the draft EIS/OEIS provided via CD with the Navy's April 6, 2020 letter that was sent to Pechanga. The Navy also welcomes the opportunity to meet with Pechanga telephonically due to travel restrictions during the COVID-19 pandemic to discuss further.

5090
Ser N0000CV/0496
June 29, 2020

UNDERTAKING

The PMSR is located adjacent to Los Angeles, Ventura, Santa Barbara, and San Luis Obispo counties along the Pacific Coast of Southern California and includes 36,000 square miles of controlled sea and airspace designated for testing and training activities. The Naval Air Warfare Center Weapons Division (NAWCWD) is the primary tenant at NBVC Point Mugu and the primary user of the PMSR. NAWCWD Point Mugu meets its mission to conduct state-of-the-art weapons systems testing and evaluation and to maintain operational readiness by providing a safe, realistic, and instrumented testing environment. Vessels, aircraft, and weapons systems must be able to perform in realistic marine environments and operate as intended, thus improving system accuracy and personnel safety.

The Navy's proposed undertaking is to conduct military readiness activities within the PMSR. The proposed undertaking includes testing and training activities previously analyzed in the 2002 PMSR EIS/OEIS and activities associated with the Environmental Assessments (EA) completed at PMSR since 2002. In addition to consolidating previously analyzed actions into one comprehensive document, the current EIS/OEIS also addresses proposed increases in activity frequency of military research, development, acquisition, testing, and evaluation (referred to as "testing") and scheduled training activities at the PMSR. The testing and training activities subject to the current EIS/OEIS would be conducted at sea and in designated airspace within the PMSR Study Area, as well as missile launch operations and directed energy activities originating from NBVC Point Mugu and San Nicolas Island (SNI). The proposed undertaking would continue military readiness activities with some proposed increases in testing and training activities that are the same as or similar to those currently occurring within the PMSR, and have been occurring for decades. The proposed undertaking will allow for continued testing and training in support of military readiness and Department of Defense mission requirements as required by Title 10 and to provide combat-ready forces. The purpose of the proposed action is to provide modern instrumented airspace, sea space, testing and training areas, testing and training facilities, and range infrastructure to fully support current, emerging, and foreseeable future testing and training requirements, and ensure the long-term viability of the PMSR while protecting human health and the environment.

At Point Mugu, the Navy proposes testing activities associated with the Directed Energy Systems Integration Laboratory, and launch activities associated with the Launch Complex Building (PM-55), including the Alpha (PM-715 and PM-717), Bravo (PM-727, PM-728 and PM-729), Charlie (PM-748 and PM-749), and Nike Zeus (PM-751) launch complexes. Missiles can also be launched from a truck within the launch complex area. The truck is self-contained and is only onsite for the launch duration.

For SNI, the Navy proposes the continued use of the Land Impact Site, a 10.5-acre target area located on the northwest portion of the island historically associated with the Standoff Land Attack Missile (SLAM) testing program. The Land Impact Site is used for air-to-surface tests with inert weapon systems. The proposed tempo for the continued use of the Land Impact Site will not exceed what was previously analyzed in the 1998 EA for Non-warhead SLAM and future Model SLAM Firings. In addition, the Navy proposes the continued use of the existing Alpha Launch Complex (N-193 and N-315). The Alpha Launch Complex is typically used for launching supersonic targets. The proposed tempo for the use of the launch complex would not

5090
Ser N0000CV/0496
June 29, 2020

exceed what was previously analyzed in the 2002 PMSR EIS/OEIS. The Navy also proposes to conduct testing activities associated with the Directed Energy facility on SNI. Construction and use of the Directed Energy facility on SNI was previously analyzed in the 2015 Directed Energy Test Facility at SNI. There is no change in tempo proposed for Directed Energy activities on SNI from what was analyzed in the 2015 EA for the Directed Energy facility.

AREA OF POTENTIAL EFFECT

Consistent with 36 CFR 800.16(d), the APE for this project is defined as the geographic area within which the proposed undertaking may directly cause effects to historic properties. The APE for the proposed undertaking includes the PMSR, the areas associated with land-based launch and land impact facilities, and sites on NBVC Point Mugu and SNI.

IDENTIFICATION OF HISTORIC PROPERTIES

Most of the activities for the proposed undertaking will take place within the open ocean areas in the PMSR, with additional activities occurring at land-based launch and land impact facilities and sites on NBVC Point Mugu and SNI. The Study Area contains one National Register eligible architectural resource and three eligible archaeological sites.

On NBVC Point Mugu, the vast majority of architectural resources have been inventoried. Additionally, most of the non-developed and non-wetland acreage has been surveyed for archaeological sites. There are no recorded archaeological sites within the APE on NBVC Point Mugu.

Building PM-55 and its associated Launch Complex are located within the APE on NBVC Point Mugu. The building and launch complex is considered an exceptionally significant Cold War-era resource and was determined eligible for listing on the National Register of Historic Places (NRHP) under criteria A and C (JRP Historical Consulting Services, 1998). The Navy typically launches 50 to 70 missiles or targets annually from Building PM-55 and its associated beach launch pads. The majority of launches entail Jet-Assisted Takeoff (JATO) or Rocket-Assisted Takeoff (RATO) bottles to assist the launch of missiles. These bottles primarily fall into the wetland immediately in front of the launch pad (the drop zone) if the event occurs at Building PM-55. If the launch occurs from an operational pad adjacent to the beach (Pad Alpha, Pad Bravo, Pad Charlie, or Pad Nike Zeus), JATO/RATO bottles may expend into the near shore environment. The RATO and JATO bottles are retrieved during periodic clean-up processes.

San Nicolas Island has been the subject of archaeological investigations for at least 100 years, including a complete pedestrian survey resulting in the identification of approximately 600 archaeological sites. Within the APE on SNI, three eligible archaeological sites were identified: CA-SNI-12, CA-SNI-41, and CA-SNI-168.

Site CA-SNI-12 is identified as a highly disturbed habitation site comprised of a large deflating and eroding midden complex with stabilized areas containing buried deposits and human skeletal remains. The human remains are within two areas identified as cemeteries. These areas are located in the northwestern and eastern portions of the site. As analyzed in the 2015 Directed Energy Test Facility EA. The Directed Energy Test Facility would be positioned at the far northern extent of site CA-SNI-12. Components of the Directed Energy Test Facility,

5090
Ser N0000CV/0496
June 29, 2020

which are within or near CA-SNI-12, consist of a concrete pad sited on bedrock and a graded road to the pad. The concrete pad is located outside of the site boundary to the immediate west of CA-SNI-12, while the road bisects the northern portion of the site. At CA-SNI-12, the proposed activities analyzed for the Directed Energy Test Facility in this Draft EIS/OEIS involve the directed energy system (e.g., laser or high-powered microwave) at the shooter site being aimed and shot at one or more of the calibration target sites. Once the system is calibrated, it would be aimed at a target in order to conduct system tests. The "shooter" systems siting would allow a directed energy system to attack airborne or seaborne targets as well as land-based targets. The proposed tempo will not exceed what was previously analyzed in the 2015 Directed Energy Test Facility EA.

Site CA-SNI-41 is a habitation site with a large, dense midden complex. Early site investigations between the 1930s and 1950s resulted in the removal of seven burials from the site. The western portion of site CA-SNI-41 may overlap the Rock Crusher Site Launch Complex (enclosure (4)). However, archival research suggests the Rock Crusher Site Launch Complex is located to the immediate northwest and outside of the site CA-SNI-41 boundary, and an updated boundary may be required. The Navy constructed two launchers near Rock Crusher; however, the launchers were removed. The launch pads still exist and are each typically used three-to-five times per year to launch missiles via mobile or temporary launchers. The Rock Crusher Site Launch Complex is used to launch missiles or targets westward, over the ocean, within a 60-degree azimuth.

Site CA-SNI-168 is a multiple locus habitation site with a large lithic and shell scatter and buried midden areas. One cemetery area was identified at the site. The cemetery area is located approximately ninety meters east of the Land Impact Site, which is located within site CA-SNI-168. The Land Impact Site consists of structures on an elevated, irregularly-shaped single access road with an adjacent platform constructed of imported fill and gravel. The Land Impact Site is used for air-to-surface tests using inert weapon systems. While these weapons are considered inert, some do use small pyrotechnic devices (e.g., spotting charges, live fuses). Targets within the Land Impact Site may include empty Container Express (commonly known as CONEX) boxes configured to simulate buildings, helicopter or aircraft bodies, as well as other constructed simulated targets. The Land Impact Site is the only active impact site on SNI and has been in use since 1989. The proposed tempo for the continued use of the Land Impact Site will not exceed what was previously analyzed in the 1998 Environmental Assessment for Non-warhead SLAM and Future Model SLAM Firings, approximately 8–26 times annually.

During Section 106 consultation for the P-586 undertaking on SNI, the Pechanga Tribe informed the Navy of two additional potential historic properties. These potential historic properties were identified by Pechanga as a Traditional Cultural Property (TCP) and an archaeological district. Pechanga asserted that the TCP includes the entire island and that each archaeological site on the island is a contributing element to the overall archaeological district. In response to the Pechanga Tribe's identification of these potential historic properties, the Navy is preparing to contract both an ethnographic study and archaeological district study of SNI to identify and define the nature of both property types.

The only known submerged cultural resources within the study area are historic period shipwrecks and planes. To date, no systematic underwater survey has been undertaken within

5090
Ser N0000CV/0496
June 29, 2020

the waters of the PMSR; however, a submerged cultural resources assessment for the Channel Islands National Park and Channel Islands National Marine Sanctuary was conducted in 1996 which identified historic period resources in the waters near the study area.

DETERMINATION OF EFFECT

As described in the PMSR Draft EIS/OEIS, training and testing activities are expected to continue at current or similar levels in existing localities. These activities are generally consistent with those analyzed in the 2002 PMSR EIS/OEIS and subsequent EAs completed for the PMSR since 2002 wherein the Navy received SHPO concurrence on determinations of No Adverse Effect to historic properties. The activities proposed in the current Draft EIS/OEIS are representative of testing and training that the Navy has conducted in the PMSR for decades.

There are four historic properties identified within the APE for the PMSR: Building PM-55 and its associated Launch Complex on NBVC Point Mugu; and CA-SNI-12, CA-SNI-41, and CA-SNI-168 on SNI. Based on analysis of the proposed undertaking at each location, the Navy has determined the activities proposed in the PMSR Draft EIS/OEIS will not adversely affect historic properties.

For activities associated with the proposed undertaking, Building PM-55 and its Launch Complex at Point Mugu would continue as a launch facility. This activity received analysis as part of the Navy's 2002 PMSR EIS/OEIS. Consistent with findings of the 2002 EIS/OEIS, recent analysis found that the current proposed undertaking would not adversely affect the historic property because the building's historic or current use would not be altered.

The SNI Directed Energy Test Facility is sited at the far northern end of Site CA-SNI-12. Potential impacts to CA-SNI-12 and the nearby site CA-SNI-157 were identified during the Navy's preparation of the Directed Energy Test Facilities at San Nicolas Island EA. Through consultation with the SHPO, the project's construction plans were adjusted to avoid CA-SNI-157 and to minimize effects to CA-SNI-12 (enclosure (5)). Archaeological testing was conducted within the portion of site CA-SNI-12 that would be affected by widening the existing road in the northern portion of the site to support the Directed Energy Test Facility. This area was found to be highly disturbed and consisted of a surface deposit that had washed down from the top of a dune. The area was found to be a non-contributing element of the site. Additionally, measures were developed to avoid or minimize adverse effects to other portions of the site. A physical barrier was installed to prevent sea mammals from accessing the concrete pad adjacent to the site boundary for haul out and to prevent people from driving onto CA-SNI-12. Signage was also installed to direct people to walk on paved and graded areas only. Accordingly, the EA determined there would be no impacts to the archaeological site associated with testing and personnel training at the site. CA SHPO concurrence was received for these findings in a letter dated December 2, 2014.

The Rock Crusher Launch site on SNI (PM-807, PM-807a, and PM-813) contains the Tomahawk Launch Pad and the RAM Launch Pad. These concrete pads were constructed between 1970 and 1996 and are located within or near the western portion of site CA-SNI-41. Although the site boundary is currently depicted within the Rock Crusher Launch Site, a comparison of site records, reports, and GIS data suggest the site is located outside of the launch

5090
Ser N0000CV/0496
June 29, 2020

site. In fact, the 1998 EA for the Tomahawk Flight Test Operations on the West Coast of the United States notes the site is located approximately 65 meters east of the launch area. During recordation and investigation of CA-SNI-41 by California State University, Los Angeles in 1997, the western portion of the site was found to be disturbed by the construction of the Rock Crusher Launch site. In spite of this disturbance, the investigators concluded that remaining portions of site CA-SNI-41 retain integrity for listing in the NRHP under criterion D. Under the current draft EIS/OEIS, no additional construction is proposed in this area, and testing and training activities will be confined to existing launch pads and access roads. Project activities which are limited to use of the existing facilities and infrastructure are consistent with current use of the Rock Crusher Launch site and would not adversely affect CA-SNI-41.

In 1998, the Navy prepared an EA for the development and use of the SLAM Impact Site (now referred to as the Land Impact Site) which is located within CA-SNI-168. Environmental analysis conducted for that EA determined impacts to CA-SNI-168 would result from the construction of the SLAM site. In support of the EA, consultation ensued between the Navy and CA SHPO in 1996, which resulted in the mitigation through data recovery of the parts of CA-SNI-168 that would be affected by the SLAM site (Enclosure 6). Additionally, the Navy developed procedures to avoid or minimize potential adverse effects to other portions of the site not subject to the data recovery efforts. These measures include aircrew briefings prior to each flight and ongoing ground crew briefings; restricted access areas at target sites, including access routes; reporting new discoveries; prohibiting collection of artifacts; off-road travel minimized and marked areas avoided; and coordination between missile recovery crews and range environmental representatives prior to recovering any missile outside a target APE. Since the types of activities included in the proposed undertaking are similar in nature to those analyzed during the development of the 1998 EA, the Navy has determined that continued use of the Land Impact Site would not have an adverse effect on site CA-SNI-168.

Based on the above analyses, the Navy has determined that the activities proposed in the PMSR Draft EIS/OEIS would have no adverse effect to historic properties, consistent with 36 CFR 800.5(b).

The 2002 Final PMSR EIS/OEIS and subsequent EAs completed since 2002, as well as the 1998 EA for the development and use of the SLAM Impact site, can be accessed via the project website at <https://pmsr-eis.com/Documents/>. A CD-ROM or printed copy of these documents can be made available by request.

CONSULTATION MEETING

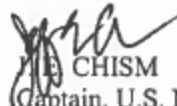
The Pechanga Tribe's April 10, 2020 letter requested to meet with NBVC to discuss the proposed undertaking. Due to current Federal and State guidance on social distancing in response to COVID-19, the Navy is unable to meet in-person to discuss the Draft EIS/OEIS. The Navy proposes an initial consultation meeting with your Tribe via teleconference. If the Tribe is amenable to this form of communication, three date and time options are provided for your convenience:

7/22/2020; 1:00 PM – 3:00 PM
7/23/2020; 1:00 PM – 3:00 PM
7/24/2020; 10:00 AM – 12:00 PM

5090
Ser N0000CV/0496
June 29, 2020

Please select a date and time and notify Mr. Joseph Montoya, NBVC Environmental Planning and Conservation Branch Manager at (805) 989-3804 or joseph.l.montoya@navy.mil. Should you or your staff have any questions or concerns, please contact Mr. Montoya.

Sincerely,


J. E. CHISM
Captain, U.S. Navy
Commanding Officer

- Enclosures:
1. Notice of Availability of the PMSR Draft EIS/OEIS Letter
 2. APE at NBVC Point Mugu
 3. APE at NBVC SNI
 4. Archaeological Sites within or near APE at SNI
 5. SHPO Consultation Package Reference No. USN_2013_0814_001
 6. SHPO Consultation and Concurrence Letter Reference No. USN9609188

Copy to:
Gary DuBois
Director, Cultural Resources Department
Tribal Historic Preservation Officer
Pechanga Band of Luiseño Indians
P.O. Box 2183
Temecula, CA 92593

Ebru Ozdil
Cultural Analyst
Pechanga Band of Luiseño Indians
P.O. Box 2183
Temecula, CA 92593

G.5.1.7 Navy Follow-Up Invitation Letter to Tribes for Consultation (Example)



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER WEAPONS DIVISION
1 ADMINISTRATION CIRCLE 575 I AVENUE SUITE 1
CHINA LAKE, CA 93555-6100 POINT MUGU, CA 93042-5040

IN REPLY REFER TO:

5090
Ser EB2R000M/1724
24 Jun 20

The Honorable Temet Aguilar
Pauma Band of Luiseño Mission Indians
1010 Pauma Reservation Rd.
Pauma Valley, CA 92061

**SUBJECT: POINT MUGU SEA RANGE ENVIRONMENTAL IMPACT STATEMENT/
OVERSEAS ENVIRONMENTAL IMPACT STATEMENT**

Dear Chairperson Aguilar:

The Department of the Navy has prepared a Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) for military activity on the Point Mugu Sea Range (PMSR), Naval Base Ventura County, in accordance with the National Environmental Policy Act (NEPA).

Naval Base Ventura County invited your Tribe to enter into Government-to-Government consultation regarding the PMSR EIS/OEIS on February 11, 2020. At that time, the Navy provided you with the Draft Executive Summary and Draft Cultural Resources Chapter from the PMSR EIS/OEIS. The Navy sent your Tribe another letter, dated April 6, 2020, in which the Navy provided a CD copy of the Draft EIS/OEIS. This letter also informed you that the Navy is conducting NEPA consultation concurrent with Section 106 consultation.

The Draft EIS/OEIS for the PMSR assesses the potential environmental consequences associated with continuing military readiness activities previously analyzed in the March 2002 Naval Air Warfare Center Weapons Division (NAWCWD) PMSR Final EIS/OEIS and environmental assessments completed at the PMSR since 2002. In addition to consolidating previously analyzed actions into one comprehensive document, the Navy is also analyzing the potential environmental consequences of proposed increases in research, development, acquisition, testing, and evaluation (hereinafter referred to as "testing") and training activities. These activities are consistent with those analyzed in the 2002 analysis and are representative of Navy activities that have occurred in the PMSR for decades.

The PMSR is located adjacent to Los Angeles, Ventura, Santa Barbara, and San Luis Obispo counties along the Pacific Coast of Southern California and includes 36,000 square miles of controlled sea and airspace designated for testing and training activities (Enclosure 1). NAWCWD Point Mugu meets its mission to conduct state-of-the-art weapons systems testing and evaluation and to maintain operational readiness by providing a safe, realistic, and instrumented testing environment. Vessels, aircraft, and weapons systems must be able to perform in realistic marine environments and operate as intended, thus improving system accuracy and personnel safety.

5090
Ser EB2R000M/1724
24 Jun 20

The Proposed Action is to continue military readiness activities and increase testing and training activities that are the same as or similar to those currently occurring within the PMSR. The purpose of the Proposed Action is to:

- Provide modern instrumented airspace, sea space, testing and training areas, testing and training facilities, and range infrastructure to fully support current, emerging, and foreseeable future testing and training requirements.
- Ensure the long-term viability of the Point Mugu Sea Range while protecting human health and the environment.

The need for the Proposed Action is to allow for continued testing and training in support of military readiness and Department of Defense mission requirements as required by Title 10 of the United States Code – Armed Forces and to provide combat-ready forces.

The public comment period for the Draft EIS/OEIS closed on June 8, 2020. However, should you or your staff have any questions or concerns, please contact Mr. Joseph Montoya, NBVC Environmental Planning and Conservation Branch Manager at (805) 989-3804 or joseph.l.montoya@navy.mil.

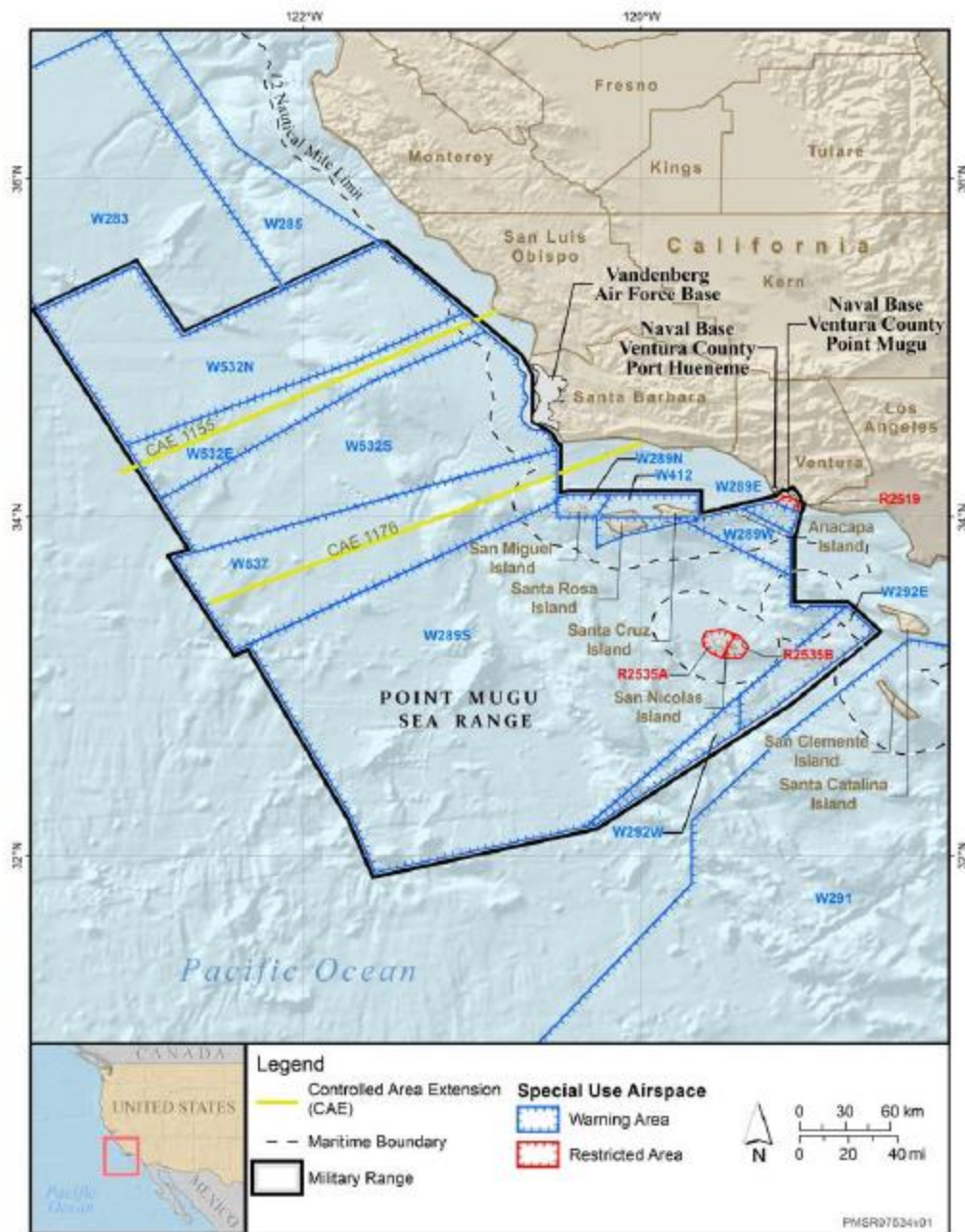
Sincerely,



KENNETH SEELEY
By direction

Enclosure: PMSR EIS/OEIS Study Area

Enclosure 1: Point Mugu Sea Range EIS/OEIS Study Area



Enclosure (1)

G.5.1.8 Navy Follow-Up Invitation Letter to Tribes for Consultation (Recipient List)

The Honorable Temet A. Aguilar, Chairperson
Pauma Band of Luiseño Mission Indians

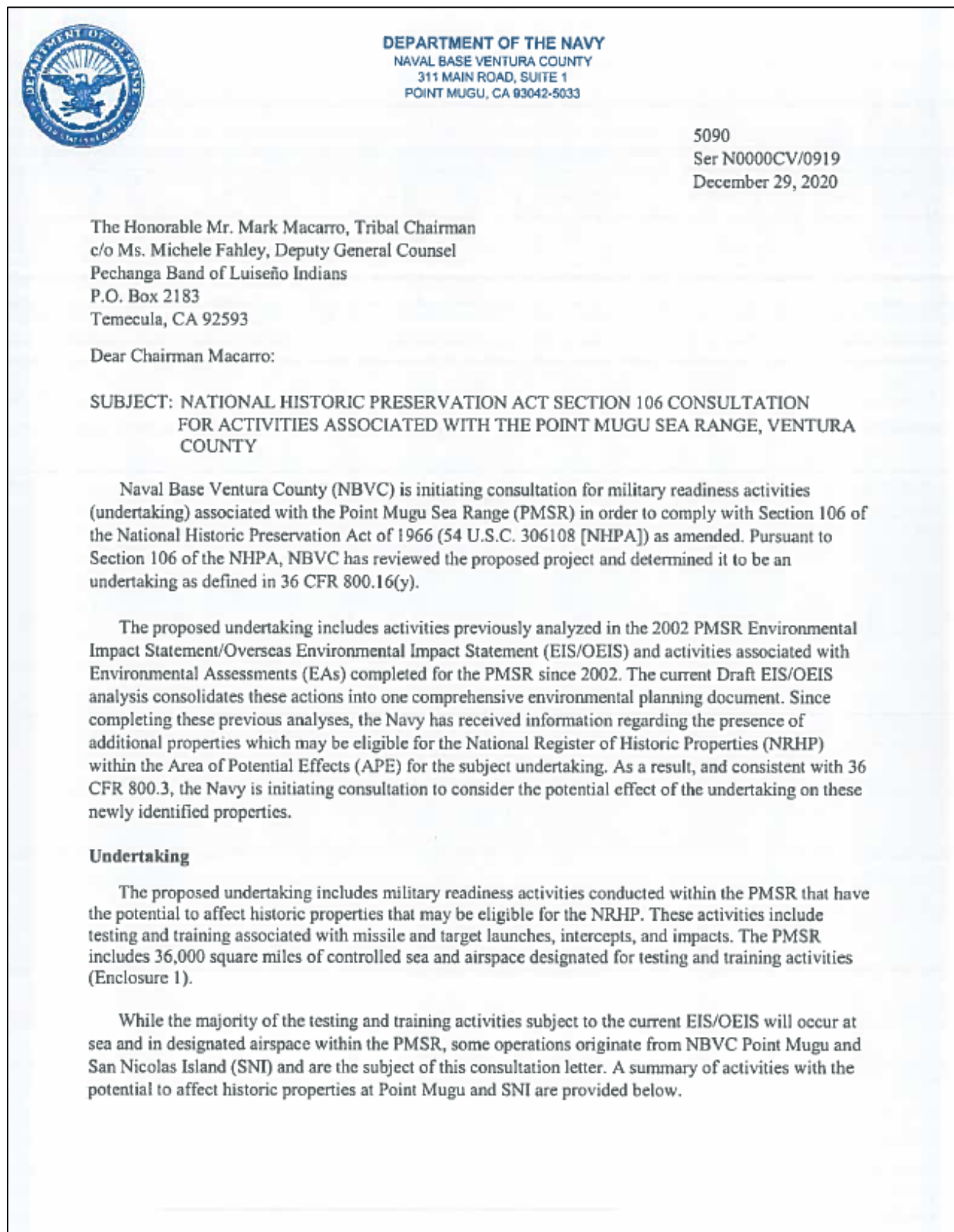
The Honorable Fred Nelson, Chairperson
La Jolla Band of Luiseño Indians

The Honorable Robert H. Smith, Chairperson
Pala Band of Luiseño Mission Indians

The Honorable Kenneth Kahn, Chairperson
Santa Ynez Band of Chumash Mission Indians

The Honorable Isaiah Vivanco, Chairperson
Soboba Band of Luiseño Indians

G.5.1.9 Navy Invitation Letter to Tribes for Section 106 Consultation (Examples)



5090
Ser N0000CV/0919
December 29, 2020

Land Impact Site on SNI

At SNI, the Navy proposes the continued use of the Land Impact Site, a targeted impact area located on the northwest portion of the island historically associated with the Standoff Land Attack Missile (SLAM) testing program. The Land Impact Site is used for air-to-surface tests with inert weapon systems, which impact targets located on an elevated pad of imported fill and gravel. The Land Impact Site consists of multiple targets situated on the elevated pad; however, individual events are directed at a specific target within the site. The proposed tempo for the continued use of the Land Impact Site will not exceed a maximum of 26 inert impacts per year.

Alpha Launch Complex on SNI

The Navy proposes continued use of the Alpha Launch Complex on SNI to launch supersonic targets from existing launch pads within the complex. The proposed tempo for the combined use of both the Alpha Launch Complex and the Building 807 Launch Complex (see below) would not exceed a maximum of 40 launch events per year.

Building 807 Launch Complex near the Rock Crusher site on SNI

The Navy proposes continued use of the Building 807 Launch Complex near Rock Crusher on SNI to launch supersonic targets, similar to the launch activities at the Alpha Launch Complex. As noted above, the proposed tempo for the combined use of the Building 807 Launch Complex and the Alpha Launch Complex would not exceed 40 launches per year.

Directed Energy on SNI

The Directed Energy activities on SNI includes high-energy laser (HEL) and high-power microwave (HPM) systems from land, vessels, and aircraft. On SNI, the Directed Energy activities include a DE shooter site at Tender Point (from which HEL or HPM is fired), and DE target site at Vizcaino Point (used to calibrate the HEL or HPM). The shooter systems siting would allow a DE system to attack airborne or seaborne targets as well as land-based targets. The proposed tempo for use of the DE facilities on SNI would be approximately 125 days per year.

Area of Potential Effect

Consistent with 36 CFR 800.16(d), the APE is defined as the geographic area within which the proposed undertaking may directly or indirectly cause effects to historic properties. The APE for the proposed undertaking includes a series of discontinuous sub-areas throughout the PMSR:

Land Impact Site

The APE for the Land Impact Site on SNI includes the target pad and surrounding area subject to falling debris associated with weapon impact tests. This area encompasses approximately 52 acres and measures approximately 520 meters N/S by 400 meters E/W. It also includes an approximately 300-meter road segment located south of the target pad (Enclosure 2). The APE for the Land Impact Site is informed by analysis conducted during 1997 data recovery efforts at CA-SNI-168 and includes both the Area of Direct Effects and the Area of Indirect Effects identified during that study. The Area of Direct Effects includes the target pad and its surrounding area, accounting for cleanup efforts resulting from missile impacts. The Area of Indirect Effects is a larger area whose extent is represented by the boundary of the currently defined APE. The Area of Indirect Effects was identified in the 1997 study as an area where

5090
Ser N0000CV/0919
December 29, 2020

there could be a light debris scatter and periodic foot traffic to remove the debris. The Area of Indirect Effects also accounts for the minor possibility of a Mission abort. Recent field visits by Navy Archaeologists verified the previously defined Areas of Direct and Indirect Effects. Additional field visits are planned to ensure the accuracy of the defined APE.

Alpha Launch Complex

The APE for the Launch pad areas associated with the Alpha Launch Complex on SNI includes the Coyote Launch Pad and an area with miscellaneous launch pads located to the south of the Coyote Launch Pads (Enclosure 2). In addition to the launch pads, a 30-meter buffer around the launch pads is included in the APE.

Building 807 Launch Complex near the Rock Crusher Site

The APE for the areas associated with the Building 807 Launch Complex near the Rock Crusher site on SNI includes the Tomahawk Launch Pad and the rolling airframe missile (RAM) Launch Pad as well as a gravel area located adjacent to the launch pads, with a 30-meter buffer around the launch pads and associated gravel area (Enclosure 2).

Directed Energy Test and Target Areas

The APE for the DE test and target areas on SNI include a DE shooter site at Tender Point and a DE target site at Vizcaino Point (Enclosure 2). The APE for the DE shooter and target sites include a 30-meter buffer surrounding the test and target pads.

Identification of Historic Properties

Pursuant to 36 CFR 800.4(a)(2), NBVC has reviewed the cultural resources inventory for the identified APE. The large majority of the proposed undertaking activities will take place within the offshore area of the PMSR. A smaller number of activities occur at land-based launch and land impact facilities and sites on NBVC Point Mugu and SNI. The APE for the proposed undertaking contains four National Register eligible archaeological sites on SNI. The APE also contains one archaeological site that was recommended not eligible for the National Register, but SHPO concurrence was never received. A summary of known historic properties on SNI is provided here.

There are two historic properties within the Land Impact Site APE. These sites are the archaeological sites CA-SNI-168 and CA-SNI-169.

(1) CA-SNI-168 is a large shell midden with six loci that is subject to wind erosion. Archaeological testing of the site to support construction of the Impact Pad in 1997 indicate that the site is a camp site where final tool manufacture, food processing, and general domestic production and maintenance activities occurred year-round. The site contained numerous ground stone tools (manos, mortars, pitted stones, net sinkers and weights), lithic debitage, a large chert biface, whalebone tools, several shell fishhook blanks, and ornamental items including pendants and shell/stone beads. The site is largely deflated with limited intact midden soils. Three burials were removed from this site, one in the 1970s, one in the 1980s, and one in 2000. The Land Impact Site is located on top of site CA-SNI-168. In consultation with SHPO, data recovery efforts in 1997 mitigated impacts from construction and use of the Land Impact Site.

(2) CA-SNI-169 is a dispersed midden area consisting of at least three deflating midden remnants in

5090
Ser N0000CV/0919
December 29, 2020

a dune environment. This site represents a locus of a larger campsite complex that includes CA-SNI-168. The artifacts and ecofacts associated with this site include evidence of food processing for resources possibly consumed elsewhere. Numerous tools to procure, process, and store tools are present at the site. Cultural material identified on site includes cores, flakes, sandstone fragments, marine shell, and fish bone.

There is one historic property within the Alpha Launch Complex and Target APE on SNI. This site is the archaeological site CA-SNI-44.

(1) CA-SNI-44 is a lithic scatter and low density midden that has been heavily impacted by past military construction of the launch pad. The site is largely disturbed and deflated, but buried, intact midden deposits occur in Locus B near the intersection of Tufts Road and the launch pad access road. Lithic materials include metavolcanics, quartzite, breccia, and chert; and groundstone artifacts consisted of a sandstone pestle and two manos. Midden constituents include black abalone, owl limpet, California mussel, and sea mammal

There is one historic property within the APE for the launch pad areas associated with the Building 807 Launch Complex at the Rock Crusher site. This site is the archaeological site CA-SNI-41.

(1) CA-SNI-41 is a habitation site with a large, dense, eroding shell midden complex situated on a large sand dune. The site consists of several areas of buried midden flanked by eroded caliche outcrops. It contains lithics, a large quantity of marine shell, some groundstone, miscellaneous tools, and trade items such as chert. Modern disturbance to the site includes several pipes and cables that run across the site, especially at the western and eastern ends. There may have been an old road along the southern flank of the dune. The western part of the dune has been disturbed by the construction of the road to the Rock Crusher site. Early site investigations between the 1930s and 1950s resulted in the removal of seven burials from the site.

There is one historic property within the Directed Energy Test and Target APE on SNI. This site is the archaeological site CA-SNI-12.

(2) CA-SNI-12 is a large, eroding and deflating midden complex located on a coastal terrace with dunes. The site consists of large amounts of marine shell, lithics, some groundstone, and faunal remains. The site is highly disturbed by erosion and the presence of roads that bisect the site. Stabilized areas are present and contain buried deposits and human skeletal remains. The human remains are within two areas identified as cemeteries. These areas are located in the northwestern and eastern portions of the site.

In accordance with 36 CFR 800.4(b)(1), NVBC is making efforts to identify additional historic properties that may be present within the APE. During Section 106 consultation for the P-586 undertaking on SNI, the Pechanga Band of Luiseño Indians (Pechanga) Tribe informed the Navy of two potential historic properties. Your Tribe provided the Navy with a confidential ethnographic information report that identified these potential historic properties as a Traditional Cultural Property (TCP) and an archaeological district. You indicated the TCP includes the entire island and that each archaeological site on the island is a contributing element to the overall archaeological district. In response to your Tribe's identification of these potential historic properties, the Navy has contracted both an ethnographic study and archaeological district study of SNI to identify and define the nature of both property types. These studies are underway and are being developed in consultation with your Tribe. As it becomes available, the information resulting from these studies will be taken into consideration for this and future NHPA consultations between Pechanga and the Navy.

5090
Ser N0000CV/0919
December 29, 2020

Pursuant to 36 CFR 800.4(a)(4), NBVC is seeking additional information beyond what you have already provided regarding the identification of historic properties to which your Tribe attaches religious and cultural significance that may be affected by this undertaking. The provision of this information from your Tribe will aid in the ability to determine the level of effect as well as the nature of the properties and their significance. This information is paramount and therefore the subject of this continued Section 106 consultation.

Plan for Consultation

After the Navy has received your Tribe's comments regarding the undertaking, definition of the APE, and the identification of historic properties, the Navy will proceed to the next step in the Section 106 process. The Navy respectfully requests your comments within 30 days of receipt of this letter. If you have any questions, please contact Dr. Kristina Erlandson, Cultural Resources Manager, NBVC, at (805) 234-6399 or by email at Kristina.erlandson@navy.mil.

Sincerely,


J. H. CHISM
Captain, U.S. Navy
Commanding Officer

Enclosures: 1. PMSR EIS/OEIS Study Area
2. APE at SNL

Copy to:
Commander Navy Regional Southwest
Attn: Environmental Department
Cultural Resources Management Program
San Diego, CA 92147

The Honorable Mr. Temet A. Aguilar, Tribal Chairman
c/o Chris Devers, Pauma Cultural Committee
Pauma Band of Luiseño Indians
P.O. Box 369
Pauma Valley, CA 92061

The Honorable Mr. Bo Mazzetti, Tribal Chairman
c/o Cheryl Madrigal, THPO
Rincon Band of Luiseño Indians
Rincon Tribal Hall,
Valley Center, CA 92082

The Honorable Mr. Kenneth Kahn, Tribal Chairman

5090
Ser N0000CV/0919
December 29, 2020

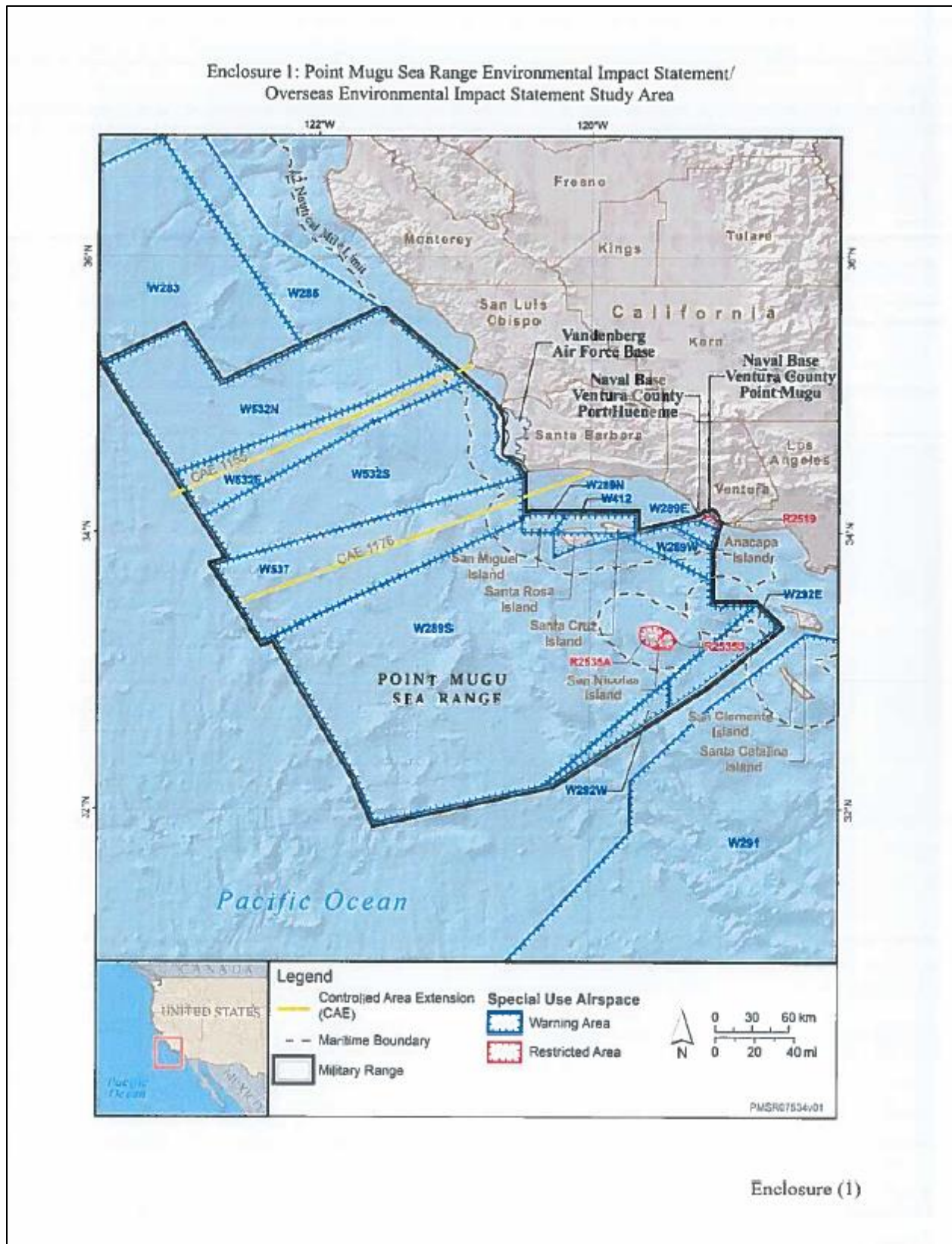
c/o Nakia Zavalla, Tribal Culture Director
Santa Ynez Band of Chumash Indians
P.O. Box 517
Santa Ynez, CA 93460

The Honorable Mr. Fred Nelson, Jr., Tribal Chairman
c/o James Trujillo
La Jolla Band of Luiseño Indians
22000 Highway 76
Pauma Valley, CA 92061

The Honorable Robert H. Smith, Tribal Chairman
c/o Shasta Gaughen, THPO
Pala Band of Mission Indians
12196 Pala Mission Road
Pala, CA 92059

The Honorable Mr. Isaiah Vivanco, Tribal Chairman
c/o Joseph Ontiveros, THPO
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816-7100





DEPARTMENT OF THE NAVY
NAVAL BASE VENTURA COUNTY
311 MAIN ROAD, SUITE 1
POINT MUGU, CA 93042-5033

IN REPLY REFER TO:

5090
Ser N0000CV/007
January 7, 2021

The Honorable Mr. Temet A. Aguilar, Tribal Chairman
c/o Chris Devers, Pauma Cultural Committee
Pauma Band of Luiseño Indians
P.O. Box 369
Pauma Valley, CA 92061

Dear Chairman Aguilar:

**SUBJECT: NATIONAL HISTORIC PRESERVATION ACT SECTION 106 CONSULTATION
FOR ACTIVITIES ASSOCIATED WITH THE POINT MUGU SEA RANGE,
VENTURA COUNTY**

Naval Base Ventura County (NBVC) is initiating consultation for military readiness activities (undertaking) associated with the Point Mugu Sea Range (PMSR) in order to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. 306108 [NHPA]) as amended. Pursuant to Section 106 of the NHPA, NBVC has reviewed the proposed project and determined it to be an undertaking as defined in 36 CFR 800.16(y).

The proposed undertaking includes activities previously analyzed in the 2002 PMSR Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) and activities associated with Environmental Assessments (EAs) completed for the PMSR since 2002. The current Draft EIS/OEIS analysis consolidates these actions into one comprehensive environmental planning document. Since completing these previous analyses, the Navy has received information regarding the presence of additional properties which may be eligible for the National Register of Historic Properties (NRHP) within the Area of Potential Effects (APE) for the subject undertaking. As a result, and consistent with 36 CFR 800.3, the Navy is initiating consultation to consider the potential effect of the undertaking on these newly identified properties.

Undertaking

The proposed undertaking includes military readiness activities conducted within the PMSR that have the potential to affect historic properties that may be eligible for the NRHP. These activities include testing and training associated with missile and target launches, intercepts, and impacts. The PMSR includes 36,000 square miles of controlled sea and airspace designated for testing and training activities (Enclosure 1).

While the majority of the testing and training activities subject to the current EIS/OEIS will occur at sea and in designated airspace within the PMSR, some missile operations originate from NBVC Point Mugu and San Nicolas Island (SNI) and are the subject of this consultation letter. A summary of activities with the potential to affect historic properties at Point Mugu and SNI are provided below.

5090
Ser N0000CV/007
January 7, 2021

Land Impact Site on SNI

At SNI, the Navy proposes the continued use of the Land Impact Site, a targeted impact area located on the northwest portion of the island historically associated with the Standoff Land Attack Missile (SLAM) testing program. The Land Impact Site is used for air-to-surface tests with inert weapon systems, which impact targets located on an elevated pad of imported fill and gravel. The Land Impact Site consists of multiple targets situated on the elevated pad; however, individual events are directed at a specific target within the site. The proposed tempo for the continued use of the Land Impact Site will not exceed a maximum of 26 inert impacts per year.

Alpha Launch Complex on SNI

The Navy proposes continued use of the Alpha Launch Complex on SNI to launch supersonic targets from existing launch pads within the complex. The proposed tempo for the combined use of both the Alpha Launch Complex and the Building 807 Launch Complex (see below) would not exceed a maximum of 40 launch events per year.

Building 807 Launch Complex near the Rock Crusher site on SNI

The Navy proposes continued use of the Building 807 Launch Complex near Rock Crusher on SNI to launch supersonic targets, similar to the launch activities at the Alpha Launch Complex. As noted above, the proposed tempo for the combined use of the Building 807 Launch Complex and the Alpha Launch Complex would not exceed 40 launches per year.

Directed Energy on SNI

The Directed Energy activities on SNI includes high-energy laser (HEL) and high-power microwave (HPM) systems from land, vessels, and aircraft. On SNI, the Directed Energy activities include a DE shooter site at Tender Point (from which HEL or HPM is fired), and DE target site at Vizcaino Point (used to calibrate the HEL or HPM). The shooter systems siting would allow a DE system to attack airborne or seaborne targets as well as land-based targets. The proposed tempo for use of the DE facilities on SNI would be approximately 125 days per year.

Area of Potential Effect

Consistent with 36 CFR 800.16(d), the APE is defined as the geographic area within which the proposed undertaking may directly or indirectly cause effects to historic properties. The APE for the proposed undertaking includes a series of discontinuous sub-areas throughout the PMSR:

Land Impact Site

The APE for the Land Impact Site on SNI includes the target pad and surrounding area subject to falling debris associated with weapon impact tests. This area encompasses approximately 52 acres and measures approximately 520 meters N/S by 400 meters E/W. It also includes an approximately 300-meter road segment located south of the target pad (Enclosure 2). The APE for the Land Impact Site is informed by analysis conducted during 1997 data recovery efforts at CA-

5090
Ser N0000CV/007
January 7, 2021

SNI-168 and includes both the Area of Direct Effects and the Area of Indirect Effects identified during that study. The Area of Direct Effects includes the target pad and its surrounding area, accounting for cleanup efforts resulting from missile impacts. The Area of Indirect Effects is a larger area whose extent is represented by the boundary of the currently defined APE. The Area of Indirect Effects was identified in the 1997 study as an area where there could be a light debris scatter and periodic foot traffic to remove the debris. The Area of Indirect Effects also accounts for the minor possibility of a Mission abort. Recent field visits by Navy Archaeologists verified the previously defined Areas of Direct and Indirect Effects. Additional field visits are planned to ensure the accuracy of the defined APE.

Alpha Launch Complex

The APE for the Launch pad areas associated with the Alpha Launch Complex on SNI includes the Coyote Launch Pad and an area with miscellaneous launch pads located to the south of the Coyote Launch Pads (Enclosure 2). In addition to the launch pads, a 30-meter buffer around the launch pads is included in the APE.

Building 807 Launch Complex near the Rock Crusher Site

The APE for the areas associated with the Building 807 Launch Complex near the Rock Crusher site on SNI includes the Tomahawk Launch Pad and the rolling airframe missile (RAM) Launch Pad as well as a gravel area located adjacent to the launch pads, with a 30-meter buffer around the launch pads and associated gravel area (Enclosure 2).

Directed Energy Test and Target Areas

The APE for the DE test and target areas on SNI include a DE shooter site at Tender Point and a DE target site at Vizcaino Point (Enclosure 2). The APE for the DE shooter and target sites include a 30-meter buffer surrounding the test and target pads.

Identification of Historic Properties

Pursuant to 36 CFR 800.4(a)(2), NBVC has reviewed the cultural resources inventory for the identified APE. The large majority of the proposed undertaking activities will take place within the offshore area of the PMSR. A smaller number of activities occur at land-based launch and land impact facilities and sites on NBVC Point Mugu and SNI. The APE for the proposed undertaking contains four National Register eligible archaeological sites on SNI. The APE also contains one archaeological site that was recommended not eligible for the National Register, but SHPO concurrence was never received. A summary of known historic properties on SNI is provided here. There are two historic properties within the Land Impact Site APE. These sites are the archaeological sites CA-SNI-168 and CA-SNI-169.

(1) CA-SNI-168 is a large shell midden with six loci that is subject to wind erosion. Archaeological testing of the site to support construction of the Impact Pad in 1997 indicate that the site is a camp site where final tool manufacture, food processing, and general domestic

5090
Ser N0000CV/007
January 7, 2021

production and maintenance activities occurred year-round. The site contained numerous ground stone tools (manos, mortars, pitted stones, net sinkers and weights), lithic debitage, a large chert biface, whalebone tools, several shell fishhook blanks, and ornamental items including pendants and shell/stone beads. The site is largely deflated with limited intact midden soils. Three burials were removed from this site, one in the 1970s, one in the 1980s, and one in 2000. The Land Impact Site is located on top of site CA-SNI-168. In consultation with SHPO, data recovery efforts in 1997 mitigated impacts from construction and use of the Land Impact Site.

(2) CA-SNI-169 is a dispersed midden area consisting of at least three deflating midden remnants in a dune environment. This site represents a locus of a larger campsite complex that includes CA-SNI-168. The artifacts and ecofacts associated with this site include evidence of food processing for resources possibly consumed elsewhere. Numerous tools to procure, process, and store tools are present at the site. Cultural material identified on site includes cores, flakes, sandstone fragments, marine shell, and fish bone.

There is one historic property within the Alpha Launch Complex and Target APE on SNI. This site is the archaeological site CA-SNI-44.

(1) CA-SNI-44 is a lithic scatter and low density midden that has been heavily impacted by past military construction of the launch pad. The site is largely disturbed and deflated, but buried, intact midden deposits occur in Locus B near the intersection of Tufts Road and the launch pad access road. Lithic materials include metavolcanics, quartzite, breccia, and chert; and groundstone artifacts consisted of a sandstone pestle and two manos. Midden constituents include black abalone, owl limpet, California mussel, and sea mammal.

There is one historic property within the APE for the launch pad areas associated with the Building 807 Launch Complex at the Rock Crusher site. This site is the archaeological site CA-SNI-41.

(1) CA-SNI-41 is a habitation site with a large, dense, eroding shell midden complex situated on a large sand dune. The site consists of several areas of buried midden flanked by eroded caliche outcrops. It contains lithics, a large quantity of marine shell, some groundstone, miscellaneous tools, and trade items such as chert. Modern disturbance to the site includes several pipes and cables that run across the site, especially at the western and eastern ends. There may have been an old road along the southern flank of the dune. The western part of the dune has been disturbed by the construction of the road to the Rock Crusher site. Early site investigations between the 1930s and 1950s resulted in the removal of seven burials from the site.

There is one historic property within the Directed Energy Test and Target APE on SNI. This site is the archaeological site CA-SNI-12.

(2) CA-SNI-12 is a large, eroding and deflating midden complex located on a coastal terrace

5090
Ser N0000CV/007
January 7, 2021

with dunes. The site consists of large amounts of marine shell, lithics, some groundstone, and faunal remains. The site is highly disturbed by erosion and the presence of roads that bisect the site. Stabilized areas are present and contain buried deposits and human skeletal remains. The human remains are within two areas identified as cemeteries. These areas are located in the northwestern and eastern portions of the site.

In accordance with 36 CFR 800.4(b)(1), NBVC is making efforts to identify additional historic properties that may be present within the APE. During Section 106 consultation for the P-586 undertaking on SNI, the Pechanga Band of Luiseño Indians (Pechanga) Tribe informed the Navy of two potential historic properties. Pechanga identified these potential historic properties as a Traditional Cultural Property (TCP) and an island-wide archaeological district. In response to the Pechanga Tribe's identification of these potential historic properties, the Navy has contracted both an ethnographic study and archaeological district study of SNI to identify and define the nature of both property types. These studies are underway and are being developed in consultation with Indian tribes that attach religious and cultural significance to SNI. As it becomes available, the information resulting from these studies will be taken into consideration for this and future NHPA consultations between the tribes and the Navy.

Pursuant to 36 CFR 800.4(a)(4), NBVC is seeking information you may have regarding the identification of historic properties to which your Tribe attaches religious and cultural significance that may be affected by this undertaking. The provision of this information from your Tribe will aid in the ability to determine the level of effect as well as the nature of the properties and their significance. This information is paramount and therefore the subject of this continued Section 106 consultation.

Plan for Consultation

After the Navy has received your Tribe's comments regarding the undertaking, definition of the APE, and the identification of historic properties, the Navy will proceed to the next step in the Section 106 process. The Navy respectfully requests your comments within 30 days of receipt of this letter. If you have any questions, please contact Dr. Kristina Erlandson, Cultural Resources Manager, NBVC, at (805) 234-6399 or by email at Kristina.erlandson@navy.mil.

Sincerely,



J. E. CHISM
Captain, U.S. Navy
Commanding Officer

Enclosures: 1. PMSR EIS/OEIS Study Area
2. APE at SNI

Copy to:

Commander Navy Region Southwest
Attn: Environmental Department
Cultural Resources Management Program
San Diego, CA 92147

The Honorable Mr. Mark Macarro, Tribal Chairman
c/o Ms. Michele Fahley, Deputy General Counsel
Pechanga Band of Luiseño Indians
P.O. Box 2183
Temecula, CA 92593

The Honorable Mr. Bo Mazzetti, Tribal Chairman
c/o Cheryl Madrigal, THPO
Rincon Band of Luiseño Indians
Rincon Tribal Hall,
Valley Center, CA 92082

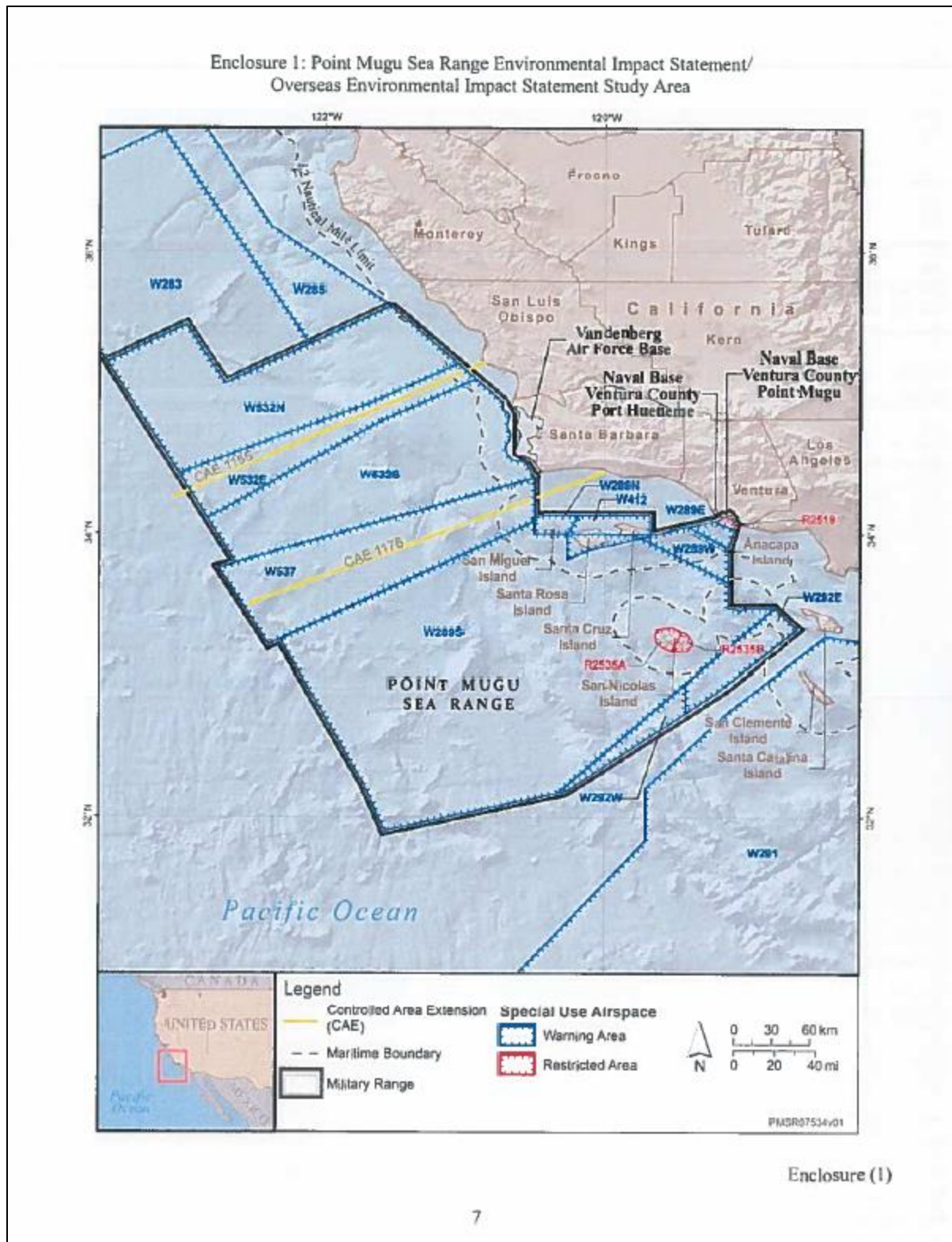
The Honorable Mr. Kenneth Kahn, Tribal Chairman
c/o Nakia Zavalla, Tribal Culture Director
Santa Ynez Band of Chumash Indians
P.O. Box 517
Santa Ynez, CA 93460

The Honorable Mr. Fred Nelson, Jr., Tribal Chairman
c/o James Trujillo
La Jolla Band of Luiseño Indians
22000 Highway 76
Pauma Valley, CA 92061

The Honorable Robert H. Smith, Tribal Chairman
c/o Shasta Gaughen, THPO
Pala Band of Mission Indians
12196 Pala Mission Road
Pala, CA 92059

The Honorable Mr. Isaiah Vivanco, Tribal Chairman
c/o Joseph Ontiveros, THPO
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816-7100



G.5.1.10 Navy Invitation Letter to Tribes for Section 106 Consultation (Recipient List)

Commander Navy Region Southwest
Cultural Resources Management Program

The Honorable Mark Macarro, Tribal Chairperson
c/o Michele Fahley, Deputy General Counsel
Pechanga Band of Luiseño Mission Indians

The Honorable Bo Mazzetti, Tribal Chairperson
c/o Cheryl Madrigal, THPO
Rincon Band of Luiseño Mission Indians

The Honorable Kenneth Kahn, Tribal Chairperson
c/o Nakia Zavalla, Tribal Culture Director
Santa Ynez Band of Chumash Mission Indians

The Honorable Fred Nelson Jr., Tribal Chairperson
c/o James Trujillo
La Jolla Band of Luiseño Indians

The Honorable Robert H. Smith, Tribal Chairperson
c/o Shasta Gaughen, THPO
Pala Band of Luiseño Mission Indians

The Honorable Isaiah Vivanco, Tribal Chairperson
c/o Joseph Ontiveros, THPO
Soboba Band of Luiseño Indians

Ms. Julianne Polanco, State Historic Preservation Officer
Office of Historic Preservation

G.5.1.11 Pala Band of Mission Indians Section 106 Response Letter



TRIBAL HISTORIC PRESERVATION OFFICE
PALA BAND OF MISSION INDIANS
PMB 50, 35008 Pala Temecula Road | Pala, CA 92059
Phone 760-891-3510 | www.palatribe.com

January 11, 2021

Kristina Erlandson
Dept. of the Navy
311 Main Road Suite 1
Point Mugu, Ca 93042

Re: Activities Associated with Point Mugu Sea Range

Dear Kristina Erlandson:

The Pala Band of Mission Indians Tribal Historic Preservation Office has received your notification of the project referenced above. This letter constitutes our response on behalf of Robert Smith, Tribal Chairman.

We have consulted our maps and determined that the project as described is not within the boundaries of the recognized Pala Indian Reservation. The project is also beyond the boundaries of the territory that the tribe considers its Traditional Use Area (TUA). Therefore, we have no objection to the continuation of project activities as currently planned and we defer to the wishes of Tribes in closer proximity to the project area.

We appreciate involvement with your initiative and look forward to working with you on future efforts. If you have questions or need additional information, please do not hesitate to contact Alexis Wallick by telephone at 760-891-3537 or by e-mail at awallick@palatribe.com.

Sincerely,

A handwritten signature in black ink that reads "Shasta C. Gaughen". The signature is fluid and cursive, with a long horizontal stroke at the end.

Shasta C. Gaughen, PhD
Tribal Historic Preservation Officer
Pala Band of Mission Indians

ATTENTION: THE PALA TRIBAL HISTORIC PRESERVATION OFFICE IS RESPONSIBLE FOR ALL REQUESTS FOR CONSULTATION. PLEASE ADDRESS CORRESPONDENCE TO SHASTA C. GAUGHEN AT THE ABOVE ADDRESS. IT IS NOT NECESSARY TO ALSO SEND NOTICES TO PALA TRIBAL CHAIRMAN ROBERT SMITH.

Consultation letter 1

G.5.1.12 Rincon Band of Luiseño Indians Section 106 Response Letter

Rincon Band of Luiseño Indians

CULTURAL RESOURCES DEPARTMENT

One Government Center Lane | Valley Center | CA 92082
(760) 749-1051 | Fax: (760) 749-8901 | rincon-nsn.gov



January 13, 2021

Sent via email: Kristina.Erlandson@navy.mil
Department of the Navy
Naval Base Ventura County 311 Main Road, Suite 1
Point Mugu, CA 93042-5033

Re: Request for Section 106 Consultation on the Point Mugu Sea Range, Venture County; 5090, Ser N0000CV/923

Dear Ms. Erlandson,

This letter is written on behalf of the Rincon Band of Luiseño Indians ("Rincon Band" or "Band"), a federally recognized Indian Tribe and sovereign government. We have received your notification regarding proposed military readiness activities associated with the Point Mugu Sea Range. The identified location is within the Traditional Use Area (TUA) of the Luiseño people and within the Band's specific Area of Historic Interest (AHI). As such, Rincon is traditionally and culturally affiliated to the project area.

The Band would like to schedule a consultation (web/phone) to discuss the project and potential impacts to cultural resources. If you have additional questions or concerns, please do not hesitate to contact our office at your convenience at (760) 297-2635 or via electronic mail at cmadriral@rincon-nsn.gov. We look forward to working together to protect and preserve our cultural assets.

Sincerely,

Cheryl Madrigal
Tribal Historic Preservation Officer
Cultural Resources Manager

Bo Mazzetti
Chairman

Tishmall Turner
Vice Chair

Laurie E. Gonzalez
Council Member

John Constantino
Council Member

Joseph Linton
Council Member

G.5.1.13 Pechanga Band of Luiseño Mission Indians Section 106 Response Letter



PECHANGA TRIBAL HISTORIC PRESERVATION OFFICE
Temecula Band of Luiseño Mission Indians

Post Office, Box 2183 • Temecula, CA 92593
Telephone (951) 770-6300 • Fax (951) 506-9491

Tribal Historic Preservation
Officer:
Gary P. DuBois, JD, MSW

THPO Historian:
Lisa Woodward, Ph.D.

Assistant THPO:
Juan D. Ochoa

Advisory Review Board:
Neal Ibanez
Bridgett Barcello
Darlene Miranda
Eve Gerber
Andrew Masiel, Sr.
Richard B. Searce
Robert Villalobos

January 14, 2021

VIA E-MAIL and USPS

Captain J.E. Chism
Naval Base Ventura County
311 Main Road, Suite 1
Point Mugu, CA 93042-5033

Re: Pechanga Tribe Continued Consultation Pursuant to Section 106 for Activities Associated with the Point Mugu Sea Range, Ventura County

Dear Captain Chism,

This letter is written on behalf of the Pechanga Band of Luiseño Indians (hereinafter, "the Tribe"), a federally recognized Indian tribe and sovereign government in response to the Section 106 National Historic Preservation Act Consultation notice dated December 29, 2020 (Letter), regarding the above referenced undertaking. This letter serves as the Tribe's formal request for consultation with the Naval Base Ventura County (NBVC) under Section 106 for this Undertaking. It is the Tribe's understanding that the Department of Navy is re-initiating consultation for military readiness activities (undertaking) associated with the Point Mugu Sea Range (PMSR) in order to comply with Section 106 of the National Historic Preservation Act of 1966 (54, U.S.C. 306108 [NHPA]) as amended. As noted in the Navy's consultation letter, the proposed undertaking includes military readiness activities conducted within the PMSR that have the potential to affect historic properties that may be eligible for the NRHP. As you are aware, the entirety of San Nicolas Island is extremely culturally sensitive, including a substantial number of human remains, funerary objects, and tribal cultural resources.¹ As previously identified by Pechanga, San Nicolas is both a Traditional Cultural Property (TCP) and an Archaeological District, both of which the Tribe maintains are eligible under all four National Register criteria. Therefore, while the majority of the testing and training activities might occur at sea, as the Navy suggests in the Letter, other operations occur at San Nicolas Island that will likely have adverse effects to the TCP and the Archaeological District.

Comments on the Undertaking

The Letter states the majority of the activities *originate* from NBVC Point Mugu and San Nicolas Island, **but** there are direct impacts to the *Land Impact Sites* on San Nicolas Island which is located within a

¹ Please note that while the NHPA incorporates cultural resources into the rubric of "historic properties," the Tribe takes a much more expansive view of the nature of these resources, which we can discuss further in our Section 106 consultation. For purposes of this letter, the Navy should read the term "tribal cultural resources" to be included within the definition of "historic properties."

Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need

Pechanga Comment Letter to the Naval Base Ventura County
Re: Pechanga Tribe Continued Section 106 Consultation for Point Mugu Sea Range EIS/OEIS
January 14, 2021
Page 2

recorded archaeological site where human remains and associated funerary objects were previously collected.

Land Impact Site (SNI)

The APE for this area includes the target pad and the surrounding area, which falls within archaeological site SNI-168. A 1997 archaeological analysis determined the APE for the Land Impact Site, which includes an Area of Direct Effects and an Area of Indirect Effects; however, there are still possible activities that could disturb cultural items that remain within the site. Mitigation measures were implemented for impacts to the site, but this was conducted at a time when Tribes were not culturally affiliated with the Island and Tribal consultation was not required. Data recovery was conducted on this site as part of the mitigation and human remains and associated funerary objects were previously unearthed in this location. This previous study solely addressed the physical impacts to the area but did not address the intangible importance of the site and its larger contribution to the Island as a whole.

SNI-168 is described by the Navy as a large shell midden consisting of six loci that are deflated by wind erosion but still contain a few intact cultural deposits. Mitigation for the impacts caused by the construction of the SLAM Impact Site pad was a data recovery project. Through this data recovery and testing program, the site was determined to be a camp site consisting of tool manufacture, food processing, domestic production and maintenance activities that would have occurred year-round. According to the Point Mugu Sea Range Draft EIS, the site continues to be NRHP eligible, however, there was no discussion of the burials unearthed in the site except in an entry in the "3.10-2 Archaeological Sites in the APE" table that lists the site type as "habitation with remains" (pg. 3.10-12 and 744 of the pdf). The Letter acknowledges there were three burials removed from this site, one in the 1970s, one in the 1980s, and one in 2000; however, there is no mention of this in the assessment of the site. The site contains burial areas, where human remains were removed — and recorded in the collection catalogs as a **nearly complete skeleton** — meaning there are still human remains within the site as not all of the skeletal remains were collected. Associated funerary objects were also recovered with one of these burials, suggesting there could be more funerary items present or in collections within the Navy's repository or other museums that are misidentified as "artifacts."

The Tribe has raised this issue repeatedly with the Navy since our engagement on San Nicolas Island as a culturally-affiliated Indian tribe. Sites which contained human remains and funerary objects are still sacred and of great religious and cultural significance to the Tribe. Sites do not lose their cultural and religious meaning simply because archaeologists unlawfully removed the Tribe's Ancestors, often for the nefarious purpose of dehumanizing our communities. The burial context does not cease to exist simply because remains and items may have been removed, or because the Navy made that determination without considering the tribal values associated with these places. Ancestors were interred here in their final resting places; their removal does not change that fact. Second, as the available records show — including the results of the data recovery program at SNI-168 — remains were often left behind as collectors only sought certain parts of the skeleton or "museum-quality" funerary objects. Thus, what are often mis-identified as "artifacts" are in fact funerary objects because they are from a burial context. This is a common problem in interpreting archaeological sites because the people who define them — the culturally affiliated tribal communities — are excised from the narrative and identification of their material culture.

Through the reopening of Section 106, the previous archaeological determination should be reevaluated to include a more accurate assessment of the site significance, including the cultural and religious

Pechanga Comment Letter to the Naval Base Ventura County
Re: Pechanga Tribe Continued Section 106 Consultation for Point Mugu Sea Range EIS/OEIS
January 14, 2021
Page 3

significance attributed to these sites and cultural items by their affiliated tribal communities. It is not just a “large shell midden” that reflects “tool manufacture, food processing, and domestic production” but it also contains burials, which to the Tribe is considered a cemetery. This disparate interpretation of the site – habitation versus burial – is derived from a misunderstanding or lack of understanding regarding tribal religious ceremonies. Foodstuffs were often a part of these ceremonies, both as payment and in feeding the community in attendance. The presence of food items does not make it a habitation site, particularly when burials and funerary items are present. The two cannot be separated when discussing tribal cemeteries and burial areas. The Tribe further points out that there are 172 bags of unsorted material (Drek) from SNI-168 stored at the Navy’s China Lake repository that could potentially contain human remains. In fact, as the Tribe has notified the Navy, in random sampling of the over 1,100 bags of Drek removed from San Nicolas Island, cremains and burned funerary objects were located. With known human remains removed from this site, there is the potential that remains and funerary items could be within the bags, as was the case with some of the unsorted material from other sites on SNI.²

On a conference call with the Navy on September 1, 2020, Lisa Thomas stated she visits the SLAM site after bombing activities to investigate impacts to the archaeological site. What are the protocols if cultural items are discovered after these activities? Are reports created for these visits? The recent surface survey of the site for this undertaking encountered fragmented bone that was determined to be pinniped but still archaeological in nature, demonstrating the continued presence of surface and subsurface cultural material on the site. The Tribe must presume these faunal remains are funerary given their context in relation to known human remains. SNI-168 needs to be reassessed, not only to include into the site description and significance of the presence of human remains, but to also incorporate into the evaluation the cultural sensitivity and Tribal views regarding the site and larger area. The Tribe also requests a copy of the SNI-168 data recovery report by J. Rosenthal et al. for review.

There is also a statement in the Point Mugu Sea Range Draft EIS that is not accurate. The document states: “Continued use of the Land Impact Site has the potential to affect terrestrial archaeological sites in and in proximity to it. Portions of CA-SNI-168 within the Land Impact Site were mitigated by a data recovery program that was conducted in compliance with federal standards (U.S. Department of the Navy, 1998) and included consultation with the appropriate tribes (e.g., Pauma Band of Luiseño Indians, Pechanga Band of Luiseño Indians, Rincon Band of Luiseño Indians, Santa Ynez and of Chumash Indians) (pg 4-48 or pg. 860 of pdf). Potential impacts on any remaining cultural materials at these sites could occur and result in loss of integrity, damage, physical alteration, and destruction.” These statements are concerning for the Tribe considering consultation **DID NOT** occur for this project and the Tribe was not involved in the mitigation measures, and certainly not consulted regarding the intentional removal of its Ancestors. The draft EIS must be revised to accurately reflect the history regarding this site. We understand from our September 1st call this area is covered with approximately 6-8 feet of fill, but we were also informed that impacts occasionally occur outside of the designated impacts area. Thus, the presence of fill does not eliminate the potential to impact this very sensitive site. Further, erosion on the Island is a serious concern and it is not clear how the fill protects against erosion or what is the protocol in the event erosion and other activities uncover cultural deposits. This needs to be addressed in our Section 106 consultation.

² We note that the Tribe and the Navy have yet to determine treatment of the Drek. The Pechanga Tribe wishes to reengage on this issue in the near future.

Pechanga Comment Letter to the Naval Base Ventura County
Re: Pechanga Tribe Continued Section 106 Consultation for Point Mugu Sea Range EIS/OEIS
January 14, 2021
Page 4

SNI-169 is also within the APE and is similarly described as a dispersed midden with three deflating areas within a dune that is part of the larger site that includes SNI-168. The archaeological assessment is that food processing was conducted here and transported to another area, yet it is considered to be part of SNI-168 and it should be reevaluated as such. Connecting the sites from an archaeological perspective means we must also connect the sites from a cultural perspective. The Point Mugu Sea Range Draft EIS states the site is NRHP eligible and that plans were developed to mitigate impacts but were never implemented. What were these plans and why were they not implemented? Does the Navy intend to reauthorize these measures? Are they appropriate given the new information obtained by the Navy over the course of nearly 8 years of intense government-to-government consultation regarding the cultural and religious importance of the Island? The Tribe requests to discuss this further during our consultation.

Alpha Launch Complex and Target APE

The one site within this area, SNI-44, is summarized as a lithic scatter and low-density midden impacted by construction of the launch pad which still contains intact cultural deposits in Locus B. The unsorted materials (Drek) inventories include 12 bags from this site, but the current catalog states they are missing. Could these bags possibly be part of the collection still housed at California State University, Los Angeles that have not yet been returned to the Navy repository? The only mention of this site in the Point Mugu Sea Range Draft EIS is in the "3.10-2 Archaeological Sites in the APE" table which lists it as a multi-use processing site that it is ineligible for the NRHP. There is no accompanying description about the site in the document nor information as to how the Navy made this determination. The Tribe cannot concur with this determination given the current dearth of information. We request to consult further regarding this site and its characterization once information is provided to the Tribe.

Rock Crusher Site

SNI-41 is described as a habitation site with a large, dense, eroding shell midden complex on a sand dune consisting of several areas of buried cultural deposits. Lithics, shell, groundstone, miscellaneous tools, and trade items are recorded for this site and it is noted that seven burials were removed between the 1930s and 1950s. Again, this site is only listed in the Point Mugu Sea Range Draft EIS table "3.10-2 Archaeological Sites in the APE" and is not discussed any further in the report. Due to the number of human remains recovered from this site, which includes a cremation, further research and evaluation will need to be conducted with Tribal consultation. The same arguments noted above regarding the significance of this site are renewed with respect to SNI-41.

Directed Energy Test and Target APE

In the site description for SNI-12, the Letter identifies this site as containing two cemetery areas. While this site is described as a "large and deflating midden complex" similar to the other sites described therein, the term "cemeteries" is used, yet it has just as many human remains removed from the site as SNI-41. Is it known that burials are still intact on the site? Why categorize this site differently from the others with human remains? Additionally, the same arguments as above apply to this site.

The Point Mugu Sea Range Draft EIS report states that in 2015, the SHPO concurred with no impact findings for the DE Test Facilities EA at SNI-12. The Tribe notes that this determination was made absent consultation with affiliated tribes. This finding should be reevaluated with tribal consultation and information because Ancestral remains were removed and repatriated. Further, the Letter notes that the site continues to be considered a cemetery by the Navy archaeologists. The EIS report, drafted in April 2020, states that the Navy requested funds to conduct a TCP and Archaeological District study, which is now underway, but it also says: "For the purposes of the Section 106 consultation for the current project,

Pechanga Comment Letter to the Naval Base Ventura County
Re: Pechanga Tribe Continued Section 106 Consultation for Point Mugu Sea Range EIS/OEIS
January 14, 2021
Page 5

the Navy will view SNI as a TCP eligible for inclusion in the NRHP and will also consider the archaeological district as eligible for the NRHP" (3.10-12; pg.744 of pdf). Considering the completion dates for both studies are two years away, will this presumption continue for the current undertaking? If so, all of the APE sites should be NRHP eligible and be reevaluated with Tribal input. Since the entirety of San Nicolas Island is within the Point Mugu Sea Range, the Navy must revise this presumption to include the whole Island as within the undertaking's APE and not only the impacts to the specific location but also impacts to the entire Island should be assessed in the Draft EIS.

Missing from the list of historic properties in the Letter is SNI-61, which lies within the Coyote Launch Pad as identified in the accompanying maps. Site CA-SNI-61 is considered to be ineligible in Table 3.10-2 of the Point Mugu Sea Range Draft EIS; however, it should have been included in the descriptions of the sites. This site has been previously discussed under the P-586 project, but because it is being directly impacted by this current undertaking, the Tribe is requesting that further evaluation be conducted.

The Tribe formally requests to be notified and involved in the entire environmental review process for the duration of the above referenced undertaking. Please add the Tribe to your distribution list(s) for public notices and circulation of all documents, including environmental review documents, archaeological reports, and all documents pertaining to this undertaking. Please also incorporate these comments into the record of approval.

The Pechanga Tribe asserts that San Nicolas Island is part of '*Atáaxum* (Luiseño), and therefore the Tribe's, Aboriginal territory as evidenced by the existence of cultural resources, place names, *tóota yixélval* (rock art, pictographs, petroglyphs), and an extensive '*Atáaxum* artifact record on the Island. This culturally sensitive location is affiliated with the Pechanga Band of Luiseño Indians because of the Tribe's cultural ties to San Nicolas Island, including extensive documentation of the Tribe's ancestors living on the Island. Further, the Pechanga Band ('*Atáaxum*/Luiseño) was determined by the Navy to be culturally affiliated with the Island pursuant to the Native American Graves Protection and Repatriation Act on February 26, 2015.

Under both NEPA and Section 106, we look forward to working closely with the NBVC on ensuring that a full, comprehensive environmental review of the undertaking's effects is completed, which includes analysis and discussion of any sensitive tribal cultural resources, including human remains and funerary objects, that could potentially be affected by this and any future undertakings, whether they be direct, indirect, or cumulative effects. Further, we hope to assist the NBVC with ensuring that the undertaking will provide every effort to avoid effects to human remains, funerary objects, and tribal cultural resources. As such, we request a consultation meeting with the NBVC to receive additional information about the undertaking and to further discuss our concerns.

As required by the NHPA and Section 106, the Tribe must be included during the identification, evaluation, adverse effects determinations, and resolution of such effects of military readiness activities proposed in SNI as well as during phases of the environmental review process for the overall Point Mugu Sea Range undertaking. The Tribe reserves the right to fully participate in the environmental review process, as well as to provide future comment on the undertaking's effects to tribal cultural resources and for the potential resolution of such effects at the appropriate time in the Section 106 process.

The Pechanga Tribe looks forward to working together with the Naval Base Ventura County in protecting the invaluable Pechanga cultural resources that could be affected by the military readiness activities.

Pechanga Comment Letter to the Naval Base Ventura County
Re: Pechanga Tribe Continued Section 106 Consultation for Point Mugu Sea Range EIS/OEIS
January 14, 2021
Page 6

Please contact Michele Fahley, Deputy General Counsel at mfahley@pechanga-nsn.gov or at 951-770-6179 or Ebru Ozdil, Cultural Analyst at 951-770-6313 or at eozdil@pechanga-nsn.gov once you have had a chance to review these comments so that we can schedule our consultation. Thank you.

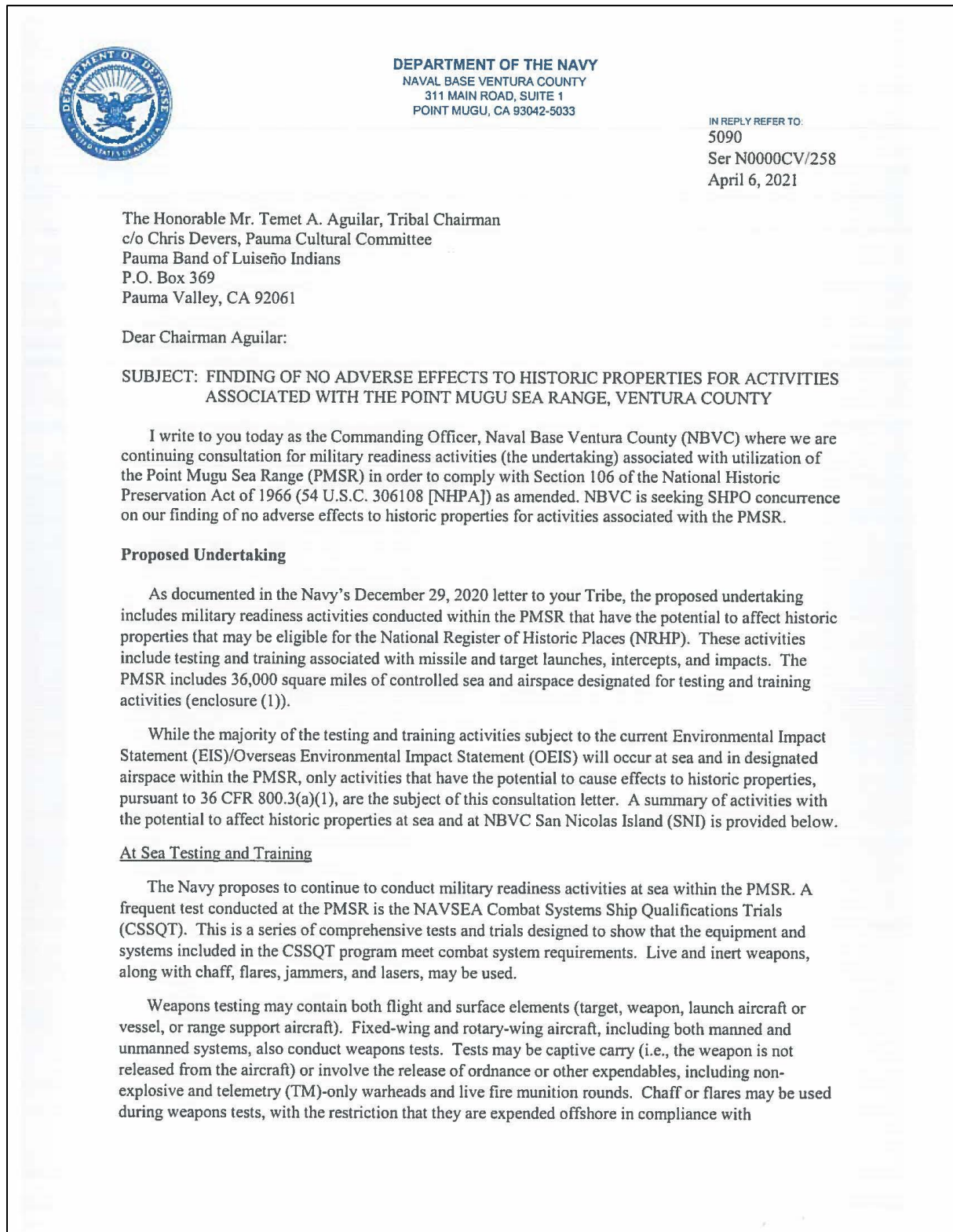
Sincerely,

A handwritten signature in black ink, appearing to read "Gary DuBois", with a stylized flourish at the end.

Gary DuBois, JD, MSW
Director, Cultural Resources Department
Tribal Historic Preservation Officer

cc: Pechanga Office of the General Counsel

G.5.1.14 Navy Finding of No Adverse Effects to Historic Properties for Activities Associated with the Point Mugu Sea Range (Example)



5090
Ser N0000CV/258
April 6, 2021

environmental regulations. Collectively, these materials released at sea are considered military expended materials (MEM).

Terrestrial Testing and Training

Land Impact Site on SNI

On SNI, the Navy proposes the continued use of the Land Impact Site, a targeted impact area located on the western portion of the island historically associated with the Standoff Land Attack Missile (SLAM) testing program. The Land Impact Site is used for air-to-surface or surface-to-surface tests with inert weapon systems, which impact targets located on an elevated pad of imported fill and gravel. The Land Impact Site consists of multiple targets situated on the elevated pad; however, individual events are directed at a specific target within the site. The proposed tempo for the continued use of the Land Impact Site will not exceed a maximum of 26 inert impacts per year.

Alpha Launch Complex on SNI

The Navy proposes continued use of the Alpha Launch Complex (Buildings N-189, N-192, N-306, N-307, N-314, N-315, N-316, and N-511) on SNI to launch supersonic targets from existing Vandal and Coyote launch pads within the complex. The proposed tempo for the combined use of both the Alpha Launch Complex and the Building N-807 Launch Complex (see below) would not exceed a maximum of 40 launch events per year.

Building N-807 Launch Complex near the Rock Crusher site on SNI

The Navy proposes continued use of the Building N-807 Launch Complex near Rock Crusher on SNI to launch supersonic targets, similar to the launch activities at the Alpha Launch Complex. As noted above, the proposed tempo for the combined use of the Building N-807 Launch Complex and the Alpha Launch Complex would not exceed 40 launches per year.

Directed Energy on SNI

The DE activities on SNI includes High Energy Lasers (HEL) and High Powered Microwave (HPM) systems from land, vessels, and aircraft. On SNI, the DE activities include a shooter site at Tender Point (from which HEL or HPM is fired), and DE target site at Vizcaino Point (used to calibrate the HEL or HPM). The shooter systems siting allows a DE system to attack airborne or seaborne targets as well as land-based targets. The proposed tempo for use of the DE facilities on SNI would be approximately 125 days per year.

Historic Properties Identified in the APE

Consistent with 36 CFR 800.4(a)(1), the Navy determined the area of potential effect (APE) for the proposed undertaking in consultation with the SHPO. The Navy's letter to your Tribe dated December 29, 2020 defined the APE to include the Land Impact Site, Alpha Launch Complex, Building N-807 Launch Complex, and DE target and shooter sites on SNI (enclosure (2)).

5090
Ser N0000CV/258
April 6, 2021

In accordance with 36 CFR 800.4(b)(1), the Navy's effort to identify historic properties took into account past planning, research, and studies, the magnitude and nature of the undertaking, the degree of Federal involvement, the nature and extent of the potential effects, and the likely nature and location of historic properties within the APE. The Navy obtained information from a variety of sources, including the following:

- 1) Properties identified during previous planning for the associated range areas within the current PMSR APE and consultations for previous PMSR undertakings.
- 2) The National Register Information System.
- 3) The California Historical Resources Information System.
- 4) Navy database of cultural resources records, reports, and documentation.
- 5) Publicly available sources about Tribal territories and resources, including Tribal websites.
- 6) Information solicited directly during Tribal consultations to identify properties of traditional religious and cultural significance within the APE.
- 7) National Oceanic and Atmospheric Administration's Office of Coast Survey Advanced Wreck and Obstruction Information System.
- 8) California State Lands Commission Shipwrecks database.
- 9) Channel Islands National Park Archaeological Overview and Assessment: Submerged Archaeological Resources.

The results of the Navy's identification efforts are provided below.

At Sea – Submerged Historic Properties

Submerged pre-contact archaeological sites within the PMSR may include Paleocoastal and Early Holocene archaeological sites in waters surrounding island and coastal areas of the PMSR. These sites are most likely to occur within water depths of 100 meters below mean high tide, representing areas that were inundated by rising sea levels since the Last Glacial Maximum ~20,000 years ago. However, no submerged pre-contact archaeological sites have been identified in the PMSR to date.

There are 195 shipwrecks located within or near the PMSR, 129 of them with plottable coordinates. The largest number of shipwrecks found within the PMSR is near Santa Rosa Island, in the vicinity of Talcott Shoal, Sandy Point, Bee Rock, East Point, and Becher's Bay. Thirty-two shipwrecks are known to have occurred within two (2) nautical miles (NM) of SNI, 27 of which are older than 50 years. In many cases, although a shipwreck is known to have occurred and its general coordinates are known, no wreckage has been located.

Known sunken Navy watercraft and aircraft losses within the PMSR include 31 sunken military watercraft and 92 aircraft losses. Two of the shipwrecks occurred before 1920, seven of the shipwrecks were involved in the 1923 Honda Point disaster, and 22 were targets as part of fleet reductions. A total of 12 of these wrecks have general locational data; 11 of the 12 wrecks are at a depth of 5,000 feet (ft.) or deeper (one is at a depth of 2,400 ft.). The 92 identified aircraft losses all occurred before 1951, with 87 of the losses occurring during the 1942-1945 period. None of the losses has precise locational data, and it is unclear whether the aircraft were salvaged.

5090
Ser N0000CV/258
April 6, 2021

In 2010, a historic context for shipwrecks that occurred after European contact until 1965 within one (1) NM of SNI was prepared. As part of the context, 45 shipwrecks and 21 downed aircraft were identified in the vicinity of SNI and Begg Rock. These wrecks and downed aircraft occurred from the mid-19th century to the late-20th century. Preliminary NRHP evaluations were made for the 15 shipwrecks that are believed to have occurred within one (1) NM of SNI that are considered shipwrecks under the Abandoned Shipwrecks Act of 1988. The other cultural resource found submerged is the Grumman Avenger, a government plane that was possibly ditched about 20 miles southwest of Santa Cruz Island due to mechanical problems. However, none of the shipwrecks or downed aircraft are listed in or have been determined eligible for listing on the NRHP.

Terrestrial Historic Properties

Land Impact Site - Pre-Contact Archaeological Sites

There are two (2) historic properties within the Land Impact Site APE. These properties are the pre-contact archaeological sites CA-SNI-168 and CA-SNI-169.

- CA-SNI-168 is a large shell midden with six (6) loci that is subject to wind erosion. Archaeological testing of the site to support construction of the Land Impact Site target pad (formerly SLAM) in 1997 indicate this is a habitation site where general domestic production and maintenance activities occurred year-round, primarily between ~3,200 and 2,400 years ago. The site contained numerous ground stone tools (manos, mortars, pitted stones, net sinkers and weights), lithic debitage, a large chert biface, whalebone tools, several shell fishhook blanks, and ornamental items including pendants and shell/stone beads. The site is largely deflated with limited intact midden soils at the location of the Land Impact Site target pad, located on top of site CA-SNI-168. In consultation with SHPO, data recovery efforts in 1997 mitigated impacts from construction and use of the Land Impact Site. Three (3) burials were removed from an apparent cemetery area at this site, one (1) in the 1970s, one (1) in the 1980s, and one (1) in 2000. Site CA-SNI-168 was determined eligible for listing on the NRHP under criterion D, with concurrence from SHPO in 1996.
- CA-SNI-169 is a dispersed midden area consisting of at least three (3) deflating midden remnants in a dune environment. Cultural material identified on site includes cores, flakes, ground stone, marine shell, bird bone, and fish bone. The presence of several fishhook fragments and blanks, combined with the diversity of fish taxa recovered, indicates fishing occurred in nearshore kelp forests and pelagic waters further out. Occupation at the site occurred primarily between ~2,000 and 3,000 years ago. No human remains have been identified at this site, and it is considered eligible for listing on the NRHP under criterion D, with concurrence from SHPO in 1996.

Alpha Launch Complex – Historic Buildings

There is one (1) historic property within the APE area associated with the Alpha Launch Complex on SNI. This property is comprised of the Alpha Launch Complex facility and includes the architectural resources: Buildings N-189, N-192, N-306, N-307, N-314, N-315, N-316, N-511 and its associated Launch Complex.

5090
Ser N0000CV/258
April 6, 2021

- The Alpha Launch Complex buildings were built between 1962 and 1968 in support of launch activities during the Cold War era, and are still in use supporting launch activities today. The buildings associated with the launch complex were determined not eligible for the NRHP under Criteria Consideration G for properties that are less than 50 years old (JRP 1998). Currently, these buildings are all over 50 years old. The Navy has determined that for the purposes of this consultation and assessing potential effects, they are assumed eligible for listing on the NRHP.

Alpha Launch Complex – Pre-Contact Archaeological Sites

There are two (2) historic properties within the Alpha Launch Complex APE on SNI. These are pre-contact archaeological sites CA-SNI-44 and CA-SNI-61.

- CA-SNI-44 is a lithic scatter and low density midden dated to the Late Holocene that has been heavily impacted by past military construction of the launch pad. The site is largely disturbed and deflated, but buried, intact midden deposits occur in Locus B near the intersection of Tufts Road and the launch pad access road. Lithic materials include metavolcanics, quartzite, breccia, and chert; and ground stone artifacts consisted of a sandstone pestle and two (2) manos. Midden constituents include black abalone, owl limpet, California mussel, and sea mammal. No human remains have been identified at this site, and CA-SNI-44 has been determined ineligible for listing on the NRHP, with concurrence from SHPO in 2015.
- CA-SNI-61 is a large site consisting of six (6) loci dated to the Late Holocene with low densities of shell midden and lithic debitage, almost exclusively concentrated in near-surface contexts. The site that has been extensively disturbed by the construction of Tufts road, buildings, and the original launch pad. No human remains have been identified at CA-SNI-61, and the site was determined to be ineligible for listing on the NRHP, with concurrence from SHPO in 2015.

Building N-807 Launch Complex near the Rock Crusher Site – Pre-Contact Archaeological Site

There is one (1) historic property within the APE for the launch pad areas associated with the Building N-807 Launch Complex at the Rock Crusher site. This site is the pre-contact archaeological site CA-SNI-41.

- CA-SNI-41 is a habitation site with a large, dense, eroding shell midden complex situated on a large sand dune, dated primarily to between 3,000 and 5,000 years ago. The site consists of several loci of buried midden flanked by eroded caliche outcrops. It contains lithics, a large quantity of marine shell, some ground stone, miscellaneous tools, and exotic material such as chert. Modern disturbance to the site includes several pipes and cables that run across the site, especially at the western and eastern ends. There may have been an old road along the southern flank of the dune. The western part of the dune has been disturbed by the construction of the road to the Rock Crusher site. Early site investigations between the 1930s and 1950s resulted in the removal of seven (7) burials from the site. In 2010, two (2) burials were noted eroding on the surface during Section 110 archaeological testing at the site. The burials are located more than 360 meters from the edge of the launch complex boundary, and were left in situ. The 2010 Section 110 evaluation of site CA-SNI-41 recommended the site eligible for listing on the NRHP under criterion D.

5090
Ser N0000CV/258
April 6, 2021

Directed Energy Test and Target Areas – Pre-Contact Archaeological Site

There is one (1) historic property within the Directed Energy Test and Target APE on SNI. This site is the pre-contact archaeological site CA-SNI-12.

- CA-SNI-12 is a large, eroding midden complex located on a low coastal terrace with dunes. The site consists of dense deposits of marine shell, lithics, some ground stone, and faunal remains dated to the Middle Holocene (~5,000 BP). The site is disturbed by aeolian erosion and the presence of a road that bisects the site. Stabilized areas are present and contain buried deposits and human burials, within two (2) cemetery areas located in the northwestern and eastern portions of the site. Six (6) burials were removed from the site by previous researchers from the 1930s through 1970s and additional burials are currently being exposed by erosion, approximately 30 meters southeast of the parking area. Site CA-SNI-12 was determined eligible for listing on the NRHP under criterion D, with concurrence from SHPO in 2010.

Island-wide Archaeological District

During consultation for another undertaking on SNI, the Pechanga Band of Luiseño Indians (Pechanga) informed the Navy they believe all of the archaeological sites on SNI comprise an archaeological district. In response to Pechanga's identification of this potential historic property, the Navy has contracted an archaeological district study, currently underway and in consultation with Indian tribes that attach religious and cultural significance to SNI. As it becomes available, the information resulting from this study will be taken into consideration for this and future NHPA consultations for undertakings on SNI.

Island-wide Traditional Cultural Property

During consultation for another undertaking on SNI, Pechanga informed the Navy that they view the entire island as a Traditional Cultural Property (TCP). In response to Pechanga's identification of this potential historic property, the Navy has contracted an ethnographic study, currently underway and in consultation with Indian tribes that attach religious and cultural significance to SNI. As it becomes available, the information resulting from this study will be taken into consideration for this and future NHPA consultations for undertakings on SNI.

Government to Government (G2G) Consultation

As a result of G2G consultations between the Navy and federally recognized Indian tribes for the PMSR EIS/OEIS the Navy has agreed to the following terms and conditions to date:

- 1) Navy will provide annual reports to Tribes that identify the number of launch and/or impact events that occur each year. The reporting commitment will be signed into the Record of Decision for the PMSR EIS/OEIS and will be provided as an appendix to the ICRMP updated annually.
- 2) Navy will consult with Tribes on the proposed permanent facilities associated with DE activities on SNI when plans for the facilities become available. While DE activities are proposed and analyzed under this EIS/OEIS, the construction of permanent facilities are not included in this undertaking.
- 3) Navy will develop a NAGPRA Plan of Action in consultation with all federally recognized Tribes for inadvertent discoveries at the Land Impact Site.

5090
Ser N0000CV/258
April 6, 2021

Assessment of Effects on Historic Properties

At Sea – Submerged Historic Properties

The Navy identified the potential for historic properties at sea within the PMSR. The Navy assumes that these properties are potentially susceptible to effects from proposed Navy activities. Shipwrecks have been recorded in offshore waters, and most are located near islands and the mainland. Additionally, submerged pre-contact resources within the PMSR may include Paleocoastal and Early Holocene archaeological sites in waters surrounding island and coastal areas of the PMSR. These sites are most likely to occur within water depths of 100 meters below mean high tide, representing areas inundated by sea levels rise within the last 20,000 years. The majority of proposed testing and training activities would occur over the open ocean, beyond 3 NM from shore, and the settling of MEM would primarily occur in areas away from where potential pre-contact archaeological sites, shipwrecks, or other resources would most likely be found. In the event that MEM occurs near submerged historic properties, there would be no adverse effects because: 1) Most anticipated expended munitions would be small objects and fragments that would slowly drift to the seafloor after striking the ocean surface; and, 2) Settling of MEM on the seafloor would be diffuse and transitory, as MEM is likely to be transported by currents and other turbulence. Therefore the settling of MEM would not alter the archaeological or cultural characteristics of the submerged cultural resources if they should sink on or in the vicinity of an historic property.

Impulsive noise generated by supersonic aircraft flights associated with PMSR activities can occur. Such activities are limited to altitudes above 30,000 ft. and in locations more than 15 NM from shore, including the islands. Boom overpressure dissipates with depth of water (e.g., to a tenth of initial value at a depth of about 122 ft.). Further, the underwater sound field due to transmitted sonic boom waveforms primarily consists of low-frequency components, and frequencies greater than 20 Hz have been found to be difficult to observe at depths greater than 33 ft. (10 m). As such, the underwater sound field and vibration associated with sonic booms would not be transmitted to depths that would affect known or unknown submerged historic properties within the PMSR.

Therefore, consistent with 36 CFR 800.5(b), the Navy finds that activities at sea, including those involving military expended materials and impulsive noise, will have no adverse effect to submerged historic properties.

Terrestrial Historic Properties

The Navy identified seven (7) potential historic properties within the APE on SNI. The historic properties consist of one (1) military-era site: Alpha Launch Complex facility and its associated buildings; four (4) pre-contact archaeological sites: CA-SNI-12, CA-SNI-41, CA-SNI-168, CA-SNI-169; one (1) archaeological district; and one (1) TCP. The Navy assumes that all of these properties are potentially susceptible to effects from proposed Navy activities.

Land Impact Site on SNI

The proposed action includes the continued use of the Land Impact Site, with activities not to exceed a maximum of 26 inert impacts per year. The target pad at the Land Impact Site was constructed on top of CA-SNI-168. Site CA-SNI-168 has been determined eligible for listing on the NRHP under criterion

5090
Ser N0000CV/258
April 6, 2021

D, and activities associated with the Land Impact Site were mitigated in the late 1990s through data recovery in consultation with the SHPO.

Site CA-SNI-169 is located north of the Land Impact Site footprint yet it is situated within the APE for activities associated with the Land Impact Site. Site CA-SNI-169 was determined eligible for listing on the NRHP under criterion D, and activities associated with the Land Impact Site were mitigated in the late 1990s through data recovery in consultation with the SHPO.

The impacts from inert missile strikes is limited to the target pad itself, which is built up of compacted fill material. The inert missiles tested at the Land Impact Site are precision guided to ensure impact of the target pad only. However, debris generated from these tests does occasionally fall off the pad, and land on the surrounding archaeological site CA-SNI-168, and possibly CA-SNI-169 to the north. The increased precision of missile technology since the late 1990s has reduced the potential for debris to land on CA-SNI-169, but it is possible. Debris that lands off the target pad largely consists of metal fragments, mostly lighter weight aluminum alloy that are hand-sized or smaller.

Protective measures are currently in place at the Land Impact Site to ensure effects from testing and training activities are limited to previously mitigated areas of site CA-SNI-168. Prior to each event, a Navy archaeologist briefs personnel as to where they can and cannot go. The archaeologist is onsite during the staging and demobilization of equipment. Further protective measures include: 1) Pre-event surveys by a Navy archaeologist to ensure no human remains are present in the vicinity that may have been newly exposed by erosion; 2) Post-event surveys by the archaeologist to recover any larger missile impact debris; 3) Site access to the target pad is limited to pre/post-test and training activities, and personnel must be accompanied by a Navy archaeologist.

Vibrations from inert impact events may affect intact archaeological deposits away from the impact pad. These vibrations may make the deposits looser and therefore subject to increased aeolian erosion. However, the entire area is in an active dune field, and site deposits occur within Holocene dune sand that is susceptible to aeolian erosion even in the absence of vibrations caused by inert missile impacts on the target pad. Erosion in the vicinity of the Land Impact Site led to the exposure of a burial east of the pad in 2000. The burial was exhumed in 2000, and subsequently repatriated and reburied on SNI in October 2019. The Navy acknowledges the potential for additional human remains in this location, which is why an archaeological survey is conducted before and after each impact event.

In the event of post-review discovery of historic properties or unanticipated effects to historic properties, the Navy will follow the statutory prescriptions outlined in 36 CFR 800.13(b). If the archaeologist determines NAGPRA items are present, Tribes will be notified pursuant to NAGPRA, or a Plan of Action developed between affiliated Tribes and the Navy.

Due to previous mitigation of site CA-SNI-168 for areas affected by testing and training activities at the Land Impact Site, and protective measures put in place to avoid effects to other areas of CA-SNI-168, as well as CA-SNI-169, the Navy has determined that the proposed activities covered in the PMSR EIS/OEIS will not directly or indirectly alter any of the characteristics that qualify sites CA-SNI-168 or CA-SNI-169 for inclusion on the NRHP. Based on these findings, the Navy has determined that the

5090
Ser N0000CV/258
April 6, 2021

continued use of the Land Impact Site will have no adverse effect to CA-SNI-168 or CA-SNI-169, consistent with 36 CFR 800.5(b).

Alpha Launch Complex on SNI

Potential effects to historic properties at the Alpha Launch Complex are restricted to launch activities at the Coyote and Vandal launch pads. Between 2014 and 2019, the number of launch events ranged from two (2) to three (3) per year, with an average of 2.6 launches per year. The pre-contact archaeological sites within the APE of the Alpha Launch Complex (CA-SNI-44 and CA-SNI-61) were both heavily damaged by initial construction of the launch pads in the late 1950s/early 1960s, and SHPO has concurred both are ineligible for listing on the NRHP. Current launch activities at the Coyote and Vandal launch pads take place at permanent launchers on concrete pads, and no ground disturbance occurs as a result of launch activities. In assuming that the Alpha Launch Complex is eligible for the NRHP, the continued use of the active facilities associated with the launch complex for the same purposes for which they were built does not present the potential for adverse effects to this historic property.

Based on the results of its identification and evaluation of historic properties, the Navy has determined that no adverse effects to historic properties will be caused by the proposed continued use of the Alpha Launch Complex for activities covered in the PMSR EIS/OEIS.

Building N-807 Launch Complex near the Rock Crusher site on SNI

Launch activities at the Building N-807 Launch Complex near the Rock Crusher Site occur via mobile or temporary launchers on concrete pads, which were constructed between 1970 and 1996. Between 2014 and 2019, the number of launch events ranged from two (2) to five (5) per year, with an average of 2.8 launches per year. CA-SNI-41, located on a large dune immediately east of the launch complex, is within the APE for this activity. The western portion of the site nearest the launch area was previously disturbed by construction of the launch site. The launch complex is used to launch missiles or targets westward over the ocean, within a 60-degree azimuth and steep angle. During launch activities, blowback energy generated from the launches is directed towards the launch pad, rather than towards CA-SNI-41.

Noise and vibration associated with the launch events are significant enough to startle elephant seals and drive harbor seals offshore, but not enough to affect archaeological deposits or increase aeolian erosion. Site CA-SNI-41 is situated on a Holocene sand dune that is susceptible to aeolian erosion even in the absence of launch activities.

Prior to each event, a Navy archaeologist briefs personnel as to where they can and cannot go. Off-limits areas are reinforced by physical barriers at the boundary of the launch complex to prevent foot and vehicle traffic onto site CA-SNI-41. The archaeologist is onsite during the staging and demobilization of equipment. Current launch activities at the Building N-807 Launch Complex take place on existing launch pads, and no ground disturbance occurs as a result.

Based on the results of its identification and evaluation of historic properties, the Navy finds that the proposed continued use of the Building N-807 Launch Complex by activities covered in the PMSR EIS/OEIS will not alter any of the characteristics that qualify site CA-SNI-41 for inclusion on the NRHP.

5090
Ser N0000CV/258
April 6, 2021

Therefore, consistent with 36 CFR 800.5(b), the Navy has determined the proposed activities will have no adverse effects to CA-SNI-41.

Directed Energy on SNI

The DE activity proposed for this undertaking involves shooting high-energy laser or high-power microwave systems from a temporary trailer at Tender Point to a temporary target at Vizcaino Point or targets located at sea. Early military construction of a road bisecting CA-SNI-12 and the parking area at Tender Point heavily damaged the northwestern portion of the site. The archaeological site includes two (2) cemetery areas, one of which is located approximately 50 meters from the edge of the parking area.

DE test events are currently conducted using temporary equipment staged in the parking area at Tender Point. Prior to each event, a Navy archaeologist briefs personnel as to where they can and cannot go. Off-limits areas are also reinforced by signage. The archaeologist is onsite during the staging and demobilization of equipment.

Based on the results of its identification and evaluation of historic properties, the Navy finds that the proposed DE activities covered in the PMSR EIS/OEIS will not alter any of the characteristics that qualify site CA-SNI-12 for inclusion on the NRHP. Therefore, consistent with 36 CFR 800.5(b), the Navy has determined the proposed activities will have no adverse effects to CA-SNI-12.

Effects on Proposed Archaeological District

For the purposes of this consultation, the proposed archaeological district is assumed to be eligible for listing on the NRHP. However, consistent with 36 CFR 800.16(d), the Navy has defined the APE to include locations on SNI where activities associated with the PMSR may directly or indirectly cause alterations in the character or use of historic properties. Therefore, the portions of the archaeological district within the APE are limited to the Land Impact Site, Alpha Launch Complex, Building N-807 Launch Complex, and Directed Energy target and shooter sites. As noted above, eligible archaeological sites located within the APE are CA-SNI-12, CA-SNI-41, CA-SNI-168, and CA-SNI-169. Additionally, two (2) sites, CA-SNI-44 and CA-SNI-61, within the APE have previously been determined ineligible. However, for the purposes of this consultation, the Navy considers sites CA-SNI-44 and CA-SNI-61 to be potential contributors to the proposed archaeological district.

Based on the results of its identification and evaluation of historic properties, the Navy finds that terrestrial activities proposed within the PMSR APE on SNI (see analyses above), including impacts at the Land Impact Site, launch activities from the Alpha Launch Complex and Building N-807 Launch Complex, and directed energy testing and training will not adversely affect individually eligible historic properties or potential contributors to the archaeological district on SNI. As a result, the Navy has determined that PMSR EIS/OEIS activities will not alter any of the characteristics that qualify the proposed archaeological district for inclusion on the NRHP. Therefore, consistent with 36 CFR 800.5(b), the Navy has determined the proposed activities will have no adverse effects to the archaeological district.

Effects on Proposed Traditional Cultural Property

5090
Ser N0000CV/258
April 6, 2021

For the purposes of this consultation, the proposed TCP is assumed to be eligible for listing on the NRHP. Pechanga informed the Navy it believes the TCP is eligible under criteria A, B, C, and D, and that the island maintains sufficient integrity such that it would be eligible for listing pursuant to 36 CFR 60.4 of the NHPA. The Navy has contracted an ethnographic study to inform a formal evaluation of eligibility. The initial results of the contracted effort will not be available until late 2021 or early 2022. The Navy will conduct future consultations based on the results of the contracted effort.

While the TCP information provided to the Navy is confidential, it is generally described as occurring within a ceremonial landscape featuring prominently in Luiseño religion, song, and ceremony. The TCP is further described by Pechanga as retaining integrity of location, setting, feeling, and association to the extent that an ancestor from the beginning of time would recognize the island today. In summary, regarding the TCP, Pechanga has articulated to the Navy that the island retains its "integrity of condition" due to the limited physical alteration of the landscape as a result of Navy management, compared with other areas. Further, Pechanga maintains that an "integrity of relationship" exists as the island is prominently featured in Luiseño culture, song, and oral tradition.

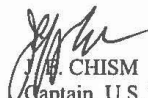
The Navy recognizes that activities associated with the PMSR on SNI may be inconsistent with Tribal values. However, assuming for the purposes of this analysis that the proposed TCP retains its integrity of location, design, setting, feeling, and association under existing conditions, because the proposed undertaking includes no new activities or increases in operational tempo within the APE on SNI, consistent with 36 CFR 800.5(b), the Navy finds that activities comprising the proposed undertakings would have no adverse effect on the proposed TCP.

Finding of Effect

Pursuant to 36 CFR 800.4(b)(1), the Navy took into account past planning, research, and studies, the magnitude and nature of the undertaking and the degree of Federal involvement, the nature and extent of potential effects on historic properties, and the nature and location of historic properties within the APE. As a result of its research and analysis, and in consideration of information received during consultation, the Navy has determined the proposed undertaking will have no adverse effects to historic properties, consistent with 36 CFR 800.5(b).

The Navy respectfully requests your comments within 30 days of receipt of this letter, consistent with 36 CFR 800.5(c). If you have any questions, please contact Dr. Kristina Erlandson, Cultural Resources Manager, NBVC, at (805) 234-6399 or by email at Kristina.erlandson@navy.mil.

Sincerely,


J. CHISM
Captain, U.S. Navy
Commanding Officer

5090
Ser N0000CV/258
April 6, 2021

Enclosures: 1. PMSR EIS/OEIS Study Area
2. APE at SNI

Copy to:
Commander, Navy Region Southwest
Attn: Environmental Department/Cultural Resources Management Program
San Diego, CA 92147

The Honorable Mr. Mark Macarro, Tribal Chairman
c/o Ms. Michele Fahley, Deputy General Counsel
Pechanga Band of Luiseño Indians
P.O. Box 2183
Temecula, CA 92593

The Honorable Mr. Bo Mazzetti, Tribal Chairman
c/o Cheryl Madrigal, THPO
Rincon Band of Luiseño Indians
Rincon Tribal Hall,
Valley Center, CA 92082

The Honorable Mr. Kenneth Kahn, Tribal Chairman
c/o Nakia Zavalla, Tribal Cultural Director
Santa Ynez Band of Chumash Indians
P.O. Box 517
Santa Ynez, CA 93460

The Honorable Mr. Fred Nelson, Jr., Tribal Chairman
c/o James Trujillo
La Jolla Band of Luiseño Indians
22000 Highway 76
Pauma Valley, CA 92061

The Honorable Mr. Robert H. Smith, Tribal Chairman
c/o Shasta Gaughen, THPO
Pala Band of Mission Indians
12196 Pala Mission Road
Pala, CA 92059

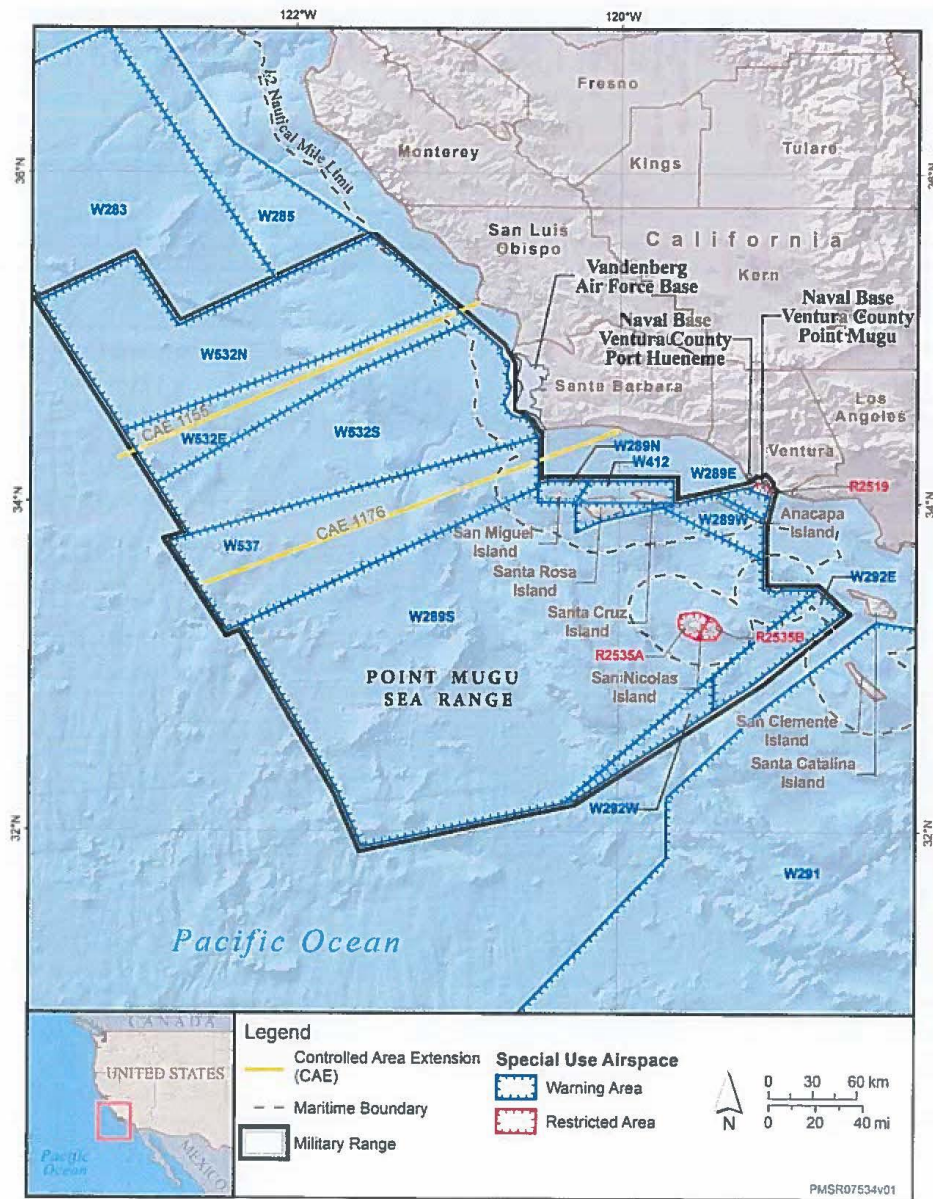
The Honorable Mr. Isaiah Vivanco, Tribal Chairman
c/o Joseph Ontiveros, THPO
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581

5090
Ser N0000CV/258
April 6, 2021

Ms. Diane Silva, Command Records Manager
NAVFAC Southwest
750 Pacific Highway, Code EV33
NBSD Bldg. 3519
San Diego, CA 92132-1280

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816-7100

Enclosure 1: Point Mugu Sea Range Environmental Impact Statement/
Overseas Environmental Impact Statement Study Area



Enclosure (1)

G.5.1.15 Navy Finding of No Adverse Effects to Historic Properties for Activities Associated with the Point Mugu Sea Range (Recipient List)

Commander Navy Region Southwest
Cultural Resources Management Program

The Honorable Temet A. Aguilar, Tribal Chairperson
c/o Chris Devers, Pauma Cultural Committee
Pauma Band of Luiseño Mission Indians

The Honorable Mark Macarro, Tribal Chairperson
c/o Michele Fahley, Deputy General Counsel
Pechanga Band of Luiseño Mission Indians

The Honorable Bo Mazzetti, Tribal Chairperson
c/o Cheryl Madrigal, THPO
Rincon Band of Luiseño Mission Indians

The Honorable Kenneth Kahn, Tribal Chairperson
c/o Nakia Zavalla, Tribal Culture Director
Santa Ynez Band of Chumash Mission Indians

The Honorable Fred Nelson Jr., Tribal Chairperson
c/o James Trujillo
La Jolla Band of Luiseño Indians

The Honorable Robert H. Smith, Tribal Chairperson
c/o Shasta Gaughen, THPO
Pala Band of Luiseño Mission Indians

The Honorable Isaiah Vivanco, Tribal Chairperson
c/o Joseph Ontiveros, THPO
Soboba Band of Luiseño Indians

Ms. Julianne Polanco, State Historic Preservation Officer
Office of Historic Preservation

G.5.1.16 Rincon Band of Luiseño Indians Response Letter to Navy Finding of No Adverse Effects to Historic Properties Associated with the Point Mugu Sea Range

Rincon Band of Luiseño Indians One Government Center Lane Valley Center CA 92082 (760) 749-1051 Fax: (760) 749-8901 rincon-nsn.gov 					
VIA ELECTRONIC MAIL ONLY TO: Kristina.Erlandson@navy.mil					
May 10, 2021					
Kristina Erlandson, Ph.D. Department of the Navy Naval Base Ventura County 311 Main Road, Suite 1 Point Mugu, CA 93042-5033					
RE: RINCON'S COMMENTS ON THE ACTIVITIES ASSOCIATED WITH THE POINT MUGU SEA RANGE (PMSR), VENTURA; 5090/SER N000CV/260					
Dear Dr. Erlandson:					
This letter is written on behalf of the Rincon Band of Luiseño Indians ("Rincon Band" or "Band"), a federally recognized Indian Tribe and sovereign government. The Band has received your letter from April 6, 2021, seeking SHPO concurrence on your findings of no adverse effects to historic properties for activities associated with the PMSR. The identified location is within the Traditional Use Area of the Luiseño people, and within the Band's specific Area of Historic Interest (AHI). As such, Rincon is traditionally and culturally affiliated with the project area.					
The Rincon Band disagrees with the Naval Base Ventura County (NBVC) determination of "no adverse effects" to historic properties for activities associated with the PMSR. The Rincon Band is particularly concerned with adverse effects to recorded pre-contact ancestral and archaeological sites, burial grounds, as well as the impact to the island, a Traditional Cultural Property and part of a Historic and Archaeological District. We have the following concerns and comments:					
<u>NO ADVERSE EFFECT FINDING FOR CA-SNI-168, CA-SNI-169, CA-SNI 44, CA-SNI-61, CA-SNI-41, CA-SNI-12.</u>					
On April 6, 2021, the NBVC issued a notification, concluding that the proposed undertaking would not "directly or indirectly alter any of the characteristics that qualify sites CA-SNI 168 or CA-SNI-169 for inclusion on the NRHP" and determined that the continued use of the Land Impact Site will have no adverse effects to the mentioned sites.					
The Band would like to reiterate our concerns in regard to the impacts to these two recorded ancestral/archaeological sites. In the notification, NBVC states that site CA-SNI-168 has been determined eligible for listing on the NRHP under Criterion D, and that "activities associated with the Land Impact site were mitigated in the late 1990s through data recovery in consultation with					
<table><tr><td>Bo Mazzetti Chairman</td><td>Tishmall Turner Vice Chair</td><td>Laurie Gonzalez Council Member</td><td>John Constantino Council Member</td><td>Joseph Linton Council Member</td></tr></table>	Bo Mazzetti Chairman	Tishmall Turner Vice Chair	Laurie Gonzalez Council Member	John Constantino Council Member	Joseph Linton Council Member
Bo Mazzetti Chairman	Tishmall Turner Vice Chair	Laurie Gonzalez Council Member	John Constantino Council Member	Joseph Linton Council Member	

Kristina Erlandson, Ph.D., Department of the Navy
May 10, 2021
Page 2

the SHPO.” CA-SNI-168 contained at least three burials that were previously excavated from the site, which is otherwise described as a habitation site that contained numerous tools.

The Rincon Band urges NBVC to revisit the applied measures, as guiding regulations and practices have changed, and reminds NBVC that 36 CFR 800.4(c)(1) stipulates that:

In consultation with the SHPO/THPO and any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to identified properties and guided by the Secretary’s Standards and Guidelines for Evaluation, the agency official shall apply the National Register criteria (36 CFR part 63) to properties identified within the area of potential effects that have not been previously evaluated for National Register eligibility. *The passage of time, changing perceptions of significance, or incomplete prior evaluations may require the agency official to reevaluate properties previously determined eligible or ineligible. The agency official shall acknowledge that Indian tribes and Native Hawaiian organizations possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them.* [Emphasis ours].

This acknowledgment of the special, unique, and exclusive expertise of affiliated Tribes is especially imperative in the eyes of the ACHP, as:

There are very different views [between federal agencies and Native American tribes] on the treatment of effects to traditional cultural landscapes. Non-native people tend to think in a linear fashion while native peoples tend to think cyclically. *This difference in world view affects not only whether or not the significance of sacred places is understood but also how such places should be treated. These places are part of living communities and are their actual history* [Emphasis ours; ACHP 2011].

In the 1990s, the Tribes’ abilities to consult and provide input on such issues was very limited due to the lack of communication between federal agencies and tribes, and inattention to constraints of resources and exclusions in consideration that tribal nations were facing. This latter disadvantage was not formally addressed until 1992 when Congress amended the National Historic Preservation Act to explicitly clarify the eligibility of Native American properties and place of traditional religious and cultural importance for listing on the National Register of Historic Places (NRHP), and associated directives and guidance that require agencies to directly consult with Tribes on these and other concerns. The Rincon Band worries that the realization of such congressional mandates and associated guidance within agencies workflows and processes has yet to be institutionalized. The continuous need for improvements to ensure meaningful consultation between federal agencies and Tribes is re-confirmed by a joint report released in January 2017 by the Department of the Interior, Department of Justice, and the Army, *Improving Tribal*

Kristina Erlandson, Ph.D., Department of the Navy
May 10, 2021
Page 3

Consultation and Tribal Coordination in Federal Infrastructure Decisions, that addresses agency shortcomings.

Moreover, the Band is concerned with the previous determination of ineligibility for listing in the NRHP of CA-SNI 44 and CA-SNI-61. The Rincon Band reiterates that the evaluation is insufficient, as these sites were not evaluated in association with the surrounding recorded ancestral and archaeological sites or in context of having Traditional Cultural Property significance within the larger Historic and Archaeological District.

In regard to CA-SNI-41, CA-SNI-12, it is unacceptable to the Rincon Band that NBVC is considering the desecration of cemeteries as “no adverse effect”. While we understand that several burials were excavated from both areas, please understand that these grounds remain sacred and also still contain—even if microscopic in size—remnants of ancestors and burial goods.

The Rincon Band understands that “an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association (36 CFR Part §800.5).” As outlined in 36 CFR Part §800.5:

“Adverse effects on historic properties include, but are not limited to:

(i) Physical destruction of or damage to all or part of the property;

(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;

[...]

(iv) Change of the character of the property’s use or of physical features within the property’s setting that contribute to its historic significance;

(v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property’s significant historic features;”

[....]

As pointed out by NBVC, inert missile strikes are limited to the target pad but the potential exists that “debris generated from these tests does occasionally fall off the pad, and land on the surrounding archaeological sites.” From the area of special and unique expertise held by the

Kristina Erlandson, Ph.D., Department of the Navy
May 10, 2021
Page 4

Rincon Band, we are both informing and notifying you that such debris *will* result in adverse effects to the condition and integrity of the two ancestral/archaeological sites.

Furthermore, the Rincon Band would like to point out that an evaluation of the sites (CA-SNI-168, CA-SNI-169, CA-SNI 44, CA-SNI-61, CA-SNI-41, CA-SNI-12) only under an archaeological approach to Criterion D is woefully inadequate. National Register Bulletin 38 (Parker and King 1998) explains that eligibility under Criterion D must in fact include far more than “information potential” as defined by the discipline of archaeology to achieve compliance. As Bulletin 38 clearly outlines:

Properties that have traditional cultural significance often have already yielded, or have the potential to yield, important information through ethnographic, archeological, sociological, folkloric, or other studies. Generally speaking, ... a traditional cultural property's history of yielding, or potential to yield, information, if relevant to its significance at all, is secondary to its association with the traditional history and culture of the group that ascribes significance to it [Parker and King 1998:14].

While NRHP evaluations only under narrow archeological disciplinary understandings of significance was—and unfortunately still is—wide practice, these fail to fulfill the mandates of the NHPA and are insufficient for all related compliance processes.

Not only is the Criterion D eligibility for the tribal cultural resources in question from a Rincon traditional knowledge system possible, but in fact in this case *highly likely*. They are also very likely eligible under Criteria A and B. The Rincon Band is notifying the NBVC that it is prematurely determining the “no adverse effect” finding, as the Traditional Cultural Property significance and Historic and Archaeological District studies are still pending. The Rincon Band understands that NBVC is dedicated and committed to these studies, but additional time will be needed to allow for their completion as to not predetermine the outcome and violate the procedures of these necessary evaluation processes. The Rincon Band also does not agree that the lack of action on the NVCB's part to get such studies done years ago should now act in favor of negligence and facilitate or permit the damage to the condition and integrity—and potential destruction of—these tribal cultural resources.

The Rincon Band is well aware that damaging activities on San Nicolas Island have been ongoing for years; however, the fact that laws, regulations, guidance, and agencies' own internal processes have left Native American ancestors and cultural materials unprotected for much too long cannot result in continued negligence on the part of NBVC to fulfill its responsibilities as a steward of these—and any other—ancestral remains and resources.

It is the firm position of the Rincon Band that, in fulfilling legal and stewardship obligations and responsibilities meaningfully, reasonably, and in good faith, NBVC will find and

Kristina Erlandson, Ph.D., Department of the Navy
May 10, 2021
Page 5

acknowledge that adverse effects will be caused by activities associated with the PMSR activities to historic properties eligible for listing in the NRHP. The Rincon Band requests further consultation to develop a Memorandum of Agreement or Programmatic Agreement between the consulting Tribes and NBVC to appropriately avoid and as a last option mitigate these and any other adverse effects.

The Rincon Band would like to reiterate that the entirety of San Nicolas Island is understood and considered by the Rincon Band as a historic property with TCP significance. It is part of a larger Historic and Archaeological District and comprised of numerous contributing elements and resources that are fundamental to the identity, beliefs, and practices of the Rincon people *as a people*. As such, Rincon considers any effects and impacts proposed by the project that harm the integrity of condition and/or association to the Island and its numerous tribal resources adverse.

The Rincon Band is looking forward to further discussion of this project. If you have additional questions or concerns, please direct them to Cheryl Madrigal, Tribal Historic Preservation Officer, at your convenience at (760) 297-2635 ext. 323 or via electronic mail at cmadrigal@rincon-nsn.gov. Thank you for the opportunity to protect and preserve our cultural assets.

Sincerely yours,

RINCON BAND OF LUISEÑO INDIANS



Bo Mazzetti
Tribal Chairman

Copy to: Julianne Polanco, State Historical Preservation Officer, California Office of Historic Preservation, at Julianne.Polanco@parks.ca.gov
Denise Turner Walsh, Attorney General, Rincon Band of Luiseño Indians, at dwalsh@rincon-nsn.gov
Cheryl Madrigal, Tribal Historic Preservation Officer, Rincon Band of Luiseño Indians, at cmadrigal@rincon-nsn.gov

G.5.1.17 Santa Ynez Band of Chumash Indians Response Letter to Navy Finding of No Adverse Effects to
Historic Properties Associated with the Point Mugu Sea Range



Santa Ynez Band of Chumash Indians

Tribal Elders' Council

P.O. Box 517 ♦ Santa Ynez ♦ CA ♦ 93460

Phone: (805) 688-7997 ♦ Fax: (805) 688-9578 ♦ Email: elders@santaynezchumash.org

May 18, 2021

Department of the Navy
Naval Base Ventura County
311 Main Road, Suite 1
Point Mugu, CA 93042

Att.: Dr. Kristina Erlandson, Cultural Resources Manager

Re: Point Mugu Sea Range

Dear Dr. Erlandson:

Thank you for contacting the Tribal Elders' Council for the Santa Ynez Band of Chumash Indians. We would like to have a formal consultation with regards to the above-mentioned project.

Please contact Culture Director, Nakia Zavalla at your earliest availability for a time and date. You may contact her via email, phone or mail. See below for contact information.

NZavalla@santaynezchumash.org, (805) 688-7997
P.O. Box 517, Santa Ynez, CA 93460

Thank you for your time and attention to this matter.

Sincerely Yours,

Kelsie Merrick

Administrative Assistant | Elders' Council and Culture Department
Santa Ynez Band of Chumash Indians | Tribal Hall
(805) 688-7997 ext. 7516
kmerrick@santaynezchumash.org

G.5.1.18 Pechanga Band of Luiseño Mission Indians Response Letter to Navy Finding of No Adverse Effects to Historic Properties Associated with the Point Mugu Sea Range

	PECHANGA TRIBAL HISTORIC PRESERVATION OFFICE <i>Temecula Band of Luiseño Mission Indians</i>	Tribal Historic Preservation Officer: Gary P. DuBois, JD, MSW
	Post Office, Box 2183 • Temecula, CA 92593 Telephone (951) 770-6300 • Fax (951) 506-9491	THPO Historian: Lisa Woodward, Ph.D.
	June 1, 2021	Assistant THPO: Juan D. Ochoa
		Advisory Review Board: Neal Ibanez Bridgett Barcello Darlene Miranda Evie Gerber Andrew Masiel, Sr. Richard B. Searce Robert Villalobos
<u>VIA E-Mail and USPS</u>		
Ms. Valerie Hauser Office of Native American Affairs Advisory Council on Historic Preservation 401 F Street NW, Suite 308 Washington, DC 20001		
Re: Pechanga Tribe Comments on the Naval Base Ventura County (NBVC) Findings of "Findings of No Adverse Effect" pursuant to 36 CFR 800.5(c)(3) for Activities Associated with the Point Mugu Sea Range, Ventura County		
Dear Ms. Hauser:		
This letter is being submitted on behalf of the Pechanga Band of Luiseño Indians (Tribe) to clarify the Tribe's position on the Naval Base Ventura County's (NBVC) military readiness activities (Undertaking) associated with utilization of the Point Mugu Sea Range (PMSR). These activities include testing and training associated with missile and target launches, intercepts, and impacts. The Tribe understands that the PMSR includes 36,000 square miles of controlled sea and airspace designated for testing and training activities and San Nicolas Island is part of the PMSR. Even though the Undertaking documents include the entire island within the PMSR, the Navy only identifies one land impact site, six launch pads, one direct energy test facility and one directed energy target site, all of which are identified as the area of potential effect (APE), located on the northern end of the island. The entire island should be identified as the APE as it is described in the PMSR, not just specific areas.		
The Pechanga Tribe asserts that 'Aḡóoyi (San Nicolas Island) is part of the 'Atáaxum (Luiseño) Aboriginal territory and is a Traditional Cultural Property (TCP) as told through songs and oral accounts and the extensive record of religious and ceremonial cultural items found on the Island. The U.S. Navy determined the Pechanga Band of Luiseño Indians and other Luiseño Tribes, and the Santa Ynez Band of Chumash Indians to be culturally affiliated with San Nicolas Island pursuant to the Native American Graves Protection and Repatriation Act.		
The Tribe does <u>not</u> concur with NBVC's finding of no adverse effects for this Undertaking as we believe the Navy has failed to consider the tribal values that will be affected, and instead has focused too narrowly on impacts to archaeological sites. The Tribe cannot reiterate strongly enough the cultural significance of this Island, which is rooted in our religious and cultural practices, and which is the physical embodiment of our burial practices (evidenced the by the large number of burials and funerary objects located throughout the Island).		
<i>Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need</i>		

Pechanga Comment Letter to the Advisory Council on Historic Preservation
Re: Pechanga Tribe Comments U.S. Navy PMSR
May 25, 2021
Page 2

The Tribe officially requested Section 106 consultation on April 10, 2020, which was within the 30-day period for responding, as requested by the Navy. And again, officially requested Section 106 consultation on January 14, 2021, when the Department of Navy re-initiated consultation for military readiness activities associated with the PMSR in order to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. 306108 [NHPA]) as amended. Since initiating consultation, the Tribe has requested the Navy consider the whole Island within the Undertaking's APE and not only impacts to the specific locations identified. Further, the Tribe has also advocated that the impacts to the entire Island should be assessed in the Draft EIS, since the entirety of San Nicolas Island is described to be within the PMSR. In addition, the Tribe continues to request the Navy to consider the presence of known archeological sites that fall within the PMSR APE boundaries, previously found to contain human remains, cremations, and funerary items in which further research and evaluation needs to be conducted with Tribal consultation. One site, previously found to be National Register eligible, was mitigated with data recovery through consultation with the SHPO, at a time before Tribes were in consultation with Navy projects conducted on San Nicolas Island.

'*Aşóoyi* has always been and continues to be a significant part of Luiseño religious beliefs, cosmology, and cultural importance. The TCP '*Aşóoyi*, has vital connections to Luiseños and the Pechanga people through the intangible Creation account and the tangible cultural sites recorded on the land. '*Aşóoyi* is associated with Creation and ancestral practices which continue to function for and as part of Luiseño living traditional religion and culture. The '*Aşóoyi* TCP contributes to the significance of a Luiseño traditional cultural landscape and is an intensive zone of traditional religious and cultural importance.

For the purposes of the administrative record, the Tribe officially disagrees with the Navy's finding of "No Adverse Effect" for this proposed Undertaking. There are direct effects (human remains and funerary objects) and indirect effects (impacts to the visual characteristics of the TCP by the proposed activities; and cumulative effects on the TCP). The destruction and disturbance, once completed, can never be reversed to both the tangible and intangible elements that comprise this TCP.

The Pechanga Tribe requests to consult with Advisory Council on Historic Preservation in order to ensure compliance with the Section 106 process, including a proper assessment of the Undertaking and its adverse effects on our Luiseño ancestors, their personal belongings, and cultural items. If you have any questions regarding this letter, please contact Michele Fahley, Deputy General Counsel at mfahley@pechanga-nsn.gov or 951-770-6179.

Sincerely,



Gary DuBois, JD, MSW
Director/THPO

cc: Pechanga Office of the General Counsel
SHPO, Julianne Polanco
Pechanga Cultural Resources • Temecula Band of Luiseño Mission Indians
Post Office Box 2183 • Temecula, CA 92592

Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need

G.5.1.19 Navy Request for Rincon Band of Luiseño Indians to Review Navy's Proposed Modification of the Undertaking to Include Pre-and Post-Event Visitation, San Nicolas Island Associated with the Point Mugu Sea Range

From: [Erlandson, Kristina M. CTV USN NAVFAC SW SAN CA \(USA\)](#)
To: [Cheryl Madrigal](#)
Cc: [REDACTED]
Subject: PMSR Tribal Visitation Plan Proposal
Date: Monday, June 28, 2021 8:57:54 AM
Attachments: [PMSR Proposed SNI Tribal Visitation Plan.pdf](#)

Dear Cheryl,

Attached for your review and consideration is the Navy's proposal of a Tribal Visitation Plan. We welcome your feedback and are open to further discussion.

Please let me know if you have any questions, and I look forward to discussing this with you.

Very respectfully,
Kristina

Kristina (Gill) Erlandson, PhD
Archaeologist and Cultural Resources Manager
Naval Base Ventura County
Point Mugu, CA

[REDACTED]
[REDACTED]
Due to COVID-19 concerns I am currently teleworking and can be reached by cell or email. Work hours are 0630-1500, Monday - Thursday

**PMSR EIS Proposed Modification of the Undertaking to Include Pre- and
Post-Event Visitation, San Nicolas Island
28 Jun 2021**

In consultation with the Tribes and SHPO, the Navy proposes to modify the activities associated with the PMSR undertaking to include the development of a Tribal Visitation Plan. The Tribal Visitation Plan would facilitate an initial visit by Tribal representatives to SNI to establish baseline conditions which would be followed by additional visits after testing and training events that occur on the PMSR. Access is limited to the Area of Potential Effect defined for the activities associated with the PMSR. The Navy proposal consists of:

- **Baseline condition site visit.**
 - The Navy will coordinate an initial visit to establish baseline conditions at all archaeological sites and portions of the Traditional Cultural Property and Archaeological District within the PMSR areas of potential effect (APE) on SNI.
 - This visit would involve one representative from each of the Tribes engaged in the consultation visiting SNI at the same time so they see and hear the same thing.
 - NBVC Cultural Resources Manager (CRM) will escort the Tribal representatives during the baseline condition visit.
 - The Navy anticipates the initial visit will involve an overnight stay on SNI to ensure Tribal representatives are able to spend adequate time at the sites within the APE, if logistically feasible due to limited lodging facilities. This would be determined during the site visit planning process.
 - Travel to/from SNI would be via the shuttle from Naval Base Ventura County (NBVC), Point Mugu.
 - Photos of sites/site conditions may be taken by authorized Navy personnel and provided to the Tribes following review for Operational Security (OPSEC) concerns.
 - The Navy will prepare a summary of the sites visited, observations made, and feedback received from the Tribal representatives. The summary will be provided to all the Tribes engaged in the consultation.
 - Travel costs associated with the baseline condition site visit will be paid for by the Navy.
- **Post-test/post-training site visits.**
 - Following each PMSR training event, the Navy will coordinate with the Tribes to make travel arrangements for Tribal representatives to visit the sites within the PMSR APE.
 - The Navy will endeavor for the visits to occur as soon after each test/training event as possible with a goal of no later than 2 weeks following the conclusion of an event based upon flight availability.
 - The number of representatives included in each post-event visit to be discussed and agreed upon as part of further consultation but will not exceed one representative from each of the tribes engaged in the consultation.
 - Post-test/post-training site visits will be completed in a day trip to SNI.

- The sites visited will not be limited to those associated with the specific test/training event. The Tribal representative will be afforded an opportunity to visit and observe the conditions at all archaeological sites within the PMSR APE.
 - The NBVC Cultural Resources Manager (CRM) will escort the Tribal representative during the post event visit.
 - Travel costs associated with the post event site inspections will be paid for by the Navy.
- **Annual reporting.**
 - The NBVC CRM will prepare a summary report of testing and training events that occurred during each calendar year.
 - The report structure, format, and content will be developed in consultation with the Tribes.
 - The report will be sent to all Tribes and SHPO by (date to be determined through consultation) with a 30 day review/comment period.
- **NAGPRA Plan of Action.**
 - The Navy will consult with the culturally affiliated Tribes to develop a Plan of Action for the PMSR testing and training activities that occur at the Land Impact Site.
- **Adverse effects.**
 - If potential adverse effects are observed during a post event site visit, then the Navy will initiate consultation with the Tribes, SHPO, and ACHP for the purpose of establishing appropriate mitigations of those adverse effects.
- **Record of Decision (ROD).**
 - The above described conditions will be codified in the ROD for the PMRS EIS. The initial baseline site visit and subsequent post-event visitation would occur post-ROD.

G.5.1.20 Rincon Band of Luiseño Indians Response Letter to the Proposed Modification of the Undertaking to Include Pre-and Post-Event Visitation, San Nicolas Island Associated with the Point Mugu Sea Range

Rincon Band of Luiseño Indians

CULTURAL RESOURCES DEPARTMENT

One Government Center Lane | Valley Center | CA 92082
(760) 749-1092 | Fax: (760) 749-8901 | rincon-nsn.gov



August 18, 2021

Sent via email: Jessica.porter-rodri@navy.mil

Department of the Navy
Naval Base Ventura County
Jessica Porter-Rodriguez
311 Main Road, Suite 1
Point Mugu, CA 93042-5033

Re: Point Mugu Sea Range (PMSR), Ventura; Proposed Modification of the Undertaking to Include Pre-and Post-Event Visitation, San Nicolas Island; dated 28 June 2021

Dear Ms. Porter-Rodriguez,

This letter is written on behalf of the Rincon Band of Luiseño Indians ("Rincon Band" or "Tribe"), a federally recognized Indian Tribe and sovereign government. We would like to thank the Department of the Navy (DoN) for consulting with the Tribe on the above-mentioned project and the proposed visitation plan.

The Tribe has reviewed the proposed Visitation Plan and we have the following concerns:

1. Clarification on TCP (Traditional Cultural Property) Study

While in consultation on the PMSR and other projects, DoN staff has reiterated that the TCP study and the Archaeological District study are on the way, emphasizing DoN commitment to further research and fulfillment of assumed stewardship responsibilities. However, the current draft work plan for the Ethnographic Study as developed by Far Western and circulated to the Tribes by DoN staff, explicitly states that *"The tribal and cultural resources will not be formally evaluated to determine if they are TCPs (to determine a tribal resources as a TCP the NPS Bulletin 38 guidelines must be followed to determine if they are TCPs under 36 CFR Part 60) because that is beyond the scope of the TO"*¹. This has been a great concern to the Tribe and has been communicated via Comment's Matrix and emailed to DoN staff on June 10, 2021. Since further discussion of the Draft Work Plans between the DoN and the Tribes has not continued, it is unclear at this time if the Ethnography will actually include a TCP analysis. The Rincon Band kindly asks that DoN confirm that the Ethnography will include a TCP analysis, as this seems critical for further consultation on not only the PMSR but other projects as well.

2. Proposed Visitation Plan

We appreciate the Navy's efforts to continue dialog with the Tribes related to the cultural resources on San Nicolas Island. In their letter from May 12, 2021, SHPO disagreed with a finding of no adverse effect to historic properties because "The classes of activities described in your [DoN] letter, namely the repetitive,

¹ Draft Work Plan for Ethnographic Study of San Nicolas Island/Draft Work Plan for Ethnographic Study of San Clemente Island

Bo Mazzetti
Chairman

Tishmall Turner
Vice Chair

Laurie E. Gonzalez
Council Member

John Constantino
Council Member

Joseph Linton
Council Member

Rincon Band's comments on the Proposed Visitation Plan

Page 2 of 4

multi-year use of launch sites and land and sea targets, have the potential for cumulative effects that could, over time, adversely affect historic properties." The Tribe understands, DoN propose to impose conditions on the training activities due to time-constraints on the PMSR Environmental Impact Statement (EIS) and allow for more time for consultation on an island-wide Programmatic Agreement and a NAGPRA Comprehensive agreement.

As stated in our conference call on August 11, 2021, the Tribe believes the proposed Visitation Plan should be seen as a start to further discuss and assess potential impacts of the training activities associated with the PMSR. However, in its current draft, we are unable to identify actual measures that will assist with the protection and preservation of cultural resources in particular to avoid cumulative effects to cultural resources and the TCP. We ask DoN to include in the Visitation Plan action items to be completed after the site visit to address potential impacts identified throughout the visit, which should include: 1.) short-term management approaches of impacts to cultural resources and the TCP within the Area of Potential Effect (APE) of the PMSR; 2.) mitigation measures to protect and preserve cultural resources within the PMSR APE identified throughout the visit. As DoN stated, the consultation on and development of the island-wide PA and NAGPRA Comprehensive agreement will require additional time. Consequently, it is imperative that management and mitigation, to account for cumulative effects to cultural resources and the TCP within the PMSR APE, will be discussed and consulted on with the Tribes immediately after the initial visit.

The Tribe would like to request that the Visitation Plan will incorporate the following revisions (strikeouts are ~~red~~; additions are blue):

- **Baseline condition site visit.**
 - The Navy will coordinate an initial visit to establish baseline conditions at all archaeological sites and portions of the Traditional Cultural Property and Archaeological District within the PMSR areas of potential effect (APE) on SNI.
 - This visit would involve ~~one~~ two representative from each of the Tribes engaged in the consultation visiting SNI at the same time so they see and hear the same thing.
 - NBVC Cultural Resources Manager (CRM) will escort the Tribal representatives during the baseline condition visit.
 - The Navy anticipates the initial visit will involve an overnight stay on SNI to ensure Tribal representatives are able to spend adequate time at the sites within the APE, if logistically feasible due to limited lodging facilities. This would be determined during the site visit planning process.
 - Travel to/from SNI would be via the shuttle from Naval Base Ventura County (NBVC), Point Mugu.
 - Photos of sites/site conditions may be taken by authorized Navy personnel and provided to the Tribes following review for Operational Security (OPSEC) concerns.
 - The Navy will prepare a summary of the sites visited, observations made, and feedback received from the Tribal representatives. The summary will be provided to all the Tribes engaged in the consultation.
 - Travel costs associated with the baseline condition site visit will be paid for by the Navy.
- **Post-test/post-training site visits.**
 - Following each PMSR training event, the Navy will coordinate with the Tribes to make travel arrangements for Tribal representatives to visit the sites within the PMSR APE.

Rincon Band's comments on the Proposed Visitation Plan

Page 3 of 4

- Prior to the site visit, a post-test/post training assessment of the site(s) should be provided by DoD archaeologist to the consulting Tribes.
- The Navy will endeavor for the visits to occur as soon after each test/training event as possible with a goal of no later than 2 weeks following the conclusion of an event based upon flight availability.
- The number of representatives included in each post-event visit to be discussed and agreed upon as part of further consultation but will not exceed ~~one~~ two representative from each of the tribes engaged in the consultation.
- Post-test/post-training site visits will be completed in a day trip to SNI.
- The sites visited will not be limited to those associated with the specific test/training event. The Tribal representative will be afforded an opportunity to visit and observe the conditions at all archaeological sites within the PMSR APE.
- The NBVC Cultural Resources Manager (CRM) will escort the Tribal representative during the post event visit.
- The NBVC Cultural Resources Manager (CRM) summarizes all tribal concerns as voiced throughout the visit. The summary will be provided to the consulting Tribes and incorporated in the annual reporting.
- Travel costs associated with the post event site inspections will be paid for by the Navy.
- **Annual reporting.**
 - The NBVC CRM will prepare a summary report of testing and training events that occurred during each calendar year.
 - The report structure, format, and content will be developed in consultation with the Tribes.
 - The report will be sent to all Tribes and SHPO by (date to be determined through consultation) with a 30 day review/comment period.
- **NAGPRA Plan of Action.**
 - The Navy will consult with the culturally affiliated Tribes to develop a Plan of Action for the PMSR testing and training activities that occur at the Land Impact Site.
- **Adverse effects.**
 - If potential adverse effects are observed during a post event site visit, then the Navy will initiate consultation with the Tribes, SHPO, and ACHP for the purpose of establishing appropriate mitigations of those adverse effects.
- **Record of Decision (ROD).**
 - The above described conditions will be codified in the ROD for the PMRS EIS. The initial baseline site visit and subsequent post-event visitation would occur post-ROD.

Rincon Band's comments on the Proposed Visitation Plan

Page 4 of 4

If you have additional questions or concerns, please do not hesitate to contact our office at your convenience at (760) 749-1092 ext. 323 or via electronic mail at cmadrigal@rincon-nsn.gov. We look forward to working together to protect and preserve our cultural assets.

Sincerely,



Cheryl Madrigal
Tribal Historic Preservation Officer
Cultural Resources Manager

G.5.1.21 Summary of Tribal Correspondence and Communication

The following table summarizes Navy and Tribal correspondence related to the Point Mugu Sea Range EIS/OEIS. Dates included in the table may vary slightly from dates of letters, due to the actual mail date of letters from the Navy or the date of receipt of letters from Tribes or the State Historic Preservation Officer.

Table G-1: Navy and Tribal Correspondence Summary

Date	Type of Correspondence/Communication	Sender	Receiver	Summary of Correspondence/Communication
April 25, 2018	Letter	Navy	Federally and non-federally Recognized Tribes	NOI to develop an EIS/OEIS for the PMSR
May 24, 2018	Letter	Rincon Band	Navy	Rincon Band's comments on the Navy's NOI
February 11, 2020	Letter	Navy	Federally Recognized Tribes	Navy's invitation to Tribes to engage in Section 106 consultation for the PMSR EIS/OEIS
March 19, 2020	Letter via email	Rincon Band	Navy	Rincon Band's affirmative response to Navy's request for Section 106 consultation for the PMSR EIS/OEIS
April 6, 2020	Letter	Navy	Federally and non-federally Recognized Tribes	NOA of the PMSR Draft EIS/OEIS and 45-day comment period
April 10, 2020	Letter via email	Pechanga Band	Navy	Pechanga Band's affirmative response to Navy's request for Section 106 consultation for the PMSR EIS/OEIS
June 9, 2020	Letter via email	Rincon Band	Navy	Rincon Band's comments on the PMSR Draft EIS/OEIS and request for Section 106 meeting dates
June 9, 2020	Email	Navy	Rincon Band	Navy's response to Rincon Band's letter (received June 9, 2020) to inform the Tribe that meeting dates are forthcoming
June 24, 2020	Letter	Navy	Federally and non-federally Recognized Tribes	Status update on the PMSR Draft EIS/OEIS process
June 29, 2020	Letter	Navy	Rincon and Pechanga Bands	Navy's response to Tribe's letters requesting consultation for the PMSR EIS/OEIS

Table G-1: Navy and Tribal Correspondence Summary (continued)

Date	Type of Correspondence/Communication	Sender	Receiver	Summary of Correspondence/Communication
July 8, 2020	Email/Phone	Navy	Rincon Band	Navy provides Rincon Band with proposed meeting date
July 10, 13, and 14, 2020	Email/Phone	Navy	Pechanga Band	Navy provides Pechanga Band with proposed meeting date
July 24, 2020	Teleconference	Navy	Rincon and Pechanga Bands	Initial Section 106 meetings with Rincon and Pechanga Bands (separate meetings)
July 24, 2020	Email	Navy	Pechanga Band	Navy provides July 24 meeting minutes
July 24, 2020	File Sharing Platform	Navy	Pechanga Band	Upload of 21 Navy documents to Pechanga file share point site at Pechanga Band's request during July 24 teleconference
July 27, 2020	Email	Navy	Rincon Band	Navy provides July 24 meeting minutes and requested documents
July 30, 2020	Email	Navy	Pechanga Band	Navy follow up to confirm receipt of documents uploaded to Pechanga Band's file share point
August 24, 2020	Email/Phone	Navy/Pechanga Band	Navy/Pechanga Band	Navy confers with Pechanga to determine a preferred meeting date
August 25, 2020	Email	Navy	Rincon Band	Navy provides Rincon Band invitation for agreed to meeting date
August 27, 2020	Teleconference	Navy	Rincon Band	Section 106 meeting with Rincon Band
August 27, 2020	Email	Navy	Rincon	Navy provides Rincon Band with August 27 meeting minutes, requested document, and proposed meeting date
September 1, 2020	Teleconference	Navy	Pechanga Band	Section 106 meeting with Pechanga Band
September 1, 2020	Email	Navy	Pechanga Band	Navy provides requested document
September 3, 2020	Email	Navy	Pechanga Band	Navy provides meeting summary and chronological summary of Navy's tribal outreach efforts

Table G-1: Navy and Tribal Correspondence Summary (continued)

Date	Type of Correspondence/Communication	Sender	Receiver	Summary of Correspondence/Communication
September 8, 2020	Email	Navy	Pechanga Band	Navy provides Pechanga Band with proposed meeting date
September 15 and 29, 2020	Email	Navy/Pechanga Band	Navy/Pechanga Band	Multiple email exchanges regarding rescheduling of meetings and receipt of questions from Pechanga as discussed in prior meeting – Pechanga requested multiple extensions in submitting their questions and delays in meeting date (originally scheduled for October 6, 2020)
September 29, 2020	Email	Navy/Rincon Band	Navy/Rincon Band	Navy's request for meeting on October 7, 2020; Rincon Band's meeting confirmation
October 1, 2020	Email	Navy	Pechanga Band	Navy's request for meeting for October 21, 2020
October 6, 2020	Email	Pechanga Band	Navy	Pechanga Band's request to delay meeting until week of October 26, 2020
October 7, 2020	Email	Navy	Pechanga Band	Navy's request for meeting on October 27, 2020
October 7, 2020	Teleconference	Navy	Rincon Band	Section 106 meeting with Rincon Band
October 11, 2020	Email	Navy	Rincon Band	Navy provide Rincon Band with meeting minutes from October 7, 2020 meeting
October 21, 29, 30 and November 12, 16, 2020	Email	Navy/Pechanga Band	Navy/Pechanga Band	Email exchanges regarding rescheduled meeting dates and delay in the submittal of Pechanga's questions (as discussed during September 1, 2020 meeting)
November 10, 2020	Teleconference	Navy	Rincon Band	Section 106 meeting with Rincon Band
November 12, 2020	Email	Navy	Rincon Band	Navy provides Rincon Band with meeting minutes from November 10, 2020 meeting

Table G-1: Navy and Tribal Correspondence Summary (continued)

Date	Type of Correspondence/Communication	Sender	Receiver	Summary of Correspondence/Communication
November 18, 2020	Email	Navy	Federally Recognized Tribes	Navy provides written confirmation of the Navy's intent to re-initiate tribal consultation, with Section 106 consultation letter intended by December 18, 2020. The Navy will consider the effects of the undertaking on newly identified properties on San Nicolas Island based on information provided by the Pechanga Band regarding the potential for San Nicolas Island as a Traditional Cultural Property and archaeological district.
November 19, 2020	Email	Rincon Band	Navy	Rincon Band provides corrections to November 12 meeting minutes
November 19, 2020	Letter via email	Rincon Band	Navy	Rincon Band states they were looking forward to reinitiation of the Section 106 process to consider the effects of the undertaking on the potential San Nicolas Island Traditional Cultural Property and archaeological district
December 14, 15, and 18, 2020	Phone/Email	Navy	Pauma, Pechanga, Rincon, and Santa Ynez Bands	Navy notifies tribes of potential inadvertent discovery made at the Land Impact Site while supporting the PMSR EIS/OEIS
December 18 and 21, 2020	Email	Navy/Pechanga	Navy/Pechanga	Multiple email exchanges between Navy and Pechanga regarding potential inadvertent discovery at the Land Impact Site to schedule a teleconference
December 22, 2020	Teleconference	Navy	Pechanga	Meeting with Pechanga to discuss procedures for site visit to determine nature of the potential inadvertent discovery
December 22, 2020	Email	Navy	Federally Recognized Tribes	Navy provides update on the status of reinitiation letter which was planned for delivery on December 18, 2020
January 7, 2021	Letter via email	Navy	Federally Recognized Tribes	Transmittal of Navy's consultation reinitiation letter for the PMSR EIS/OEIS
January 8, 11, and 13, 2021	Emails	Navy/Rincon Band	Navy/Rincon Band	Email exchanges regarding the findings on the potential inadvertent discovery at the San Nicolas Island Land Impact Site/Rincon Band requested a meeting to discuss further

Table G-1: Navy and Tribal Correspondence Summary (continued)

Date	Type of Correspondence/Communication	Sender	Receiver	Summary of Correspondence/Communication
January 11, 2021	Letter	Pala Band of Luiseño Mission Indians	Navy	Pala Band of Luiseño Mission Indians' response letter to the Navy's notification of continued activities in the PMSR. The Pala Band do not object to the Navy's continued activities as the PMSR is beyond the boundaries the tribe considers its Traditional Use Area.
January 12, 2021	Email	Navy	Federally Recognized Tribes	Navy requests confirmation of receipt of consultation reinitiation letter for the PMSR EIS/OEIS
January 14, 2021	Letter via email	Pechanga Band	Navy	Pechanga Band's letter to Navy in response to Section 106 consultation reinitiation letter
January 14, 2021	Teleconference	Navy	Pechanga Band	Teleconference to discuss the findings on the potential inadvertent discovery at the San Nicolas Island Land Impact Site. Findings identified the remains as non-human and were faunal remains.
January 19, 2021	Emails	Navy	Federally Recognized Tribes	Navy/Tribes exchange emails to establish a meeting on January 26 to discuss the findings on the potential inadvertent discovery at the San Nicolas Island Land Impact Site. Findings identified the remains as non-human and were faunal remains.
January 22, 2021	Email	Rincon Band	Navy	Rincon Band requests a joint meeting to discuss faunal remains at the Land Impact Site
January 22, 2021	Email	Navy	Federally Recognized Tribes	Navy provides tribes with invite to a joint meeting to discuss faunal remains discovered at the Land Impact Site
January 26, 2021	Teleconference	Navy	Federally Recognized Tribes	Teleconference to discuss the findings on the potential inadvertent discovery at the San Nicolas Island Land Impact Site. Findings identified the remains as non-human and were faunal remains.
January 27 and 28, 2021	Email	Navy/Pechanga Band	Navy/Pechanga Band	Email exchanges to schedule meeting to discuss comments on Section 106 letter, and Navy provided requested document
January 27, February 3, and 4, 2021	Email	Navy/Rincon Band	Navy/Rincon Band	Email exchanges to schedule Section 106 meeting

Table G-1: Navy and Tribal Correspondence Summary (continued)

Date	Type of Correspondence/Communication	Sender	Receiver	Summary of Correspondence/Communication
February 3, 2021	Email	Navy	Pechanga Band	Navy provides the Tribal Chair with responses to Pechanga Band's letter dated January 14, 2021
February 8, 2021	Teleconference	Navy	Pechanga Band	Section 106 meeting between Pechanga Band and Navy
February 16, 2021	File Sharing Platform	Navy	Pechanga Band	Navy provides site records and reports for properties located within the APE on San Nicolas Island
February 17, 2021	Email	Navy	Pechanga Band	Navy provides February 8 meeting minutes to Pechanga Band
February 19, 2021	Email	Pechanga Band	Navy	Pechanga Band provides Navy with additional comments and information in response to the Navy's responses to Pechanga's letter dated January 14, 2021
February 19, 2021	Email	Navy	Rincon Band	Navy provides additional information to Rincon Band as requested during the Section 106 meeting, including a figure of where the faunal remains were found on San Nicolas Island
February 19, 2021	File Sharing Platform	Navy	Rincon Band	Navy provides site records and reports for properties located within the APE on San Nicolas Island
February 19, 2021	Email	Navy	Pechanga Band	Navy provides a figure of where the faunal remains were found on San Nicolas Island
February 19, 2021	Teleconference	Navy	Rincon Band	Section 106 meeting between Rincon Band and Navy
February 22, 2021	Email	Navy	Rincon Band	Navy provides February 19 meeting minutes to Rincon Band
February 25, 2021	Email	Navy	Rincon Band	Navy provides information on the identification of historical properties within the Areas of Potential Effect and the Section 106 process for the PMSR EIS/OEIS

Table G-1: Navy and Tribal Correspondence Summary (continued)

Date	Type of Correspondence/Communication	Sender	Receiver	Summary of Correspondence/Communication
February 25, 2021	Email	Navy	Pechanga Band	Navy provides information on the identification of historical properties within the Areas of Potential Effect and the Section 106 process for the PMSR EIS/OEIS. Navy also provides additional information to address Pechanga's February 19 responses to Navy's comment responses to Pechanga Band's January 14 letter to the Navy.
February 26, 2021	Email	Pechanga Band	Navy	Pechanga Band provides a response to Navy's February 25 email
March 3, 2021	Email	Navy	Federally Recognized Tribes	Navy provides the Tribes with a draft copy of a joint CPA for review. The Navy would like to enter into a negotiated CPA reflecting projects subject to current and future government-to-government consultations and also those matters of importance to each Tribe.
March 4, 2021	Email	Navy	Pechanga Band	Navy provides a response to Pechanga Band's February 25 email
March 17, 2021	Email	Navy	Federally Recognized Tribes	Navy follows up on the March 3 email to the Tribes regarding any interest in participating in the CPA
March 17, 2021	Email	Pechanga Band	Navy	Pechanga Band responds to Navy's March 17 email and draft CPA stating they will provide comments on the draft CPA
March 17, 2021	Email	Pala Band	Navy	Pala Band responds to Navy's March 17 email and draft CPA stating they would be interested in a joint agreement
March 19, 2021	Email	Rincon Band	Navy	Rincon Band confirms they are currently reviewing the draft CPA would be interested in a joint agreement
April 6, 2021	Email	Navy	Federally Recognized Tribes	Navy provides letters with finding of no adverse effects from the proposed PMSR activities pursuant to Section 106 of the NHPA
April 13, 2021	Letters	Navy	Federally Recognized Tribes	Navy provides letters with finding of no adverse effects from the proposed PMSR activities pursuant to Section 106 of the NHPA
May 10, 2021	Letter via email	Rincon Band	Navy	Rincon Band responds to Navy's April 6 letter and disagrees with the Navy's determination of no adverse effects on historic properties from proposed PMSR activities pursuant to Section 106 of the NHPA

Table G-1: Navy and Tribal Correspondence Summary (continued)

Date	Type of Correspondence/Communication	Sender	Receiver	Summary of Correspondence/Communication
May 18, 2021	Letter via email	Santa Ynez Band of Chumash Indians	Navy	Santa Ynez Band of Chumash Indians responds affirmatively to the Navy's offer for formal consultation under Section 106 of the NHPA
May 18 and 25, 2021	Email/Phone	Navy	Rincon Band	Navy responds to Rincon Band's May 10 letter and requests meeting to discuss disagreement on finding of adverse effect and provides Rincon Band with a copy of SHPO's May 12 letter
May 25, 2021	Email	Navy	Federally Recognized Tribes	Navy notifies Tribes of California Office of Historic Preservation's response and requests meeting
May 26, 2021	Email	Navy/Pala Band	Navy/Pala Band	Email exchanges to schedule Section 106 meeting
June 1, 2021	Email	Navy/Rincon Band	Navy/Rincon Band	Email exchanges to schedule Section 106 meeting
June 3 and 7, 2021	Email	Navy	Federally Recognized Tribes	Navy sends invite, followed by corrected invite, for joint Section 106 meeting between the Pala, Pauma, Pechanga, and Rincon Bands and the Navy
June 8, 2021	Teleconference	Navy	Federally Recognized Tribes	Section 106 meeting between Pala, Pauma, Pechanga, and Rincon Bands and the Navy to discuss Navy's finding of effect
June 8, 2021	Email	Pechanga Band	Navy and Advisory Council on Historic Properties	Pechanga Band provided a letter to the Advisory Council on Historic Properties on June 1, 2021, stating their disagreement with the Navy's finding of no adverse effect on historic properties from proposed PMSR activities pursuant to Section 106 of the NHPA. Pechanga Band provided the Navy with a copy of the letter via email on 8 June, 2021.
June 11, 2021	Email	Navy	Federally Recognized Tribes	Navy presents Tribes with a proposal to impose condition on the undertaking to avoid adverse effects through a Tribal Visitation Plan
June 28, 2021	Email	Navy	Federally Recognized Tribes	Navy provides the draft Tribal Visitation Plan and seeks feedback from the Tribes

Table G-1: Navy and Tribal Correspondence Summary (continued)

Date	Type of Correspondence/Communication	Sender	Receiver	Summary of Correspondence/Communication
July 15, 2021	Email	Navy	Federally Recognized Tribes	Navy provides a revised draft Tribal Visitation Plan incorporating Naval Facilities Engineering Systems Command Headquarters comments and asked for Tribes' feedback, seeking a Section 106 meeting to discuss
July 16, 20, and 22, 2021	Email	Navy/Federally Recognized Tribes	Navy/Federally Recognized Tribes	Email exchanges to schedule Section 106 meeting
August 3, 2021	Teleconference	Navy	Pala Band	Section 106 meeting between Pala Band and the Navy to discuss the proposed Tribal Visitation Plan
August 3, 2021	Teleconference	Navy	Pala Band	Section 106 meeting between Pala Band and the Navy to discuss the proposed Tribal Visitation Plan
August 11, 2021	Email	Navy	Federally Recognized Tribes	Navy provides meeting minutes for August 11 Section 106 meeting and requests Tribal Visitation Plan comments by August 18, also requests information again from Tribes detailing how historic properties are adversely affected by the undertaking
August 11 and 13, 2021	Email	Rincon Band/Navy	Rincon Band/Navy	Email exchanges between Rincon Band and Navy in which Rincon asks for 15 September extension to provide Site Visitation Plan comments and Navy agrees to proposed date
August 13, 2021	Email	Pechanga Band	Navy	Pechanga Band provides comments to the proposed Tribal Visitation Plan
August 18, 2021	Letter via email	Rincon Band	Navy	Rincon Band provides comments to the proposed Tribal Visitation Plan
August 24, 2021	Letter via email	Navy	Federally Recognized Tribes	Navy provides official letter signed by the Naval Base Ventura County Commanding Officer transmitting the proposed Tribal Visitation Plan to the Tribes

Table G-1: Navy and Tribal Correspondence Summary (continued)

Date	Type of Correspondence/Communication	Sender	Receiver	Summary of Correspondence/Communication
September 23, 2021	Letter via email	Advisory Council on Historic Preservation	Navy	Advisory Council on Historic Preservation (Council) provides Navy with their opinion on the Navy's finding of effect in response to Pechanga Band's request for Council review. Council acknowledges Navy's reasonable and good faith effort and finds no basis for disagreeing with the Navy's finding of No Adverse Effect to Historical Properties.
November 8, 2021 (Advisory Council on Historic Preservation) November 17, 2021 (Federally Recognized Tribes)	Letter	Navy	Advisory Council on Historic Preservation and Federally Recognized Tribes	Navy provided a written summary of its final decision affirming the initial finding of no adverse effect. The summary of the decision was sent to the Council, the SHPO/THPO, and the consulting parties. Per 36 CFR Part 800.5(c)(3)(ii)(B), the Navy's responsibilities under Section 106 are fulfilled upon providing its final decision on the appropriateness of its finding and a summary of that finding with the rationale for the decision.

Notes: CPA = Consultation Protocol Agreement, EIS/OEIS = Environmental Impact Statement/Overseas Environmental Impact Statement, Navy = U.S. Department of Navy, NHPA = National Historic Preservation Act, NOA = Notice of Availability, NOI = Notice of Intent, PMSR = Point Mugu Sea Range, SHPO = State Historic Preservation Officer, THPO = Tribal Historic Preservation Office.

G.5.2 State Historic Preservation Officer Consultations

G.5.2.1 Navy Consultation Letter to the State Historic Preservation Officer for Section 106 Process



DEPARTMENT OF THE NAVY
NAVAL BASE VENTURA COUNTY
311 MAIN ROAD, SUITE 1
POINT MUGU, CA 93042-5033

IN REPLY REFER TO:
5090
Ser N0000CV/0502
June 29, 2020

Ms. Julianne Polanco
State Historic Preservation Officer
California Department of Parks and Recreation
1725 23rd Avenue, Suite 100
Sacramento, CA 95816

Dear Ms. Polanco:

**SUBJECT: NATIONAL HISTORIC PRESERVATION ACT, SECTION 106
CONSULTATION FOR THE POINT MUGU SEA RANGE ENVIRONMENTAL
IMPACT STATEMENT AND OVERSEAS ENVIRONMENTAL IMPACT
STATEMENT**

This letter initiates consultation on the subject undertaking consistent with 36 CFR 800.3(a) and regulations for implementing Section 106 of the National Historic Preservation Act of 1966 (16 USC 470f). The Navy has determined that the development of the Point Mugu Sea Range (PMSR) Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) is an undertaking as defined in 36 CFR 800.16(y).

The Navy sent your office a Notice of Availability (NOA) letter for the draft PMSR EIS/OEIS, dated April 6, 2020, wherein the Navy welcomed review and substantive comments on the draft EIS/OEIS. Additionally, the NOA letter provided notice to your office that the Navy is consulting with interested parties regarding potential effects of proposed testing and training activities on historic properties concurrent with the National Environmental Policy Act (NEPA) public involvement process and 36 CFR 800.2(d).

UNDERTAKING

The PMSR is located adjacent to Los Angeles, Ventura, Santa Barbara, and San Luis Obispo counties along the Pacific Coast of Southern California and includes 36,000 square miles of controlled sea and airspace designated for testing and training activities. The Naval Air Warfare Center Weapons Division (NAWCWD) is the primary tenant at Naval Base Ventura County (NBVC) Point Mugu and the primary user of the PMSR. NAWCWD Point Mugu meets its mission to conduct state-of-the-art weapons systems testing and evaluation and to maintain operational readiness by providing a safe, realistic, and instrumented testing environment. Vessels, aircraft, and weapons systems must be able to perform in realistic marine environments and operate as intended, thus improving system accuracy and personnel safety.

The Navy's proposed undertaking is to continue to conduct military readiness activities within the PMSR. The proposed undertaking includes testing and training activities previously analyzed in the 2002 PMSR EIS/OEIS and activities associated with the Environmental Assessments (EAs) completed for the PMSR since 2002. In addition to consolidating previously

5090
Ser N0000CV/0502
June 29, 2020

analyzed actions into one comprehensive document, the current EIS/OEIS also addresses proposed increases in activity frequency of military research, development, acquisition, testing, and evaluation (referred to as "testing") and scheduled training activities at the PMSR. The testing and training activities subject to the current EIS/OEIS would be conducted at sea and in designated airspace within the PMSR Study Area, as well as missile launch operations and directed energy activities originating from NBVC components Point Mugu and San Nicolas Island (SNI). The proposed undertaking to be consulted on under NHPA Section 106 would continue military readiness activities with some proposed increases in testing and training activities that are the same as or similar to those currently occurring within the PMSR, and have been occurring for decades. The proposed undertaking will allow for continued testing and training in support of military readiness and Department of Defense mission requirements as required by Title 10 and to provide combat-ready forces. The purpose of the proposed action analyzed in the PMSR EIS/OEIS is to provide modern instrumented airspace, sea space, testing and training areas, testing and training facilities, and range infrastructure to fully support current, emerging, and foreseeable future testing and training requirements, and ensure the long-term viability of the PMSR while protecting human health and the environment.

At Point Mugu, the Navy proposes testing activities associated with the Directed Energy Systems Integration Laboratory and launch activities associated with the Launch Complex Building (PM-55), including the Alpha (PM-715 and PM-717), Bravo (PM-727, PM-728 and PM-729), Charlie (PM-748 and PM-749), and Nike Zeus (PM-751) launch complexes. Missiles can also be launched from a truck within the launch complex area. The truck is self-contained and is only onsite for the launch duration.

For SNI, the Navy proposes the continued use of the Land Impact Site, a 10.5-acre target area located on the northwest portion of the island historically associated with the Standoff Land Attack Missile (SLAM) testing program. The Land Impact Site is used for air-to-surface tests with inert weapon systems. The proposed tempo for the continued use of the Land Impact Site will not exceed what was previously analyzed in the 1998 EA for Non-warhead SLAM and Future Model SLAM Firings. In addition, the Navy proposes the continued use of the existing Alpha Launch Complex (N-193 and N-315). The Alpha Launch Complex is typically used for launching supersonic targets. The proposed tempo for the use of the launch complex would not exceed what was previously analyzed in the 2002 PMSR EIS/OEIS. The Navy also proposes to conduct testing activities associated with the Directed Energy facility on SNI. Construction and use of the Directed Energy facility on SNI was previously analyzed in the 2015 Directed Energy Test Facility at SNI. There is no change in tempo proposed for Directed Energy activities on SNI from what was analyzed in the 2015 EA for the Directed Energy facility.

SHPO CONSULTATION HISTORY

Prior to the preparation of the draft PMSR EIS/OEIS, the Navy conducted previous consultations with the California State Historic Preservation Officer (CA SHPO), under Section 106, for the same or similar activities in the Navy's proposed undertaking in the draft PMSR

5090
Ser N0000CV/0502
June 29, 2020

EIS/OEIS. The CA SHPO concurred with the Navy's findings during those consultations, or concurrence was assumed by the Navy in the absence of a response from the SHPO to the Navy's request for concurrence with no effects findings. Electronic copies of consultation letters between the Navy and your office regarding these undertakings can be found on the CD included with this letter.

In consultation with the CA SHPO for the development and use of the SLAM site on SNI in 1998, the SHPO concurred with the Navy's findings of the likelihood of an adverse effect to historic properties within the Area of Potential Effect (APE). In consultation with the SHPO, the Navy conducted a data recovery program to mitigate the potential effects to one historic property within the undertaking's APE.

In January of 2002, the Navy submitted a letter to the CA SHPO seeking concurrence with a determination that the proposed activities addressed in the PMSR EIS/OEIS would have no effect on National Register listed or eligible properties. The CA SHPO did not provide a response to the Navy's request.

In September 2004, the Navy submitted a letter to the CA SHPO seeking concurrence with a determination that activities analyzed in the 2007 final EA for the SSM-1 Kai would have no effect on National Register listed or eligible properties on SNI. The CA SHPO did not provide a response to the Navy's request for concurrence.

In the 2010 EA/Overseas EA for Laser Testing and Training on the Point Mugu Sea Range, the Navy determined that the undertaking would have no adverse effect on National Register listed or eligible properties. The CA SHPO did not provide a response the Navy's request for concurrence on the Navy's findings of no adverse effect.

In 2013, the CA SHPO concurred with the Navy's finding of no adverse effect to National Register listed or eligible properties by the undertaking in the Countermeasures Testing and Training EA at the PMSR.

In 2013, the CA SHPO concurred with the Navy's findings of no adverse effect to National Register listed or eligible properties for the EA/Overseas EA for PMSR Expansion of Unmanned Systems Operations.

In December 2014, the CA SHPO concurred with the Navy's findings of no adverse effect to National Register listed or eligible properties for the construction of or operations from a Directed Energy Test Facilities at SNI as analyzed in the Directed Energy Test Facility EA. The SNI Directed Energy Facility has yet to be constructed.

Finally, the Navy consulted with the CA SHPO for at-sea activities analyzed in the 2018 Hawaii-Southern California Training and Testing (HSTT) EIS/OEIS. The Navy determined that

5090
Ser N0000CV/0502
June 29, 2020

the undertaking in the HSTT EIS/OEIS, which are similar to those proposed in the Draft PMSR EIS/OEIS in a portion of the same geographic area, would have no adverse effect to submerged National Register listed or eligible properties. The CA SHPO concurred with the Navy's findings in October 2017.

In the 2020 Draft PMSR EIS/OEIS, the Navy does not propose any changes to the activities previously consulted on that would result in different determinations of effect on National Register listed or eligible properties, in accordance with Section 106 of the NHPA, for NBVC Point Mugu, SNI, or the PMSR.

CONSULTATION WITH FEDERALLY RECOGNIZED INDIAN TRIBES

In accordance with 36 CFR 800.3(f), the Navy has made efforts to identify federally recognized Indian tribes that might attach religious and cultural significance to historic properties in the APE and invite them to be consulting parties.

On February 11, 2020, the Navy sent a letter to seven federally recognized Indian tribes inviting them to enter into Government-to-Government consultation with the Navy for this Undertaking. The letter included the Executive Summary and Cultural Resources Chapter for the Draft EIS/OEIS as well as APE

maps. This letter was sent to: La Jolla Band of Luiseño Indians, Pala Band of Mission Indians, Pauma Band of Luiseño Indians, Pechanga Band of Luiseño Indians, Rincon Band of Luiseño Indians, Santa Ynez Band of Chumash Mission Indians, and Soboba Band of Luiseño Mission Indians. The Navy has received requests to consult from the Pechanga Band of Luiseño Indians and Rincon Band of Luiseño Indians. The Navy is currently making arrangements to meet and consult with both tribes, at this time on a virtual platform due to the ongoing COVID-19 pandemic.

The Navy sent a Notice of Availability letter for the draft PMSR EIS/OEIS, dated April 6, 2020, to the seven federally recognized Indian tribes as well as twenty non-federally recognized tribes or organizations. The letter provided a brief description of the proposed action notification of the availability of the draft EIS/OEIS on the project website, and an eight-page project fact sheet. Additionally, federally recognized tribes were provided a copy of the draft EIS/OEIS by CD. The letter also notified recipients that NEPA and Section 106 consultation would be conducted concurrently.

In addition to the seven federally recognized tribes, the twenty non-federally recognized tribes or organizations this letter was sent to are: Barbareno/Ventureno Band of Mission Indians, Chumash Council of Bakersfield, Chumash Maritime Association, Coastal Band of the Chumash Nation, Fernandeno Tataviam Band of Mission Indians, Gabrieleno Band of Mission Indians - Kizh Nation; Gabrielino Tongva Indians of California Tribal Council, Gabrielino and Tongva, Nation, Gabrieleno/Tongva San Gabriel Band of Mission Indians, Gabrielino-Tongva

5090
Ser N0000CV/0502
June 29, 2020

Tribe, Northern Chumash Tribal Council, Salinan Tribe of Monterey, San Luis Obispo Counties, San Fernando Band of Mission Indians, San Luis Obispo County Chumash Council, Serrano Nation of Mission Indians, Tongva Ancestral Territorial Tribal Nation, Wishtoyo Chumash Foundation, Xolon-Salinan Tribe, yak tityu tityu yak tilhini – Northern Chumash Tribe, and the Native American Heritage Commission. In all, the Navy provided the NOA for the draft PMSR EIS/OEIS to 37 individuals representing the federally recognized and non-federally recognized tribes and other organizations listed above.

To date, Pechanga and Rincon are the only tribes that have responded to Navy correspondence for the PMSR EIS/OEIS. However, the Navy intends to continue sending updates to both federally recognized and non-federally recognized tribes or organizations and provide opportunities for consultation on the PMSR EIS/OEIS if requested.

PUBLIC PARTICIPATION

Pursuant to 36 CFR 800.8(a)(1), the Navy has considered its Section 106 responsibility early in the NEPA process and planned to hold meetings and conduct analysis and review for the PMSR EIS/OEIS in such a way that they can meet the purposes and requirements of both statutes.

The Navy has provided multiple notices to make the public aware of the availability of the draft PMSR EIS/OEIS. These notices have also requested comments from the public. Copies of the draft PMSR EIS/OEIS were provided to seven public libraries in the region. The Navy published a notice of availability for the draft PMSR EIS/OEIS in the Federal Register. A postcard was mailed to citizens in the vicinity of the project area. The postcard provided information on where to access the draft PMSR EIS/OEIS and invited public participation in the EIS/OEIS process. The NBVC Public Affairs Office issued news releases with project information, draft PMSR EIS/OEIS availability, and an invitation for public participation. The Navy also prepared two notices for publication in six newspapers covering Los Angeles, Ventura, Santa Barbara, and San Luis Obispo Counties. These notices ran between April 24 and June 1, 2020. Additionally, the Navy mailed 194 letters to identified Stakeholders, on April 22, 2020, to inform them of the availability of the draft PMSR EIS/OEIS and invite their comments.

Due to current Federal and State guidance on social distancing in response to the COVID-19 pandemic, the Navy was not able to hold in-person public meetings to support the draft EIS/OEIS public review and comment period. Instead, the Navy created a website with project information and established a phone line and email address to receive questions from the public about the proposed action. Comments received regarding historic properties in the APE during the public comment periods are reviewed as part of the Navy's obligations to consult regarding the effects of the PMSR undertaking on historic properties as required by Section 106 of the NHPA. If requested by the consulting parties, the Navy will offer to conduct Section 106 meetings via teleconference or other means to meet our obligations pursuant to 36 CFR 800.8(a)(1).

5090
Ser N0000CV/0502
June 29, 2020

AREA OF POTENTIAL EFFECT

Consistent with 36 CFR 800.16(d), the APE for this project is defined as the geographic area within which the proposed undertaking may directly cause effects to historic properties. The APE for the proposed undertaking includes the PMSR, the areas associated with land-based launch and land impact facilities, and sites on NBVC Point Mugu and SNI.

IDENTIFICATION OF HISTORIC PROPERTIES

Most of the activities for the Proposed Action will take place within the open ocean areas in the PMSR, with additional activities occurring at land-based launch and land impact facilities and sites on NBVC Point Mugu and SNI. The Study Area contains one National Register eligible architectural resource and three eligible archaeological sites.

On NBVC Point Mugu, the vast majority of architectural resources have been inventoried. Additionally, most of the non-developed and non-wetland acreage has been surveyed for archaeological sites. There are no recorded archaeological sites within the APE on NBVC Point Mugu.

Building PM-55 and its associated Launch Complex are located within the APE on NBVC Point Mugu. The building and launch complex is considered an exceptionally significant Cold War-era resource and was determined eligible for listing on the National Register of Historic Places (NRHP) under criteria A and C (JRP Historical Consulting Services, 1998). The Navy typically launches 50 to 70 missiles or targets annually from Building PM-55 and its associated beach launch pads. The majority of launches entail jet-assisted takeoff (JATO) or rocket-assisted takeoff (RATO) bottles to assist the launch of missiles. These bottles primarily fall into the wetland immediately in front of the launch pad (the drop zone) if the event occurs at Building PM-55. If the launch occurs from an operational pad adjacent to the beach (Pad Alpha, Pad Bravo, Pad Charlie, or Pad Nike Zeus), JATO/RATO bottles may expend into the near shore environment. The RATO and JATO bottles are retrieved during periodic clean-up processes.

San Nicolas Island has been the subject of archaeological investigations for at least 100 years, including a complete pedestrian survey resulting in the identification of approximately 600 archaeological sites. Within the APE on SNI, three eligible archaeological sites were identified: CA-SNI-12, CA-SNI-41, and CA-SNI-168.

Site CA-SNI-12 is identified as a highly disturbed habitation site comprised of a large deflating and eroding midden complex with stabilized areas containing buried deposits and human skeletal remains. The human remains are within two areas identified as cemeteries. These areas are located in the northwestern and eastern portions of the site. As analyzed in the 2015 Directed Energy Test Facility EA, the Directed Energy Test Facility would be positioned at the far northern extent of site CA-SNI-12. Components of the Directed Energy Test Facility, which are within or near CA-SNI-12, consist of a concrete pad sited on bedrock and a graded road to the pad. The concrete pad is located outside of the site boundary to the immediate west

5090
Ser N0000CV/0502
June 29, 2020

of CA-SNI-12, while the road bisects the northern portion of the site. The proposed testing and training activities analyzed in the Draft EIS/OEIS for the Directed Energy Test Facility at CA-SNI-12 involve the directed energy system (e.g., laser or high-powered microwave) at the shooter site being aimed and shot at one or more of the calibration target sites. Once the system is calibrated, it would be aimed at a target in order to conduct system tests. The “shooter” systems siting would allow a directed energy system to attack airborne or seaborne targets as well as land-based targets. The proposed tempo will not exceed what was previously analyzed in the 2015 Directed Energy Test Facility EA.

Site CA-SNI-41 is a habitation site with a large, dense midden complex. Early site investigations between the 1930s and 1950s resulted in the removal of seven burials from the site. The western portion of site CA-SNI-41 may overlap the Rock Crusher Site Launch Complex (Enclosure 5). However, archival research suggests the Rock Crusher Site Launch Complex is located to the immediate northwest and outside of the site CA-SNI-41 boundary, and an updated boundary may be required. The Navy constructed two launchers near Rock Crusher; however, the launchers were removed. The launch pads still exist and are each typically used three-to-five times per year to launch missiles via mobile or temporary launchers. The Rock Crusher Site Launch Complex is used to launch missiles or targets westward, over the ocean, within a 60-degree azimuth.

Site CA-SNI-168 is a multiple locus habitation site with a large lithic and shell scatter and buried midden areas. One cemetery area was identified at the site. The cemetery area is located approximately ninety meters east of the Land Impact Site, which is located within site CA-SNI-168 (Enclosure 5). The Land Impact Site consists of structures along an elevated, irregularly shaped single access road with an adjacent platform constructed of imported fill and gravel. The Land Impact Site is used for air-to-surface tests using inert weapon systems. While these weapons are considered inert, some do use small pyrotechnic devices (e.g., spotting charges, live fuses). Targets within the Land Impact Site may include empty Container Express (commonly known as CONEX) boxes configured to simulate buildings, helicopter or aircraft bodies, as well as other constructed simulated targets. The Land Impact Site is the only active impact site on SNI and has been in use since 1989. The proposed tempo for the continued use of the Land Impact Site will not exceed what was previously analyzed in the 1998 EA for Non-warhead SLAM and Future Model SLAM Firings, approximately 8–26 times annually.

During Section 106 consultation for a previous undertaking on SNI, the MILCON project P-586, the Navy was informed by the Pechanga Band of Luiseño Indians (Pechanga) of two additional potential historic properties. These potential historic properties were identified by Pechanga as a Traditional Cultural Property (TCP) and an archaeological district. The Pechanga assert that the TCP includes the entire island and that each archaeological site on the island is a contributing element to the overall archaeological district. In response to the identification of these potential historic properties, the Navy is

5090
Ser N0000CV/0502
June 29, 2020

preparing to contract both an ethnographic study and archaeological district study of SNI to identify and define the nature of both property types.

Within the waters of the PMSR, submerged shipwrecks and planes comprise all of the documented cultural resources. However, the precise location of wrecks is infrequent. Rather, the available information is limited to vague descriptive narratives of the areas in which ships or planes were last known, thought to have sank, or crashed. To date, no systematic underwater survey has been undertaken; however, a submerged cultural resources assessment for the Channel Islands National Park and Channel Islands National Marine Sanctuary was conducted in 1996. The Navy reanalyzed the Channel Islands assessment in 1999 and conducted a historic context study in 2010 of shipwrecks around SNI.

A review of all three studies indicates there are a number of submerged resources within the PMSR; however, there are no known historic properties present. The following paragraphs summarize the findings of these studies.

There are 195 shipwrecks located within or near the PMSR, with 129 having plottable coordinates in Geographic Information Systems. The largest number of shipwrecks found within the PMSR is near Santa Rosa Island. These shipwrecks occurred in the vicinity of Talcott Shoal, Sandy Point, Bee Rock, East Point, and Becher's Bay. Thirty-two ships are known to have wrecked within two miles of SNI. In many cases, although a shipwreck is known to have occurred and its general coordinates are known, no wreckage has been located.

Military watercraft and aircraft lost within or near the PMSR include 31 shipwrecks and 92 downed aircraft. Of the 31 shipwrecks, seven were involved in the 1923 "Honda Point disaster," the largest peacetime U.S. Navy accident which resulted in the loss of seven destroyers after they ran aground in dense fog on September 8, 1923. Another 22 ships were used as targets as part of fleet reductions. The remaining two military shipwrecks within or near the PMSR occurred prior to 1920 and there is little record of their sinking.

The 92 identified aircraft losses all occurred before 1951, with 87 of the losses occurring during the 1942-1945 period. None of the losses has precise locational data, and it is unclear whether the aircraft were salvaged. Of the 92 aircraft losses, 63 were identified as possibly occurring within the PMSR, but precise locational data was not recorded.

As part of the Navy's 2010 *Historic Context Study to Develop a Historic Theme for Shipwrecks around San Nicolas Island*, preliminary NRHP evaluations were made for 15 shipwrecks that are believed to have sunk within 1 NM of SNI between the mid-19th to late 20th centuries. The context study also included a preliminary NRHP evaluation for one submerged government plane, a Grumman Avenger that was possibly ditched off Santa Cruz Island due to mechanical problems. This study found that none of the shipwrecks or the downed aircraft are listed in or have been determined eligible for listing in the NRHP.

5090
Ser N0000CV/0502
June 29, 2020

DETERMINATION OF EFFECT

As described in the PMSR draft EIS/OEIS, training and testing activities are expected to continue at current or similar levels in existing localities. These activities are generally consistent with those analyzed in the 2002 PMSR EIS/OEIS and subsequent EAs completed for the PMSR since 2002 wherein

the Navy received concurrence from your office on determinations of No Adverse Effect to historic properties. The activities proposed in the current draft EIS/OEIS are representative of testing and training that the Navy has conducted in the PMSR for decades.

There are four historic properties identified within the APE for the PMSR: Building PM-55 and its associated Launch Complex on NBVC Point Mugu; and CA-SNI-12, CA-SNI-41, and CA-SNI-168 on SNI. Based on analysis of the proposed undertaking at each location, the Navy has determined the activities proposed in the PMSR draft EIS/OEIS will not adversely affect historic properties.

For activities associated with the proposed undertaking, Building PM-55 and its Launch Complex at Point Mugu would continue as a launch facility. This activity received analysis as part of the Navy's 2002 PMSR EIS/OEIS. Consistent with findings of the 2002 EIS/OEIS, recent analysis found that the current proposed undertaking would not adversely affect the historic property because the building's historic or current use would not be altered.

The SNI Directed Energy Test Facility is sited at the far northern end of Site CA-SNI-12. Potential impacts to CA-SNI-12 and the nearby site CA-SNI-157 were identified during the Navy's preparation of the Directed Energy Test Facilities at San Nicolas Island EA. Through consultation with your office, the project's construction plans were adjusted to avoid CA-SNI-157 and to minimize effects to CA-SNI-12 (Enclosure 2). Archaeological testing was conducted within the portion of site CA-SNI-12 that would be affected by widening the existing road in the northern portion of the site to support the Directed Energy Test Facility. This area was found to be highly disturbed and consisted of a surface deposit that had washed down from the top of a dune. The area was found to be a non-contributing element of the site. Additionally, measures were developed to avoid or minimize adverse effects to other portions of the site. A physical barrier was installed to prevent people from driving onto CA-SNI-12. Signage was also installed to direct people to walk on paved and graded areas only. Accordingly, the EA determined there would be no impacts to the archaeological site associated with testing and personnel training at the site. Your office concurred with these findings in a letter dated December 2, 2014 (reference: USN 2013_0814_001), as discussed above. No construction for the Directed Energy Test facility is analyzed or proposed in this Draft PMSR EIS/OEIS.

The Rock Crusher Launch site on SNI contains the Tomahawk Launch Pad and the RAM Launch Pad. These concrete pads were constructed between 1970 and 1996 and are located

5090
Ser N0000CV/0502
June 29, 2020

within or near the western portion of site CA-SNI-41. Although the site boundary is currently depicted within the Rock Crusher Launch Site, a comparison of site records, reports, and GIS data suggest the site is located outside of the launch site. In fact, the 1998 EA for the Tomahawk Flight Test Operations on the West Coast of the United States notes the site is located approximately 65 meters east of the launch area. During recordation and investigation of CA-SNI-41 by California State University, Los Angeles in 1997, the western portion of the site was found to be disturbed by the construction of the Rock Crusher Launch site. In spite of this disturbance, the investigators concluded that remaining portions of site CA-SNI-41 retain integrity for listing in the NRHP under criterion D. Under the current draft EIS/OEIS, no additional construction is proposed in this area, and testing and training activities will be confined to existing launch pads and access roads. Project activities which are limited to use of the existing facilities and infrastructure are consistent with current use of the Rock Crusher Launch site and would not adversely affect CA-SNI-41.

In 1998, the Navy prepared an EA for the development and use of the SLAM Impact Site (now referred to as the Land Impact Site) which is located within CA-SNI-168. Environmental analysis conducted for that EA determined impacts to CA-SNI-168 would result from the construction of the SLAM site. In support of the EA, consultation ensued between the Navy and your office in 1996, which resulted in the mitigation through data recovery of the parts of CA-SNI-168 that would be affected by the SLAM site. Additionally, the Navy developed procedures to avoid or minimize potential adverse effects to other portions of the site not subject to the data recovery efforts. These measures include aircrew briefings prior to each flight and ongoing ground crew briefings; restricted access areas at target sites, including access routes; reporting new discoveries; prohibiting collection of artifacts; off-road travel minimized and marked areas avoided; and coordination between missile recovery crews and range environmental representatives prior to recovering any missile outside a target APE. Since the types of activities included in the proposed undertaking are similar in nature to those analyzed during the development of the 1998 EA, the Navy has determined that continued use of the Land Impact Site would not have an adverse effect on site CA-SNI-168.

Based on the above analyses, the Navy has determined that the activities proposed in the PMSR Draft EIS/OEIS would have No Adverse Effect to historic properties, consistent with 36 CFR 800.5(b). The Navy requests your concurrence with the APE pursuant to 800.4(a)(1) and with the determination of effect within 60 days of receipt of this correspondence.

5090
Ser N0000CV/0502
June 29, 2020

Should you or your staff have any questions or concerns, please contact Mr. Joseph Montoya, NBVC Environmental Planning and Conservation Branch Manager at (805) 989-3804 or joseph.l.montoya@navy.mil.

Sincerely,


J. E. ECHISM
Captain, U.S. Navy
Commanding Officer

- Enclosures:
1. Notice of Availability of the PMSR Draft EIS/OEIS Letter
 2. CD Containing Consultation Letters between U.S. Navy and SHPO
 3. APE at NBVC Point Mugu
 4. APE at NBVC SNI
 5. Archaeological Sites within or near APE at NBVC SNI

G.5.2.2 State Historic Preservation Officer Response Letter to the Navy

	State of California • Natural Resources Agency	Gavin Newsom, Governor
DEPARTMENT OF PARKS AND RECREATION OFFICE OF HISTORIC PRESERVATION		Lisa Ann L. Mangat, Director
Julianne Polanco, State Historic Preservation Officer 1725 23rd Street, Suite 100, Sacramento, CA 95816-7100 Telephone: (916) 445-7000 FAX: (916) 445-7053 calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov		
October 15, 2020		Reply in Reference To: USN_2020_0702_001
Submitted Via Electronic Mail		
Captain J.E. Chism Commanding Officer Department Of The Navy Naval Base Ventura County 311 Main Road, Suite 1 Point Mugu, CA 93042-5033		
RE: National Historic Preservation Act, Section 106 Consultation for the Point Mugu Sea Range Environmental Impact Statement and Draft Overseas Environmental Impact Statement		
Dear Captain Chism:		
The United States Navy (Navy) is consulting with the State Historic Preservation Officer (SHPO) in order to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 306108), as amended, and its implementing regulations at 36 CFR Part 800. The Navy is requesting SHPO comments on a finding of no adverse effect to historic properties. The Navy is drafting National Environmental Policy Act documentation for two testing and training areas and has determined that the development of the Point Mugu Sea Range (PMSR) Environmental Impact Statement (EIS) and the Draft Overseas EIS are undertakings, as defined in 36 CFR 800.16(y). As the Navy plans to use both the PMSR and Overseas areas in the same manner that they have for decades, the Navy is of the opinion that their continued use will not adversely affect historic properties. Having reviewed your submittal, SHPO offers the following comments: 1) SHPO has no comments on the PSMR EIS or the Draft Overseas EIS at this time; 2) While the development of the PMSR and draft Overseas EIS may broadly be considered undertakings, SHPO typically comments on effects stemming from project-specific undertakings within a defined Area of Potential Effects. If the Navy seeks comments on actives undertaken within the geographic area covered under these EIS studies, please submit undertakings for review in a manner consistent with the regulations outlined at 36 CFR Part 800. The Navy has consulted with		

2 of 2

SHPO on undertakings at Point Mugu/Port Hueneme and San Nicholas Island in the past and SHPO expects they will continue to do so.

If the Navy has any questions or comments, please contact staff historian Tristan Tozer at (916) 445-7027 or Tristan.Tozer@parks.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to be 'J. Polanco', with a long horizontal line extending to the right.

Julianne Polanco
State Historic Preservation Officer

G.5.2.3 Navy Consultation Letter to the State Historic Preservation Officer for Section 106 Process



DEPARTMENT OF THE NAVY
NAVAL BASE VENTURA COUNTY
311 MAIN ROAD, SUITE 1
POINT MUGU, CA 93042-5033

5090
Ser N0000CV/926
December 29, 2020

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816-7100
Dear Ms. Polanco:

SUBJECT: NATIONAL HISTORIC PRESERVATION ACT SECTION 106 CONSULTATION
FOR ACTIVITIES ASSOCIATED WITH THE POINT MUGU SEA RANGE, VENTURA
COUNTY

Naval Base Ventura County (NBVC) is initiating consultation for military readiness activities (undertaking) associated with the Point Mugu Sea Range (PMSR) in order to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. 306108 [NHPA]) as amended. Pursuant to Section 106 of the NHPA, NBVC has reviewed the proposed project and determined it to be an undertaking as defined in 36 CFR 800.16(y).

The proposed undertaking includes activities previously analyzed in the 2002 PMSR Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) and activities associated with Environmental Assessments (EAs) completed for the PMSR since 2002. The current Draft EIS/OEIS analysis consolidates these actions into one comprehensive environmental planning document. Since completing these previous analyses, the Navy has received information regarding the presence of additional properties which may be eligible for the National Register of Historic Properties (NRHP) within the Area of Potential Effects (APE) for the subject undertaking. As a result, and consistent with 36 CFR 800.3, the Navy is initiating consultation to consider the potential effect of the undertaking on these newly identified properties.

Undertaking

The proposed undertaking includes military readiness activities conducted within the PMSR that have the potential to affect historic properties that may be eligible for the NRHP. These activities include testing and training associated with missile and target launches, intercepts, and impacts. The PMSR includes 36,000 square miles of controlled sea and airspace designated for testing and training activities.

While the majority of the testing and training activities subject to the current EIS/OEIS will occur at sea and in designated airspace within the PMSR, some operations originate from NBVC Point Mugu and San Nicolas Island (SNI) and are the subject of this consultation letter. A summary of activities with the potential to affect historic properties at Point Mugu and SNI are provided below.

5090
Ser N0000CV/926
December 29, 2020

Directed Energy on Point Mugu

At Point Mugu, the Navy proposes continued use of Directed Energy (DE), or laser, shooter sites and testing associated with the Directed Energy Systems Integration Laboratory (DESIL). Shooter sites are locations from which DE tests are fired at a target located either at sea or in the air. The DESIL facility will mimic ship operations of DE lasers and high-powered microwave systems. The DE activities on Point Mugu include firing directed energy at air or surface target sites at sea. The proposed tempo will not exceed 70 days per year.

Launch Complex Building 55 on Point Mugu

The Navy proposes continued launch activities associated with the Launch Complex Building 55, including the Alpha, Bravo, Charlie, and Nike Zeus launch complexes. Launch Complex activities include target or missile launches, which typically require the use of rocket-assisted takeoff bottles (RATO) or jet-assisted takeoff (JATO) bottles to propel the target or missile into flight. JATO/ RATO bottles expend 1 to 2 seconds after the missile is airborne. These bottles primarily fall into the wetland immediately in front of the launch pad if the event occurs at Building PM-55. If the launch occurs from Pad Alpha, Bravo, Charlie, or Nike Zeus, JATO/RATO bottles may expend into the near shore environment.

Land Impact Site on SNI

At SNI, the Navy proposes the continued use of the Land Impact Site, a targeted impact area located on the northwest portion of the island historically associated with the Standoff Land Attack Missile (SLAM) testing program. The Land Impact Site is used for air-to-surface tests with inert weapon systems, which impact targets located on an elevated pad of imported fill and gravel. The Land Impact Site consists of multiple targets situated on the elevated pad; however, individual events are directed at a specific target within the site. The proposed tempo for the continued use of the Land Impact Site will not exceed a maximum of 26 inert impacts per year.

Alpha Launch Complex on SNI

The Navy proposes continued use of the Alpha Launch Complex on SNI to launch supersonic targets from existing launch pads within the complex. The proposed tempo for the combined use of both the Alpha Launch Complex and the Building 807 Launch Complex (see below) would not exceed a maximum of 40 launch events per year.

Building 807 Launch Complex near the Rock Crusher site on SNI

The Navy proposes continued use of the Building 807 Launch Complex near Rock Crusher on SNI to launch supersonic targets, similar to the launch activities at the Alpha Launch Complex. As noted above, the proposed tempo for the combined use of the Building 807 Launch Complex and the Alpha Launch Complex would not exceed 40 launches per year.

Directed Energy on SNI

The Directed Energy activities on SNI includes high-energy laser (HEL) and high-power microwave (HPM) systems from land, vessels, and aircraft. On SNI, the Directed Energy activities include a DE

5090
Ser N0000CV/926
December 29, 2020

shooter site at Tender Point (from which HEL or HPM is fired), and DE target site at Vizcaino Point (used to calibrate the HEL or HPM). The shooter systems siting would allow a DE system to attack airborne or seaborne targets as well as land-based targets. The proposed tempo for use of the DE facilities on SNI would be approximately 125 days per year.

Area of Potential Effect

Consistent with 36 CFR 800.16(d), the APE is defined as the geographic area within which the proposed undertaking may directly or indirectly cause effects to historic properties. The APE for the proposed undertaking includes a series of discontinuous sub-areas throughout the PMSR:

Directed Energy Systems Integrations Laboratory

The APE for the DESIL at Point Mugu includes the DESIL facility, with a 30-meter buffer surrounding the facility (Enclosure 2).

Launch Complex Building 55

The APE for the Launch Complex Building 55 on Point Mugu includes Building 55, Alpha launch pad, Bravo launch pad, Charlie launch pad, and Nike Zeus launch pad. A 30-meter buffer surrounding each facility is also included in the APE (Enclosure 2).

Land Impact Site

The APE for the Land Impact Site on SNI includes the target pad and surrounding area subject to falling debris associated with weapon impact tests. This area encompasses approximately 52 acres and measures approximately 520 meters N/S by 400 meters E/W. It also includes an approximately 300-meter road segment located south of the target pad (Enclosure 3). The APE for the Land Impact Site is informed by analysis conducted during 1997 data recovery efforts at CA-SNI-168 and includes both the Area of Direct Effects and the Area of Indirect Effects identified during that study. The Area of Direct Effects includes the target pad and its surrounding area, accounting for cleanup efforts resulting from missile impacts. The Area of Indirect Effects is a larger area whose extent is represented by the boundary of the currently defined APE. The Area of Indirect Effects was identified in the 1997 study as an area where there could be a light debris scatter and periodic foot traffic to remove the debris. The Area of Indirect Effects also accounts for the minor possibility of a Mission abort. Recent field visits by Navy Archaeologists verified the previously defined Areas of Direct and Indirect Effects. Additional field visits are planned to ensure the accuracy of the defined APE.

Alpha Launch Complex

The APE for the Launch pad areas associated with the Alpha Launch Complex on SNI includes the Coyote Launch Pad and an area with miscellaneous launch pads located to the south of the Coyote Launch Pads (Enclosure 3). In addition to the launch pads, a 30-meter buffer around the launch pads is included in the APE.

Building 807 Launch Complex near the Rock Crusher Site

The APE for the areas associated with the Building 807 Launch Complex near the Rock Crusher site on SNI includes the Tomahawk Launch Pad and the rolling airframe missile (RAM) Launch Pad as well as a gravel area located adjacent to the launch pads, with a 30-meter buffer around the launch pads and associated gravel area (Enclosure 3).

5090
Ser N0000CV/926
December 29, 2020

Directed Energy Test and Target Areas

The APE for the DE test and target areas on SNI include a DE shooter site at Tender Point and a DE target site at Vizcaino Point (Enclosure 3). The APE for the DE shooter and target sites include a 30-meter buffer surrounding the test and target pads.

Identification of Historic Properties

Pursuant to 36 CFR 800.4(a)(2), NBVC has reviewed the cultural resources inventory for the identified APE. The large majority of the proposed undertaking activities will take place within the offshore area of the PMSR. A smaller number of activities occur at land-based launch and land impact facilities and sites on NBVC Point Mugu and SNI. The APE for the proposed undertaking contains one National Register eligible architectural resource on Point Mugu and four eligible archaeological sites on SNI. The APE also contains one archaeological site that was recommended not eligible for the National Register, but SHPO concurrence was never received. A summary of known historic properties on Point Mugu and SNI is provided here.

There is one historic property within the APE for the area associated with the Launch Complex Building PM-55 at Point Mugu. This property is the architectural resource Building PM-55 and its associated launch complex.

(1) Building PM-55 and its associated Launch Complex is considered an exceptionally significant Cold War-era resource and was determined eligible for listing on the National Register of Historic Places (NRHP) under criteria A and C.

There are two historic properties within the Land Impact Site APE. These sites are the archaeological sites CA-SNI-168 and CA-SNI-169.

(1) CA-SNI-168 is a large shell midden with six loci that is subject to wind erosion. Archaeological testing of the site to support construction of the Impact Pad in 1997 indicate that the site is a camp site where final tool manufacture, food processing, and general domestic production and maintenance activities occurred year-round. The site contained numerous ground stone tools (manos, mortars, pitted stones, net sinkers and weights), lithic debitage, a large chert biface, whalebone tools, several shell fishhook blanks, and ornamental items including pendants and shell/stone beads. The site is largely deflated with limited intact midden soils. Three burials were removed from this site, one in the 1970s, one in the 1980s, and one in 2000. The Land Impact Site is located on top of site CA-SNI-168. In consultation with SHPO, data recovery efforts in 1997 mitigated impacts from construction and use of the Land Impact Site.

(2) CA-SNI-169 is a dispersed midden area consisting of at least three deflating midden remnants in a dune environment. This site represents a locus of a larger campsite complex that includes CA-SNI-168. The artifacts and ecofacts associated with this site include evidence of food processing for resources possibly consumed elsewhere. Numerous tools to procure, process, and store tools are present at the site. Cultural material identified on site includes cores, flakes, sandstone fragments, marine shell, and fish bone.

There is one historic property within the Alpha Launch Complex and Target APE on SNI. This site is the archaeological site CA-SNI-44.

(1) CA-SNI-44 is a lithic scatter and low density midden that has been heavily impacted by past

5090
Ser N0000CV/926
December 29, 2020

military construction of the launch pad. The site is largely disturbed and deflated, but buried, intact midden deposits occur in Locus B near the intersection of Tufts Road and the launch pad access road. Lithic materials include metavolcanics, quartzite, breccia, and chert; and groundstone artifacts consisted of a sandstone pestle and two manos. Midden constituents include black abalone, owl limpet, California mussel, and sea mammal

There is one historic property within the APE for the launch pad areas associated with the Building 807 Launch Complex at the Rock Crusher site. This site is the archaeological site CA-SNI-41.

(1) CA-SNI-41 is a habitation site with a large, dense, eroding shell midden complex situated on a large sand dune. The site consists of several areas of buried midden flanked by eroded caliche outcrops. It contains lithics, a large quantity of marine shell, some groundstone, miscellaneous tools, and trade items such as chert. Modern disturbance to the site includes several pipes and cables that run across the site, especially at the western and eastern ends. There may have been an old road along the southern flank of the dune. The western part of the dune has been disturbed by the construction of the road to the Rock Crusher site. Early site investigations between the 1930s and 1950s resulted in the removal of seven burials from the site.

There is one historic property within the Directed Energy Test and Target APE on SNI. This site is the archaeological site CA-SNI-12.

(2) CA-SNI-12 is a large, eroding and deflating midden complex located on a coastal terrace with dunes. The site consists of large amounts of marine shell, lithics, some groundstone, and faunal remains. The site is highly disturbed by erosion and the presence of roads that bisect the site. Stabilized areas are present and contain buried deposits and human skeletal remains. The human remains are within two areas identified as cemeteries. These areas are located in the northwestern and eastern portions of the site.

In accordance with 36 CFR 800.4(b)(1), NVBC is making efforts to identify additional historic properties that may be present within the APE. During Section 106 consultation for the P-586 undertaking on SNI, the Pechanga Band of Luiseño Indians (Pechanga) Tribe informed the Navy of two potential historic properties. Pechanga identified these potential historic properties as a Traditional Cultural Property (TCP) and an island-wide archaeological district. In response to the Pechanga Tribe's identification of these potential historic properties, the Navy has contracted both an ethnographic study and archaeological district study of SNI to identify and define the nature of both property types. These studies are underway and are being developed in consultation with Indian tribes that attach religious and cultural significance to SNI. As it becomes available, the information resulting from these studies will be taken into consideration for this and future NHPA consultations between the tribes and the Navy.

Pursuant to 36 CFR 800.4(a)(4), NBVC is seeking additional information related to the identification of historic properties within the subject APE. In furtherance of this effort, NBVC is consulting with seven federally recognized Indian tribes to seek additional information to assist in identifying properties to which they attach religious and cultural significance that may be affected by this undertaking. The provision of this information will aid in the ability to determine the level of effect as well as the nature of the properties and their significance. This information is paramount and therefore the subject of this continued Section 106 consultation.

Plan for Consultation

Consistent with 36 CFR 800.4(b), the Navy is consulting with your office to identify historic properties within the APE. After the Navy has received your comments regarding the undertaking, definition of the

5090
Ser N0000CV/926
December 29, 2020

APE, and the identification of historic properties, the Navy will proceed to the next step in the Section 106 process. The Navy respectfully requests your comments within 30 days of receipt of this letter. If you have any questions, please contact Dr. Kristina Erlandson, Cultural Resources Manager, NBVC, at (805) 234-6399 or by email at Kristina.erlandson@navy.mil.

Sincerely,


J. E. CHISM
Captain, U.S. Navy
Commanding Officer

Enclosures: 1. PMSR EIS/OEIS Study Area
2. APE at NBVC Point Mugu
3. APE at SNI

Copy to:
Commander Navy Regional Southwest
Attn: Environmental Department
Cultural Resources Management Program
San Diego, CA 92147

The Honorable Mr. Temet A. Aguilar, Tribal Chairman
c/o Chris Devers, Pauma Cultural Committee
Pauma Band of Luiseño Indians
P.O. Box 369
Pauma Valley, CA 92061

The Honorable Mr. Mark Macarro, Tribal Chairman
c/o Ms. Michele Fahley, Deputy General Counsel
Pechanga Band of Luiseño Indians
P.O. Box 2183
Temecula, CA 92593

The Honorable Mr. Bo Mazzetti, Tribal Chairman
c/o Cheryl Madrigal, THPO
Rincon Band of Luiseño Indians
Rincon Tribal Hall,
Valley Center, CA 92082

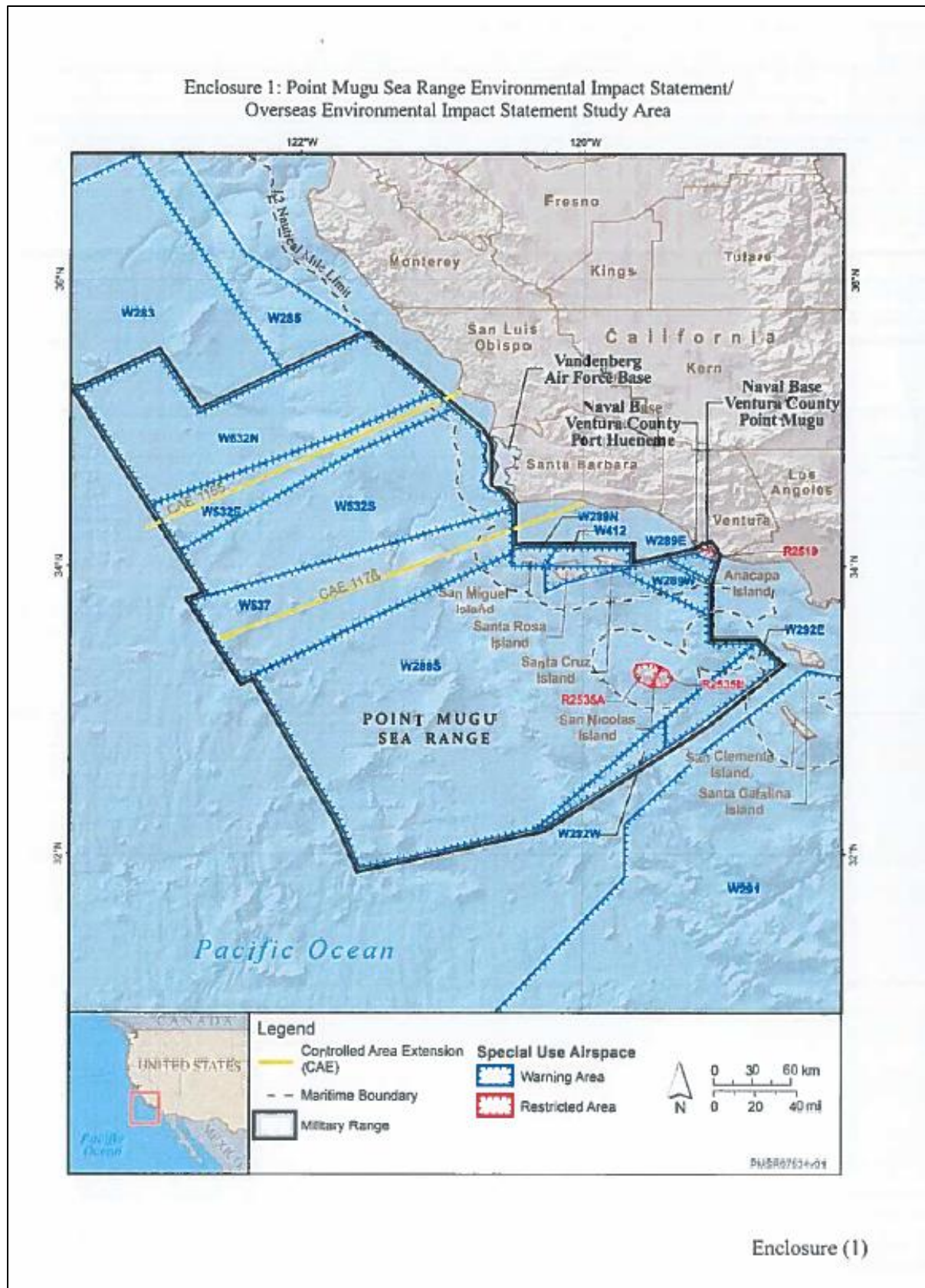
The Honorable Mr. Kenneth Kahn, Tribal Chairman
c/o Nakia Zavalla, Tribal Culture Director
Santa Ynez Band of Chumash Indians
P.O. Box 517
Santa Ynez, CA 93460

5090
Ser N0000CV/926
December 29, 2020

The Honorable Mr. Fred Nelson, Jr., Tribal Chairman
c/o James Trujillo
La Jolla Band of Luiseño Indians
22000 Highway 76
Pauma Valley, CA 92061

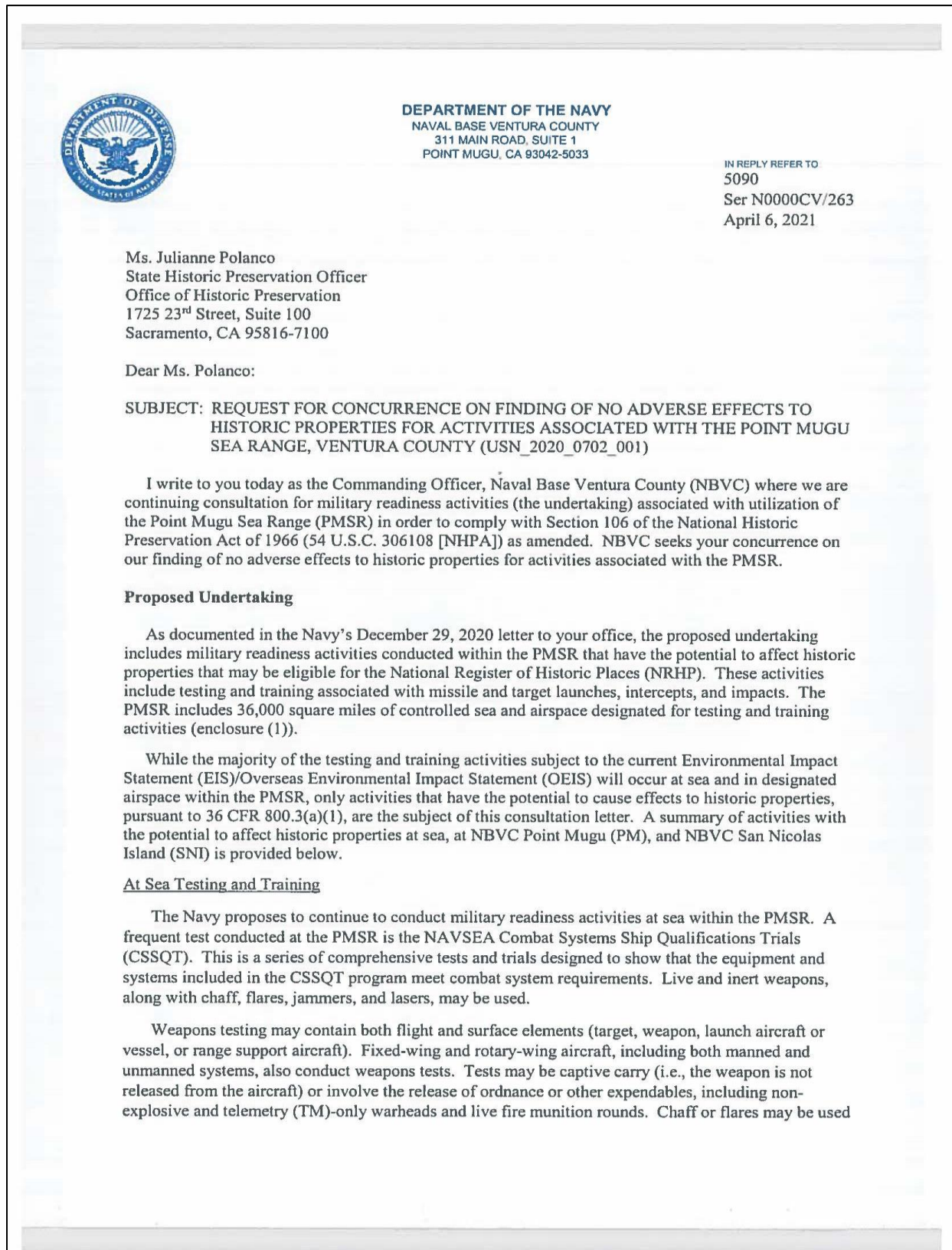
The Honorable Robert H. Smith, Tribal Chairman
c/o Shasta Gaughen, THPO
Pala Band of Mission Indians
12196 Pala Mission Road
Pala, CA 92059

The Honorable Mr. Isaiah Vivanco, Tribal Chairman
c/o Joseph Ontiveros, THPO
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581





G.5.2.4 Navy Concurrence Request Letter to the State Historic Preservation Officer for Finding of No Adverse Effect for Activities Associated with the Point Mugu Sea Range



5090
Ser N0000CV/263
April 6, 2021

during weapons tests, with the restriction that they are expended offshore in compliance with environmental regulations. Collectively, these materials released at sea are considered military expended materials (MEM).

Terrestrial Testing and Training

Directed Energy on Point Mugu

The Navy proposes to continue use of the Directed Energy (DE) shooter sites and testing associated with the Directed Energy Systems Integration Laboratory (DESIL) and existing beach pads (Alpha, Bravo, Charlie, and Nike Zeus). Shooter sites are locations from which DE tests are fired at a target located either at sea or in the air. The DESIL facility will mimic ship operations of DE lasers and high-powered microwave systems. The DE activities on Point Mugu include firing directed energy (high-energy laser (HEL) and high-power microwave (HPM) systems) at air or surface target sites at sea. The proposed tempo will not exceed 70 days per year.

Building PM-55 Launch Complex on Point Mugu

The Navy proposes to continue launch activities associated with the Building PM-55 Launch Complex, including the Alpha, Bravo, Charlie, and Nike Zeus launch complexes. Launch Complex activities include target or missile launches, which typically require the use of jet-assisted takeoff (JATO) bottles or rocket-assisted takeoff (RATO) bottles to propel the target or missile into flight. JATO/ RATO bottles expend 1 to 2 seconds after the missile is airborne. These bottles primarily fall into the wetland immediately in front of the launch pad if the event occurs at Building PM-55. If the launch occurs from Pad Alpha, Bravo, Charlie, or Nike Zeus, JATO/RATO bottles expend into the near shore environment.

Land Impact Site on SNI

On SNI, the Navy proposes to continue use of the Land Impact Site, a targeted impact area located on the western portion of the island historically associated with the Standoff Land Attack Missile (SLAM) testing program. The Land Impact Site is used for air-to-surface or surface-to-surface tests with inert weapon systems, which impact targets located on an elevated pad of imported fill and gravel. The Land Impact Site consists of multiple targets situated on the elevated pad; however, individual events are directed at a specific target within the site. The proposed tempo for the continued use of the Land Impact Site will not exceed a maximum of 26 inert impacts per year.

Alpha Launch Complex on SNI

The Navy proposes to continue use of the Alpha Launch Complex (Buildings N-189, N-192, N-306, N-307, N-314, N-315, N-316, and N-511) on SNI to launch supersonic targets from existing Vandal and Coyote launch pads within the complex. The proposed tempo for the combined use of both the Alpha Launch Complex and the Building N-807 Launch Complex (see below) would not exceed a maximum of 40 launch events per year.

Building N-807 Launch Complex near the Rock Crusher site on SNI

The Navy proposes to continue use of the Building N-807 Launch Complex near Rock Crusher on SNI to launch supersonic targets, similar to the launch activities at the Alpha Launch Complex. As noted

5090
Ser N0000CV/263
April 6, 2021

above, the proposed tempo for the combined use of the Building N-807 Launch Complex and the Alpha Launch Complex would not exceed 40 launches per year.

Directed Energy on SNI

The DE activities on SNI includes HEL and HPM systems from land, vessels, and aircraft. On SNI, the DE activities include a shooter site at Tender Point (from which HEL or HPM is fired), and DE target site at Vizcaino Point (used to calibrate the HEL or HPM). The shooter systems siting allows a DE system to attack airborne or seaborne targets as well as land-based targets. The proposed tempo for use of the DE facilities on SNI would be approximately 125 days per year.

Historic Properties Identified in the APE

Consistent with 36 CFR 800.4(a)(1), the Navy determined the area of potential effect (APE) for the proposed undertaking in consultation with your office. The Navy's December 29, 2020 letter defined the APE to include the Launch Complex Building PM-55 at Point Mugu (enclosure (2)), and the Land Impact Site, Alpha Launch Complex, Building N-807 Launch Complex, and DE target and shooter sites on SNI (enclosure (3)).

In accordance with 36 CFR 800.4(b)(1), the Navy's effort to identify historic properties took into account past planning, research, and studies, the magnitude and nature of the undertaking, the degree of Federal involvement, the nature and extent of the potential effects, and the likely nature and location of historic properties within the APE. The Navy obtained information from a variety of sources, including the following:

- 1) Properties identified during previous planning for the associated range areas within the current PMSR APE and consultations for previous PMSR undertakings.
- 2) The National Register Information System.
- 3) The California Historical Resources Information System.
- 4) Navy database of cultural resources records, reports, and documentation.
- 5) Publicly available sources about Tribal territories and resources, including Tribal websites.
- 6) Information solicited directly during Tribal consultations to identify properties of traditional religious and cultural significance within the APE.
- 7) National Oceanic and Atmospheric Administration's Office of Coast Survey Advanced Wreck and Obstruction Information System.
- 8) California State Lands Commission Shipwrecks database.
- 9) Channel Islands National Park Archaeological Overview and Assessment: Submerged Archaeological Resources.

The results of the Navy's identification efforts are provided below.

At Sea – Submerged Historic Properties

Submerged pre-contact archaeological sites within the PMSR may include Paleocoastal and Early Holocene archaeological sites in waters surrounding island and coastal areas of the PMSR. These sites are most likely to occur nearshore within water depths of 100 meters below mean high tide, representing areas that were inundated by rising sea levels since the Last Glacial Maximum ~20,000 years ago. However, no submerged pre-contact archaeological sites have been identified in the PMSR to date.

5090
Ser N0000CV/263
April 6, 2021

There are 195 shipwrecks located within or near the PMSR, 129 of them with plottable coordinates. The largest number of shipwrecks found within the PMSR is near Santa Rosa Island, in the vicinity of Talcott Shoal, Sandy Point, Bee Rock, East Point, and Becher's Bay. Thirty-two (32) shipwrecks are known to have occurred within two (2) nautical miles (NM) of SNI, 27 of which are older than 50 years. In many cases, although a shipwreck is known to have occurred and its general coordinates are known, no wreckage has been located.

Known sunken Navy watercraft and aircraft losses within the PMSR include 31 sunken military watercraft and 92 aircraft losses. Two (2) of the shipwrecks occurred before 1920, seven (7) of the shipwrecks were involved in the 1923 Honda Point disaster, and 22 were targets as part of fleet reductions. A total of 12 of these wrecks have general locational data; 11 of the 12 wrecks are at a depth of 5,000 feet (ft.) or deeper (one is at a depth of 2,400 ft.). The 92 identified aircraft losses all occurred before 1951, with 87 of the losses occurring during the 1942-1945 period. None of the losses has precise locational data, and it is unclear whether the aircraft were salvaged.

In 2010, a historic context for shipwrecks that occurred after European contact until 1965 within one (1) NM of SNI was prepared. As part of the context, 45 shipwrecks and 21 downed aircraft were identified in the vicinity of SNI and Begg Rock. These wrecks and downed aircraft occurred from the mid-19th century to the late-20th century. Preliminary NRHP evaluations were made for the 15 shipwrecks that are believed to have occurred within one (1) NM of SNI that are considered shipwrecks under the Abandoned Shipwrecks Act of 1988. The other cultural resource found submerged is the Grumman Avenger, a government plane that was possibly ditched about 20 miles southwest of Santa Cruz Island due to mechanical problems. However, none of the shipwrecks or downed aircraft are listed in or have been determined eligible for listing on the NRHP.

Terrestrial Historic Properties

Building PM-55 Launch Complex - Historic Building and Launch Complex

There is one (1) historic property within the APE area associated with Building PM-55 Launch Complex at Point Mugu. This property is the architectural resource Building PM-55 and its associated Launch Complex.

- Building PM-55 and its associated Launch Complex is considered an exceptionally significant Cold War-era resource and was determined eligible for listing on the NRHP under criteria A and C, with concurrence from the California State Historic Preservation Officer (SHPO) in 1999.

Land Impact Site - Pre-Contact Archaeological Sites

There are two (2) historic properties within the Land Impact Site APE. These properties are the pre-contact archaeological sites CA-SNI-168 and CA-SNI-169.

- CA-SNI-168 is a large shell midden with six (6) loci that is subject to wind erosion. Archaeological testing of the site to support construction of the Land Impact Site target pad (formerly SLAM) in 1997 indicate this is a habitation site where general domestic production and maintenance activities occurred year-round, primarily between ~3,200 and 2,400 years ago. The site contained numerous ground stone tools (manos, mortars, pitted stones, net sinkers and

5090
Ser N0000CV/263
April 6, 2021

weights), lithic debitage, a large chert biface, whalebone tools, several shell fishhook blanks, and ornamental items including pendants and shell/stone beads. The site is largely deflated with limited intact midden soils at the location of the Land Impact Site target pad, located on top of site CA-SNI-168. In consultation with SHPO, data recovery efforts in 1997 mitigated impacts from construction and use of the Land Impact Site. Three (3) burials were removed from an apparent cemetery area at this site, one (1) in the 1970s, one (1) in the 1980s, and one (1) in 2000. Site CA-SNI-168 was determined eligible for listing on the NRHP under criterion D, with concurrence from SHPO in 1996.

- CA-SNI-169 is a dispersed midden area consisting of at least three (3) deflating midden remnants in a dune environment. Cultural material identified on site includes cores, flakes, ground stone, marine shell, bird bone, and fish bone. The presence of several fishhook fragments and blanks, combined with the diversity of fish taxa recovered, indicates fishing occurred in nearshore kelp forests and pelagic waters further out. Occupation at the site occurred primarily between ~2,000 and 3,000 years ago. No human remains have been identified at this site, and it is considered eligible for listing on the NRHP under criterion D, with concurrence from SHPO in 1996.

Alpha Launch Complex – Historic Buildings

There is one (1) historic property within the APE area associated with the Alpha Launch Complex on SNI. This property is comprised of the Alpha Launch Complex facility and includes the architectural resources: Buildings N-189, N-192, N-306, N-307, N-314, N-315, N-316, N-511 and its associated Launch Complex.

- The Alpha Launch Complex buildings were built between 1962 and 1968 in support of launch activities during the Cold War era, and are still in use supporting launch activities today. The buildings associated with the launch complex were determined not eligible for the NRHP under Criteria Consideration G for properties that are less than 50 years old (JRP 1998). Currently, these buildings are all over 50 years old. The Navy has determined that for the purposes of this consultation and assessing potential effects, they are assumed eligible for listing on the NRHP.

Alpha Launch Complex – Pre-Contact Archaeological Sites

There are two (2) historic properties within the Alpha Launch Complex APE on SNI. These are pre-contact archaeological sites CA-SNI-44 and CA-SNI-61.

- CA-SNI-44 is a lithic scatter and low density midden dated to the Late Holocene that has been heavily impacted by past military construction of the launch pad. The site is largely disturbed and deflated, but buried, intact midden deposits occur in Locus B near the intersection of Tufts Road and the launch pad access road. Lithic materials include metavolcanics, quartzite, breccia, and chert; and ground stone artifacts consisted of a sandstone pestle and two (2) manos. Midden constituents include black abalone, owl limpet, California mussel, and sea mammal. No human remains have been identified at this site, and CA-SNI-44 has been determined ineligible for listing on the NRHP, with concurrence from SHPO in 2015.

5090
Ser N0000CV/263
April 6, 2021

- CA-SNI-61 is a large site consisting of six (6) loci dated to the Late Holocene with low densities of shell midden and lithic debitage, almost exclusively concentrated in near-surface contexts. The site has been extensively disturbed by the construction of Tufts road, buildings, and the original launch pad. No human remains have been identified at CA-SNI-61, and the site was determined to be ineligible for listing on the NRHP, with concurrence from SHPO in 2015.

Building N-807 Launch Complex near the Rock Crusher Site – Pre-Contact Archaeological Site

There is one (1) historic property within the APE for the launch pad areas associated with the Building N-807 Launch Complex at the Rock Crusher site. This site is the pre-contact archaeological site CA-SNI-41.

- CA-SNI-41 is a habitation site with a large, dense, eroding shell midden complex situated on a large sand dune, dated primarily to between 3,000 and 5,000 years ago. The site consists of several loci of buried midden flanked by eroded caliche outcrops. It contains lithics, a large quantity of marine shell, some ground stone, miscellaneous tools, and exotic material such as chert. Modern disturbance to the site includes several pipes and cables that run across the site, especially at the western and eastern ends. There may have been an old road along the southern flank of the dune. The western part of the dune has been disturbed by the construction of the road to the Rock Crusher site. Early site investigations between the 1930s and 1950s resulted in the removal of seven (7) burials from the site. In 2010, two (2) burials were noted eroding on the surface during Section 110 archaeological testing at the site. The burials are located more than 360 meters from the edge of the launch complex boundary, and were left in situ. The 2010 Section 110 evaluation of site CA-SNI-41 recommended the site eligible for listing on the NRHP under criterion D (enclosure (4)). The Navy seeks your concurrence on the eligibility of CA-SNI-41.

Directed Energy Test and Target Areas – Pre-Contact Archaeological Site

There is one (1) historic property within the Directed Energy Test and Target APE on SNI. This site is the pre-contact archaeological site CA-SNI-12.

- CA-SNI-12 is a large, eroding midden complex located on a low coastal terrace within sand dunes. The site consists of dense deposits of marine shell, lithics, some ground stone, and faunal remains dated to the Middle Holocene (~5,000 BP). The site is disturbed by aeolian erosion and the presence of a road that bisects the site. Stabilized areas are present and contain buried deposits and human burials, within two (2) cemetery areas located in the northwestern and eastern portions of the site. Six (6) burials were removed from the site by previous researchers from the 1930s through 1970s and additional burials are currently being exposed by erosion, approximately 30 meters southeast of the parking area. Site CA-SNI-12 was determined eligible for listing on the NRHP under criterion D, with concurrence from SHPO in 2010.

Island-wide Archaeological District

During consultation for another undertaking on SNI, the Pechanga Band of Luiseño Indians (Pechanga) informed the Navy they believe all of the archaeological sites on SNI comprise an archaeological district. In response to Pechanga's identification of this potential historic property, the Navy has contracted an archaeological district study, currently underway and in consultation with Indian tribes that attach religious and cultural significance to SNI. As it becomes available, the information

5090
Ser N0000CV/263
April 6, 2021

resulting from this study will be taken into consideration for this and future NHPA consultations for undertakings on SNI.

Island-wide Traditional Cultural Property

During consultation for another undertaking on SNI, Pechanga informed the Navy that they view the entire island as a Traditional Cultural Property (TCP). In response to Pechanga's identification of this potential historic property, the Navy has contracted an ethnographic study, currently underway and in consultation with Indian tribes that attach religious and cultural significance to SNI. As it becomes available, the information resulting from this study will be taken into consideration for this and future NHPA consultations for undertakings on SNI.

SHPO Consultation

Prior to the preparation of the Draft PMSR EIS/OEIS, the Navy conducted previous consultations with the SHPO, under Section 106, for the same or similar activities in the proposed undertaking for the PMSR. The SHPO concurred with the Navy's findings during those previous consultations, or concurrence was assumed by the Navy in the absence of a response from the SHPO to the Navy's request for concurrence with its findings. These consultations are summarized below.

In consultation with the SHPO for the development and use of the SLAM site on SNI in 1998, the SHPO concurred with the Navy's findings of the likelihood of an adverse effect to historic properties within the Area of Potential Effect (APE) as a result of the construction and use of the SLAM site. In consultation with the SHPO, the Navy conducted a data recovery program to mitigate the potential effects to CA-SNI-168.

In January 2002, the Navy submitted a letter to the SHPO seeking concurrence with a determination that the proposed activities addressed in the PMSR EIS/OEIS would have no effect on National Register listed or eligible properties. The SHPO did not provide a response to the Navy's request. In the absence of a response, the Navy assumed SHPO concurrence.

In September 2004, the Navy submitted a letter to the SHPO seeking concurrence with a determination that activities analyzed in the 2007 Final Environmental Assessment (EA) for the SSM-1 Kai would have no adverse effect on site CA-SNI-61. In the absence of a response, the Navy assumed SHPO concurrence with the Navy's finding.

In the 2010 EA/Overseas EA for Laser Testing and Training on the Point Mugu Sea Range, the Navy determined the undertaking would have no adverse effect to National Register listed or eligible properties. The SHPO did not provide a response the Navy's request for concurrence on the Navy's findings of no adverse effect. In the absence of a response, the Navy assumed SHPO concurrence.

In 2013, the SHPO concurred with the Navy's findings of no adverse effect to National Register listed or eligible properties for the EA/Overseas EA for PMSR Expansion of Unmanned Systems Operations.

In 2013, the SHPO concurred with the Navy's finding of no adverse effect to CA-SNI-12 by the undertaking in the 2014 Countermeasures Testing and Training EA, at the PMSR.

In December 2014, the SHPO concurred with the Navy's findings of no adverse effect to CA-SNI-12 as a result of DE test activities at SNI as analyzed in the 2015 Directed Energy Test Facility EA. The SNI DE Test Facility has yet to be constructed due to revisions made to the EA in consultation with the

5090
Ser N0000CV/263
April 6, 2021

SHPO. The Navy has committed to consultation with Tribes for the construction of the SNI Directed Energy Facility.

In January 2015, the SHPO concurred with the Navy's finding that sites CA-SNI-44 and CA-SNI-61 are ineligible for listing on the NRHP, and that no historic properties were affected as a result of construction of the quad launch pad to replace the existing launch pad within the Alpha Launch Complex.

Finally, the Navy consulted with the SHPO for at-sea activities analyzed in the 2018 Hawaii-Southern California Training and Testing (HSTT) EIS/OEIS. The Navy determined that the undertaking activities in the HSTT EIS/OEIS, which are similar to those proposed in the Draft PMSR EIS/OEIS in a portion of the same geographic area, would have no adverse effect to submerged National Register listed or eligible properties. The SHPO concurred with the Navy's findings in October 2017.

In the 2021 PMSR EIS/OEIS, the Navy does not propose any changes to the activities previously consulted on that would result in different determinations of effect on National Register listed or eligible properties, in accordance with Section 106 of the NHPA, for NBVC PM, SNI, or the PMSR. However, the Navy is including analysis for the potential to effect two (2) newly identified historic properties, the proposed archaeological district and the proposed TCP. These resources were not included in previous consultations with your office for activities associated with the PMSR EIS/OEIS.

Tribal Consultation

In accordance with 36 CFR 800.3(f)(2), the Navy has made efforts to identify federally recognized Indian tribes that might attach religious and cultural significance to historic properties in the APE and invited them to be consulting parties.

On February 11, 2020, the Navy sent a letter to seven (7) federally recognized Indian tribes inviting them to enter into Government-to-Government (G2G) consultation with the Navy for this undertaking. The letter included the Executive Summary and Cultural Resources Chapter for the Draft EIS/OEIS as well as APE maps. This letter was sent to: La Jolla Band of Luiseño Indians, Pala Band of Mission Indians, Pauma Band of Luiseño Indians, Pechanga Band of Luiseño Indians, Rincon Band of Luiseño Indians, Santa Ynez Band of Chumash Indians, and Soboba Band of Luiseño Mission Indians. The Navy received requests to consult from the Pechanga Band of Luiseño Indians and Rincon Band of Luiseño Indians. The Navy consulted with both tribes for the EIS/OEIS on a virtual platform due to the ongoing COVID-19 pandemic.

The Navy sent a Notice of Availability letter for the Draft PMSR EIS/OEIS, dated April 6, 2020, to the seven (7) federally recognized Indian tribes as well as twenty (20) non-federally recognized tribes or organizations. The letter provided a brief description of the proposed action, notification of the availability of the Draft EIS/OEIS on the project website, and an eight-page project fact sheet. Additionally, the federally recognized tribes were provided a copy of the Draft EIS/OEIS on CD. The letter also notified recipients that NEPA and Section 106 consultation would be conducted concurrently. The twenty (20) non-federally recognized tribes or organizations this letter was sent to are: Barbareño/Ventureño Band of Mission Indians; Chumash Council of Bakersfield; Chumash Maritime Association; Coastal Band of the Chumash Nation; Fernandeño Tataviam Band of Mission Indians; Gabrielino Band of Mission Indians - Kizh Nation; Gabrielino Tongva Indians of California Tribal Council; Gabrielino/Tongva Nation; Gabrielino/Tongva San Gabriel Band of Mission Indians; Gabrielino-Tongva Tribe; Northern Chumash Tribal Council; Salinan Tribe of Monterey, San Luis

5090
Ser N0000CV/263
April 6, 2021

Obispo Counties; San Fernando Band of Mission Indians; San Luis Obispo County Chumash Council; Serrano Nation of Mission Indians; Tongva Ancestral Territorial Tribal Nation; Wishtoyo Chumash Foundation; Xolon-Salinan Tribe; yak tityu tityu yak tilhini – Northern Chumash Tribe; and the Native American Heritage Commission. In all, the Navy provided the Notice of Availability for the Draft PMSR EIS/OEIS to 37 individuals representing the federally recognized and non-federally recognized tribes and other organizations listed above.

During Section 106 tribal consultations for a separate project, tribes expressed concern to the Navy that the proposed archaeological district and TCP were not adequately analyzed for impacts. The Navy agreed to re-initiate consultation on activities associated with the PMSR to assess effects on the newly identified properties. Section 106 initiation letters were sent to all federally recognized Tribes on January 11, 2021 as a result. Only the Pechanga Band of Luiseño Indians and Rincon Band of Luiseño Indians have entered into the new G2G consultation focused on the proposed archaeological district and TCP.

As a result of these G2G consultations, the Navy has agreed to the following terms and conditions to date:

- 1) Navy will provide annual reports to Tribes that identify the number of launch and/or impact events that occur each year. The reporting commitment will be signed into the Record of Decision for the PMSR EIS/OEIS and will be provided as an appendix to the ICRMP updated annually.
- 2) Navy will consult with Tribes on the proposed permanent facilities associated with DE activities on SNI when plans for the facilities become available. While DE activities are proposed and analyzed under this EIS/OEIS, the construction of permanent facilities are not included in this undertaking.
- 3) Navy will develop a Native American Graves and Repatriation Act (NAGPRA) Plan of Action in consultation with all federally recognized Tribes for inadvertent discoveries at the Land Impact Site.

Assessment of Effects on Historic Properties

At Sea – Submerged Historic Properties

The Navy identified the potential for historic properties at sea within the PMSR. The Navy assumes that these properties are potentially susceptible to effects from proposed Navy activities. Shipwrecks have been recorded in offshore waters, and most are located near islands or the mainland. Additionally, submerged pre-contact resources within the PMSR may include Paleocoastal and Early Holocene archaeological sites in waters surrounding island and coastal areas of the PMSR. These sites are most likely to occur within water depths of 100 m below mean high tide, representing areas inundated by sea levels rise within the last 20,000 years. The majority of proposed testing and training activities would occur over the open ocean, beyond 3 NM from shore, and the settling of MEM would primarily occur in areas away from where potential pre-contact archaeological sites, shipwrecks, or other resources would most likely be found. In the event that MEM occurs near submerged historic properties, there would be no adverse effects because: 1) Most anticipated expended munitions would be small objects and fragments that would slowly drift to the seafloor after striking the ocean surface; and, 2) Settling of MEM on the seafloor would be diffuse and transitory, as MEM is likely to be transported by currents and other turbulence. Therefore the settling of MEM would not alter the archaeological or cultural characteristics of the submerged cultural resources if they should sink on or in the vicinity of an historic property.

5090
Ser N0000CV/263
April 6, 2021

Impulsive noise generated by supersonic aircraft flights associated with PMSR activities can occur. Such activities are limited to altitudes above 30,000 ft. and in locations more than 15 NM from shore, including the islands. Boom overpressure dissipates with depth of water (e.g., to a tenth of initial value at a depth of about 122 ft.). Further, the underwater sound field due to transmitted sonic boom waveforms primarily consists of low-frequency components, and frequencies greater than 20 Hz have been found to be difficult to observe at depths greater than 33 ft. (10 m). As such, the underwater sound field and vibration associated with sonic booms would not be transmitted to depths that would affect known or unknown submerged historic properties within the PMSR.

Therefore, consistent with 36 CFR 800.5(b), the Navy finds that activities at sea, including those involving military expended materials and impulsive noise, will have no adverse effect to submerged historic properties.

Terrestrial Historic Properties

The Navy identified eight (8) potential historic properties within the APE on land, with one (1) at PM and seven (7) at SNI. The historic properties consist of one (1) historic building: Building PM-55 and its associated launch complex; one (1) military-era site: Alpha Launch Complex facility and its associated buildings; four (4) pre-contact archaeological sites: CA-SNI-12, CA-SNI-41, CA-SNI-168, CA-SNI-169; one (1) archaeological district; and one (1) TCP. The Navy assumes that all of these properties are potentially susceptible to effects from proposed Navy activities.

Directed Energy Systems Integrations Laboratory (DESIL) at Point Mugu

The proposed action at the DESIL facility would occur at Building PM-55 and its associated Launch Complex, a historic property eligible for listing on the NRHP under criteria A and C. However, the proposed action will not alter any of the characteristics that qualify Building PM-55 or the associated launch complex for inclusion in NRHP. As a result, consistent with 36 CFR 800.5(b), the Navy has made the determination that activities at the Point Mugu DESIL facility covered in the PMSR EIS/OEIS will have no adverse effect to historic properties.

Building PM-55 Launch Complex at Point Mugu

The proposed action includes continued launch activities occurring at the Building PM-55 Launch Complex. The proposed action would not change the use or character of the NRHP eligible Building PM-55 or its associated Launch Complex. Therefore, the Navy has determined that the continued use of the Building PM-55 Launch Complex by activities covered in the PMSR EIS/OEIS will have no adverse effect to historic properties.

Land Impact Site on SNI

The proposed action includes the continued use of the Land Impact Site, with activities not to exceed a maximum of 26 inert impacts per year. The target pad at the Land Impact Site was constructed on top of CA-SNI-168. Site CA-SNI-168 has been determined eligible for listing on the NRHP under criterion D, and activities associated with the Land Impact Site were mitigated in the late 1990s through data recovery in consultation with your office. A CD containing documentation of consultation for the Land Impact Site was provided to your office on June 29, 2020.

5090
Ser N0000CV/263
April 6, 2021

Site CA-SNI-169 is located north of the Land Impact Site footprint yet it is situated within the APE for activities associated with the Land Impact Site. Site CA-SNI-169 was determined eligible for listing on the NRHP under criterion D, and activities associated with the Land Impact Site were mitigated in the late 1990s through data recovery in consultation with your office. Documentation of this consultation is included on the CD the Navy provided to your office for the PMSR EIS/OEIS on June 29, 2020.

The impacts from inert missile strikes is limited to the target pad itself, which is built up of compacted fill material. The inert missiles tested at the Land Impact Site are precision guided to ensure impact of the target pad only. However, debris generated from these tests does occasionally fall off the pad, and land on the surrounding archaeological site CA-SNI-168, and possibly CA-SNI-169 to the north. The increased precision of missile technology since the late 1990s has reduced the potential for debris to land on CA-SNI-169, but it is possible. Debris that lands off the target pad largely consists of metal fragments, mostly lighter weight aluminum alloy that are hand-sized or smaller.

Protective measures are currently in place at the Land Impact Site to ensure effects from testing and training activities are limited to previously mitigated areas of site CA-SNI-168. Prior to each event, a Navy archaeologist briefs personnel as to where they can and cannot go. The archaeologist is onsite during the staging and demobilization of equipment. Further protective measures include: 1) Pre-event surveys by a Navy archaeologist to ensure no human remains are present in the vicinity that may have been newly exposed by erosion; 2) Post-event surveys by the archaeologist to recover any larger missile impact debris; 3) Site access to the target pad is limited to pre/post-test and training activities, and personnel must be accompanied by a Navy archaeologist.

Vibrations from inert impact events may affect intact archaeological deposits away from the impact pad. These vibrations may make the deposits looser and therefore subject to increased aeolian erosion. However, the entire area is in an active dune field, and site deposits occur within Holocene dune sand that is susceptible to aeolian erosion even in the absence of vibrations caused by inert missile impacts on the target pad. Erosion in the vicinity of the Land Impact Site led to the exposure of a burial east of the pad in 2000. The burial was exhumed in 2000, and subsequently repatriated and reburied on SNI in October 2019. The Navy acknowledges the potential for additional human remains in this location, which is why an archaeological survey is conducted before and after each impact event.

In the event of post-review discovery of historic properties or unanticipated effects to historic properties, the Navy will follow the statutory prescriptions outlined in 36 CFR 800.13(b). If the archaeologist determines NAGPRA items are present, Tribes will be notified pursuant to NAGPRA.

Due to previous mitigation of site CA-SNI-168 for areas affected by testing and training activities at the Land Impact Site, and protective measures put in place to avoid effects to other areas of CA-SNI-168, as well as CA-SNI-169, the Navy has determined that the proposed activities covered in the PMSR EIS/OEIS will not directly or indirectly alter any of the characteristics that qualify sites CA-SNI-168 or CA-SNI-169 for inclusion on the NRHP. Based on these findings, the Navy has determined that the continued use of the Land Impact Site will have no adverse effect to CA-SNI-168 or CA-SNI-169, consistent with 36 CFR 800.5(b).

Alpha Launch Complex on SNI

Potential effects to historic properties at the Alpha Launch Complex are restricted to launch activities at the Coyote and Vandal launch pads. Between 2014 and 2019, the number of launch events ranged

5090
Ser N0000CV/263
April 6, 2021

from two (2) to three (3) per year, with an average of 2.6 launches per year. The pre-contact archaeological sites within the APE of the Alpha Launch Complex (CA-SNI-44 and CA-SNI-61) were both heavily damaged by initial construction of the launch pads in the late 1950s/early 1960s, and SHPO has concurred both are ineligible for listing on the NRHP. Documentation of this consultation is included on the CD the Navy provided to your office for the PMSR EIS/OEIS on June 29, 2020. Current launch activities at the Coyote and Vandal launch pads take place at permanent launchers on concrete pads, and no ground disturbance occurs as a result of launch activities. In assuming that the Alpha Launch Complex is eligible for the NRHP, the continued use of the active facilities associated with the launch complex for the same purposes for which they were built does not present the potential for adverse effects to this historic property.

Based on the results of its identification and evaluation of historic properties, the Navy has determined that no adverse effects to historic properties will be caused by the proposed continued use of the Alpha Launch Complex for activities covered in the PMSR EIS/OEIS.

Building N-807 Launch Complex near the Rock Crusher site on SNI

Launch activities at the Building N-807 Launch Complex near the Rock Crusher Site occur via mobile or temporary launchers on concrete pads, which were constructed between 1970 and 1996. Between 2014 and 2019, the number of launch events ranged from two (2) to five (5) per year, with an average of 2.8 launches per year. CA-SNI-41, located on a large dune immediately east of the launch complex, is within the APE for this activity. The western portion of the site nearest the launch area was previously disturbed by construction of the launch site. The launch complex is used to launch missiles or targets westward over the ocean, within a 60-degree azimuth and steep angle. During launch activities, blowback energy generated from the launches is directed downwards towards the launch pad, rather than towards CA-SNI-41.

Noise and vibration associated with the launch events are significant enough to startle elephant seals and drive harbor seals offshore, but not enough to affect archaeological deposits or increase aeolian erosion. Site CA-SNI-41 is situated on a Holocene sand dune that is susceptible to aeolian erosion even in the absence of launch activities.

Prior to each event, a Navy archaeologist briefs personnel as to where they can and cannot go. Off-limits areas are reinforced by physical barriers at the boundary of the launch complex to prevent foot and vehicle traffic onto site CA-SNI-41. The archaeologist is onsite during the staging and demobilization of equipment. Current launch activities at the Building N-807 Launch Complex take place on existing launch pads, and no ground disturbance occurs as a result.

Based on the results of its identification and evaluation of historic properties, the Navy finds that the proposed continued use of the Building N-807 Launch Complex by activities covered in the PMSR EIS/OEIS will not alter any of the characteristics that qualify site CA-SNI-41 for inclusion on the NRHP. Therefore, consistent with 36 CFR 800.5(b), the Navy has determined the proposed activities will have no adverse effects to CA-SNI-41.

Directed Energy on SNI

The DE activity proposed for this undertaking involves shooting high-energy laser or high-power microwave systems from a temporary trailer at Tender Point to a temporary target at Vizcaino Point or targets located at sea. Early military construction of a road bisecting CA-SNI-12 and the parking area at

5090
Ser N0000CV/263
April 6, 2021

Tender Point heavily damaged the northwestern portion of the site. The archaeological site includes two (2) cemetery areas, one of which is located approximately 50 meters from the edge of the parking area.

DE test events are currently conducted using temporary equipment staged in the parking area at Tender Point. Prior to each event, a Navy archaeologist briefs personnel as to where they can and cannot go. Off-limits areas are also reinforced by signage. The archaeologist is onsite during the staging and demobilization of equipment.

Based on the results of its identification and evaluation of historic properties, the Navy finds that the proposed DE activities covered in the PMSR EIS/OEIS will not alter any of the characteristics that qualify site CA-SNI-12 for inclusion on the NRHP. Therefore, consistent with 36 CFR 800.5(b), the Navy has determined the proposed activities will have no adverse effects to CA-SNI-12.

Effects on Proposed Archaeological District

For the purposes of this consultation, the proposed archaeological district is assumed to be eligible for listing on the NRHP. However, consistent with 36 CFR 800.16(d), the Navy has defined the APE to include locations on SNI where activities associated with the PMSR may directly or indirectly cause alterations in the character or use of historic properties. Therefore, the portions of the archaeological district within the APE are limited to the Land Impact Site, Alpha Launch Complex, Building N-807 Launch Complex, and Directed Energy target and shooter sites. As noted above, eligible archaeological sites located within the APE are CA-SNI-12, CA-SNI-41, CA-SNI-168, and CA-SNI-169. Additionally, two (2) sites, CA-SNI-44 and CA-SNI-61, within the APE have previously been determined ineligible. However, for the purposes of this consultation, the Navy considers sites CA-SNI-44 and CA-SNI-61 to be potential contributors to the proposed archaeological district.

Based on the results of its identification and evaluation of historic properties, the Navy finds that terrestrial activities proposed within the PMSR APE on SNI (see analyses above), including impacts at the Land Impact Site, launch activities from the Alpha Launch Complex and Building N-807 Launch Complex, and directed energy testing and training, will not adversely affect individually eligible historic properties or potential contributors to the archaeological district on SNI. As a result, the Navy has determined that PMSR EIS/OEIS activities will not alter any of the characteristics that qualify the proposed archaeological district for inclusion on the NRHP. Therefore, consistent with 36 CFR 800.5(b), the Navy has determined the proposed activities will have no adverse effects to the archaeological district.

Effects on Proposed Traditional Cultural Property

For the purposes of this consultation, the proposed Traditional Cultural Property (TCP) is assumed to be eligible for listing on the NRHP. Pechanga informed the Navy that it believes the TCP is eligible under criteria A, B, C, and D, and that the island maintains sufficient integrity such that it would be eligible for listing pursuant to 36 CFR 60.4 of the NHPA. The Navy has contracted an ethnographic study to inform a formal evaluation of eligibility. The initial results of the contracted effort will not be available until late 2021 or early 2022. The Navy will conduct future consultations based on the results of the contracted effort.

While the TCP information provided to the Navy by Pechanga is confidential, it is generally described as occurring within a ceremonial landscape featuring prominently in Luiseño religion, song, and ceremony. The TCP is further described by Pechanga as retaining integrity of location, setting,

5090
Ser N0000CV/263
April 6, 2021

feeling, and association to the extent that an ancestor from the beginning of time would recognize the island today. In summary, regarding the TCP, Pechanga has articulated to the Navy that the island retains its "integrity of condition" due to the limited physical alteration of the landscape as a result of Navy management, compared with other areas. Further, Pechanga maintains that an "integrity of relationship" exists as the island is prominently featured in Luiseño culture, song, and oral tradition.

The Navy recognizes that activities associated with the PMSR on SNI may be inconsistent with Tribal values. However, assuming for the purposes of this analysis that the proposed TCP retains integrity of location, design, setting, feeling, and association under existing conditions, because the proposed undertaking includes no new activities or increases in operational tempo within the APE on SNI, consistent with 36 CFR 800.5(b), the Navy finds that activities comprising the proposed undertaking would have no adverse effect on the proposed TCP.

Finding of Effect

Pursuant to 36 CFR 800.4(b)(1), the Navy took into account past planning, research, and studies, the magnitude and nature of the undertaking and the degree of federal involvement, the nature and extent of potential effects on historic properties, and the nature and location of historic properties within the APE. As a result of its research and analysis, and in consideration of information received during consultation, the Navy has determined the proposed undertaking will have no adverse effects to historic properties, consistent with 36 CFR 800.5(b).

The Navy respectfully requests your concurrence on the finding of effects, the eligibility of CA-SNI-41, and comments within 30 days of receipt of this letter, consistent with 36 CFR 800.5(c). If you have any questions, please contact Dr. Kristina Erlandson, Cultural Resources Manager, NBVC, at (805) 234-6399 or by email at Kristina.erlandson@navy.mil.

Sincerely,



J. A. CHISM
Captain, U.S. Navy
Commanding Officer

- Enclosures: 1. PMSR EIS/OEIS Study Area
2. APE at NBVC Point Mugu
3. APE at SNI
4. Section 110 Evaluation of CA-SNI-41

Copy to:
Commander, Navy Region Southwest
Attn: Environmental Department Cultural Resources Management Program
San Diego, CA 92147

5090
Ser N0000CV/263
April 6, 2021

The Honorable Mr. Mark Macarro, Tribal Chairman
c/o Ms. Michele Fahley, Deputy General Counsel
Pechanga Band of Luiseño Indians
P.O. Box 2183
Temecula, CA 92593

The Honorable Mr. Bo Mazzetti, Tribal Chairman
c/o Cheryl Madrigal, THPO
Rincon Band of Luiseño Indians
Rincon Tribal Hall,
Valley Center, CA 92082

The Honorable Mr. Temet A. Aguilar, Tribal Chairman
c/o Chris Devers, Pauma Cultural Committee
Pauma Band of Luiseño Indians
P.O. Box 369
Pauma Valley, CA 92061

The Honorable Mr. Kenneth Kahn, Tribal Chairman
c/o Nakia Zavalla, Tribal Cultural Director
Santa Ynez Band of Chumash Indians
P.O. Box 517
Santa Ynez, CA 93460

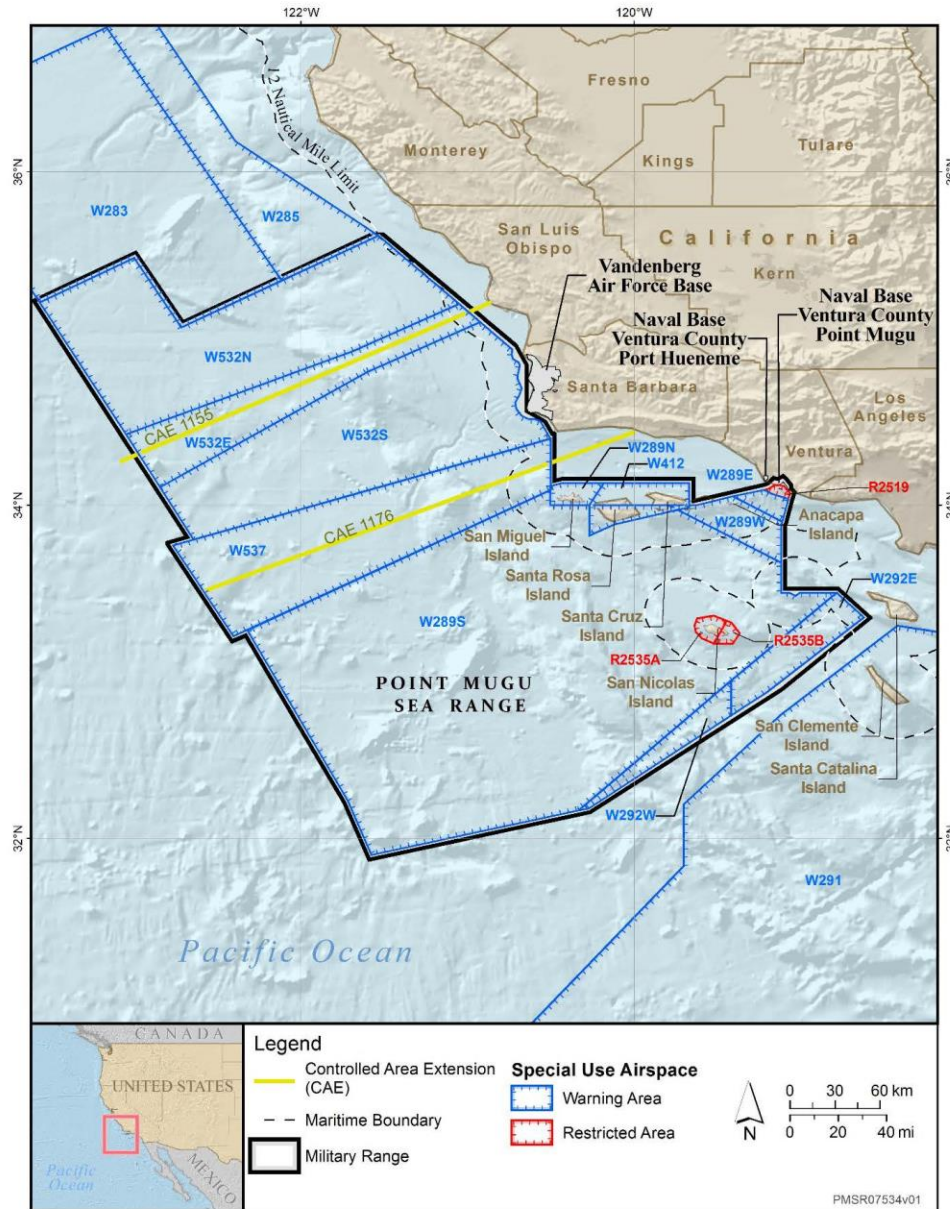
The Honorable Mr. Fred Nelson, Jr., Tribal Chairman
c/o James Trujillo
La Jolla Band of Luiseño Indians
22000 Highway 76
Pauma Valley, CA 92061

The Honorable Mr. Robert H. Smith, Tribal Chairman
c/o Shasta Gaughen, THPO
Pala Band of Mission Indians
12196 Pala Mission Road
Pala, CA 92059

The Honorable Mr. Isaiah Vivanco, Tribal Chairman
c/o Joseph Ontiveros, THPO
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581

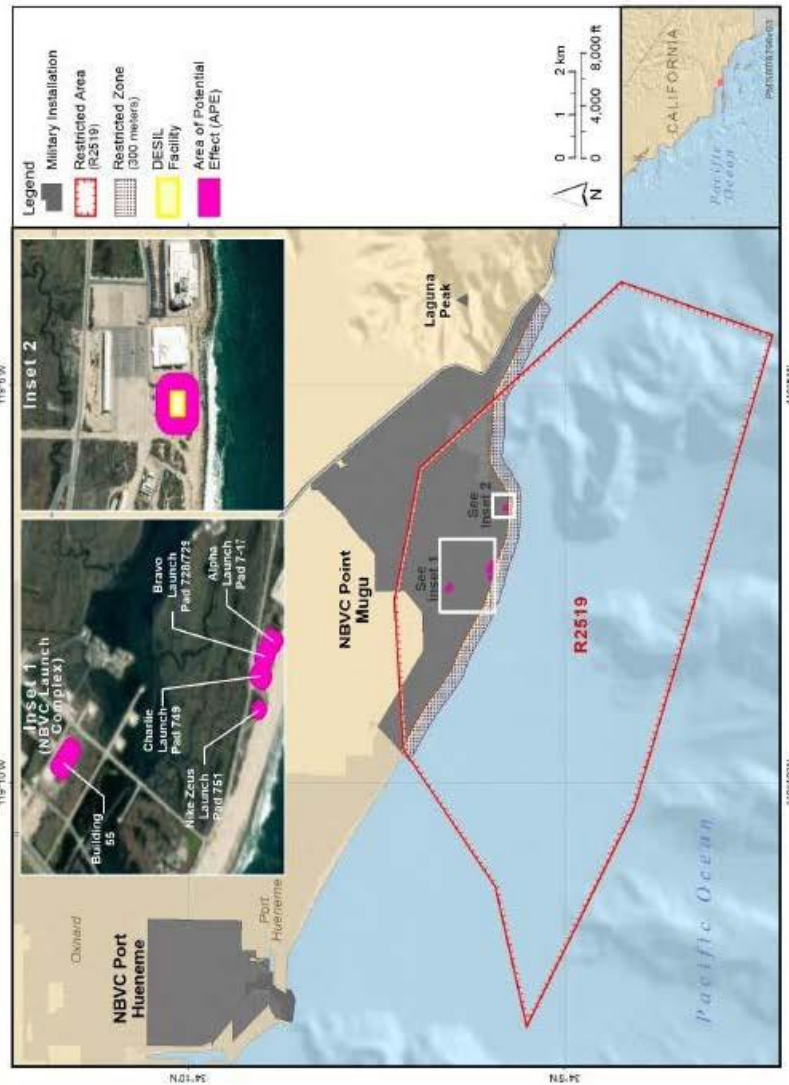
Ms. Diane Silva, Command Records Manager
NAVFAC Southwest
750 Pacific Highway, Code EV33
NBSD Bldg. 3519
San Diego, CA 92132-1280

Enclosure 1: Point Mugu Sea Range Environmental Impact Statement/
Overseas Environmental Impact Statement Study Area



Enclosure (1)

Enclosure 2: Areas of Potential Effect at Point Mugu



Enclosure(2)

G.5.2.5 California Office of Historic Preservation Response Letter to Navy Request for Concurrence on Finding of No Adverse Effects to Historic Properties Associated with the Point Mugu Sea Range

	State of California • Natural Resources Agency	Gavin Newsom, Governor
	DEPARTMENT OF PARKS AND RECREATION OFFICE OF HISTORIC PRESERVATION Julianne Polanco, State Historic Preservation Officer 1725 23rd Street, Suite 100, Sacramento, CA 95816-7100 Telephone: (916) 445-7000 FAX: (916) 445-7053 calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov	Lisa Ann L. Mangat, Director
May 12, 2021 Reply in Reference To: USN_2020_0702_001		
Submitted Via Electronic Mail		
Captain J.E. Chism Commanding Officer Department Of The Navy Naval Base Ventura County 311 Main Road, Suite 1 Point Mugu, CA 93042-5033		
RE: Request for Concurrence on Finding of No Adverse Effects to Historic Properties for Activities Associated with the Point Mugu Sea Range, Ventura County		
Dear Captain Chism:		
The United States Navy (Navy) is consulting with the State Historic Preservation Officer (SHPO) in order to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 306108), as amended, and its implementing regulations at 36 CFR Part 800. The Navy is requesting SHPO comments on a finding of no adverse effect to historic properties.		
The Navy proposes continued training activities within 36,000 square miles of miles of sea and airspace, including testing and training associated with missile and target launches, intercepts, and impacts. While the majority of these activities will occur at sea and in designated airspace in the Point Mugu Sea Range (PMSR), some activities have the potential to cause effects to historic properties located on San Nicolas Island (SNI), a place the federally-recognized Pechanga Band of Luiseño Indians and Rincon Band of Luiseño Indians considers both an archaeological district and a Traditional Cultural Property (TCP).		
The Navy has analyzed potential effects to historic properties and finds that terrestrial activities proposed within the Point Mugu Sea Range Area of Potential Effects on SNI, including impact at the Land Impact Site, launch activities from the Alpha Launch Complex and Building N-807 Launch Complex, and directed energy testing and training, will not adversely affect individually eligible historic properties or potential contributors to the archaeological district on SNI. As a result, the Navy has determined that PMSR activities will not alter any of the characteristics that qualify the proposed archaeological district for inclusion on the National Register of Historic Places. The Navy also notes that the proposed TCP retains integrity of location, design, setting, feeling, and association under existing conditions, and because the undertaking includes no new activities or increases in operational tempo, the proposed undertaking will have no adverse effect on the		

2 of 2

proposed TCP. Therefore, consistent with 36 CFR 800.5(b), the Navy has determined the proposed activities will have no adverse effects to the archaeological district or proposed TCP.

Having reviewed your letter, SHPO offers the following comments:

- 1) SHPO cannot concur with a finding of no adverse effect to historic properties at this time. The classes of activities described in your letter, namely the repetitive, multi-year use of launch sites and land and sea targets, have the potential for cumulative effects that could, over time, adversely affect historic properties. These activities would be better suited to a programmatic approach rather than standard Section 106 consultation. A programmatic agreement developed in cooperation with SHPO, Native American tribes, the Advisory Council on Historic Preservation, and interested parties would provide a framework for assessing affects to historic properties over time, as well as a format for annual reporting of training activities and meetings between signatories and concurring parties;
- 2) Until such a time programmatic agreement is executed, SHPO recommends the Navy consult under 36 CFR Part 800 for individual testing and training activities that have the potential to affect historic properties. As noted in our October 15, 2020 letter, the Navy has consulted with SHPO on undertakings at Point Mugu/Port Hueneme and San Nicholas Island in the past and SHPO expects the Navy will continue to do so.

If the Navy has any questions or comments, please contact staff historian Tristan Tozer at (916) 445-7027 or Tristan.Tozer@parks.ca.gov.

Sincerely,



Julianne Polanco
State Historic Preservation Officer

G.5.3 Advisory Council on Historic Preservation Correspondence

G.5.3.1 Advisory Council on Historic Preservation Letter to the Navy for Finding of No Adverse Effect Associated with the Point Mugu Sea Range



September 23, 2021

Robert B. Kinnach
Captain, U.S. Navy
Commanding Officer
Naval Base Ventura County
311 Main Road, Suite 1
Point Mugu, CA 93042-5033

*Ref: Point Mugu Sea Range Testing and Training
Naval Base Ventura County, California
ACHPConnect Log Number: 012750*

Dear CAPT Kinnach:

In June 2021, the Advisory Council on Historic Preservation (ACHP) received a request from the Pechanga Band of Luiseño Indians (Pechanga Band) for the ACHP to review a finding of No Adverse Effect (NAE) made by Naval Base Ventura County (NBVC) regarding the referenced undertaking in accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800). The request was made as the Pechanga Band could not concur with the proposed Area of Potential Effect (APE), the identification of historic properties, and the NBVC's finding for the referenced undertaking. Since receiving the Pechanga Band's request, the ACHP has sought additional information from both the Pechanga Band and the NBVC in order to better understand the consultation and the undertaking's finding.

The Naval Air Warfare Center Weapons Division, Point Mugu is currently evaluating the overall use of the Point Mugu Sea Range (PMSR), to meet the mission as a Major Range and Test Facility Base, to conduct weapons systems testing and evaluation by providing a safe, realistic, and instrumented sea range testing environment and to maintain the operational readiness of the military services by providing a realistic training environment to include both at sea and terrestrial actions. The current evaluation addresses proposed increases in activity frequency of military research, development, acquisition, testing, and evaluation (referred to as "testing") and scheduled training activities. The testing and training activities could be conducted at sea and in designated airspace within the PMSR, as well as missile launch operations and directed energy activities originating from NBVC components Point Mugu and San Nicolas Island (SNI). As we understand, many of these actions are the continuation of testing and training activities that have occurred within the PMSR for the past 20 years, such as the Combat Systems Ship Qualifications Trials and use of the Directed Energy Systems Integrations Laboratory, PM-55 Launch Complex, Land Impact Site, Alpha Launch Complex, and Building N-807 Launch Complex. For the purposes of Section 106, NBVC is defining the undertaking to be those training or testing activities that would be proposed and implemented.

In accordance with Section 106, the NBVC initiated consultation with the California State Historic

ADVISORY COUNCIL ON HISTORIC PRESERVATION
401 F Street NW, Suite 308 • Washington, DC 20001-2637
Phone: 202-517-0200 • Fax: 202-517-6381 • achp@achp.gov • www.achp.gov

Preservation Officer (SHPO), the Pechanga Band, the Rincon Band of Luiseño Indians (Rincon Band), the La Jolla Band of Luiseño Indians, the Pala Band of Mission Indians, the Pauma Band of Luiseño Indians, the Santa Ynez Band of Chumash Indians (Santa Ynez Band), and the Soboba Band of Luiseño Indians in June 2020. The NBVC established an APE to identify historic properties and provided consulting parties an opportunity to comment on its identification efforts. In April 2021, the NBVC provided consulting parties with a finding of NAE for the suite of testing and training activities. The NBVC received responses from the SHPO, Rincon Band, and Santa Ynez Band all stating non-concurrence with the NAE.

ACHP Review of Consultation and Findings

In accordance with 36 CFR § 800.5(c)(2)(iii), a federal agency should seek the concurrence of any Indian tribe that has made known to the agency official that it attaches religious and cultural significance to a historic property subject to a finding of NAE. If such Indian tribe disagrees with the finding, it may, within the 30 day review period of such a finding, specify the reasons for disagreeing with the finding and request the ACHP to review and object to the finding pursuant to Section 800.5(c)(2)(ii). It should be noted that the Pechanga Band's request to the ACHP was made outside of the 30 day review period, and that the NBVC could have requested the ACHP to review its finding given non-concurrence directly under Section 800.5(c)(2). However, the ACHP believes all parties involved are committed to ensuring the Section 106 process is met. Accordingly, the ACHP is providing the following review of the NAE finding and our opinion as to whether the adverse effect criteria have been correctly applied.

- For the purposes of Section 106, NBVC defined the APE as discrete geographical areas within the PMSR. For example, only specific areas at the northern end of SNI and at NBVC-Point Mugu were made part of the APE. Given that NBVC is trying to establish a new baseline of information regarding the management of PMSR, it would have been reasonable for NBVC to have defined the APE as the entire PMSR. In defining the entirety of PMSR as the APE, NBVC would not be required to identify every historic property but to make a reasonable and good faith effort to identify historic properties including properties of religious and cultural importance to Indian tribes.
- In reviewing the administrative record, the documentation provided to the SHPO differed from what was provided to the tribes. For example, the APE as described in the letters to the tribes did not include terrestrial testing and training locations on Point Mugu, as it did in the SHPO's letter, and only identified the APE on SNI. It is always recommended that information is consistent for all consulting parties in order to ensure there is meaningful discussion and understanding of the undertaking among all consulting parties.
- The Pechanga Band has previously identified the entirety of SNI as a property of religious and cultural significance to them, and notified NBVC that it should be officially designated as a Traditional Cultural Property (TCP). It is understood that NBVC has started the process to complete an ethnographic study in consultation with all tribes that attach religious and cultural significance to SNI in order to document the island as a TCP. For the purpose of this Section 106 consultation, NBVC did acknowledge the Pechanga Band's concern, and has indicated that information resulting from that study will be taken into consideration for this and future undertakings on SNI once available.
- As the activities identified in this type of undertaking are theoretical in nature, and there is no guarantee that they will actually be implemented, NBVC should continue the discussion regarding the designation of SNI as a TCP and initiate a discussion regarding how the actual use of PMSR to complete individual training and testing activities are reviewed in accordance with

Section 106. This could address the concern raised by the Pechanga Band that NBVC focused its finding of effect too narrowly on sites that are archaeological in nature, and could more appropriately address the direct, indirect, and cumulative effects from the undertaking.

In reviewing the administrative record provided by NBVC, the ACHP does not find a basis to object to the adequacy of NBVC's efforts to comply with Section 106 and its implementing regulations. The ACHP notes that the Department of the Navy (Navy) handles Section 106 consultations regarding "training and testing" differently among its regions, and we will be sharing our observations and recommendations for improving the consistency of these efforts with the Navy's Deputy Federal Preservation Officer.

The ACHP acknowledges the comments and concerns voiced by the SHPO, the Pechanga Band, and other consulting parties regarding the considerations of effects. While we do not find a basis to object to the NBVC's finding in this review of a "planning" document, we do not believe that the opportunity to address effects to historic properties within the PMSR has been closed for any party, to include NBVC. Again, NBVC should continue the consultation regarding the designation of SNI as a TCP and initiate a discussion regarding the continued use of PMSR and the individual review process for training and testing activities to determine effects to historic properties.

Next Steps

While it is unfortunate that NBVC and consulting parties could not concur on the results of the evaluation efforts, we acknowledge that NBVC did make a reasonable and good faith effort to do so and we find no basis to disagree with its finding of NAE. In reaching this conclusion, we acknowledge that the Section 106 regulations place the responsibility on and give discretion to the federal agency in determining the level of effort to conduct appropriate identification efforts taking into account past planning, research and studies, the magnitude and nature of the undertaking and the degree of federal involvement, the nature and extent of potential effects on historic properties, and the likely nature and location of historic properties within the APE. In this case, while such efforts could have more intensive as they relate to some proposed activities, overall we do not object to NBVC's approach. In accordance with 36 CFR §§ 800.5(c)(3)(ii)(A-B), NBVC must take these advisory comments into account and reach a final decision on the appropriateness of its finding. It must then prepare a summary of that finding with the rationale for the decision and provide it to the ACHP, the SHPO, and the consulting parties.

Should you have any questions or require additional assistance, please contact Ms. Katharine R. Kerr at (202) 517-0216 or by email at kkerr@achp.gov and reference the ACHP Project Number above.

Sincerely,



Jaime Loichinger
Assistant Director
Office of Federal Agency Programs

G.5.3.2 Navy Response Letter to the Advisory Council on Historic Preservation Letter to the Navy for Finding of No Adverse Effect Associated with the Point Mugu Sea Range



DEPARTMENT OF THE NAVY
NAVAL BASE VENTURA COUNTY
311 MAIN ROAD, SUITE 1
POINT MUGU, CA 93042-5033

IN REPLY REFER TO:
5090
Ser N0000CV/0794
November 8, 2021

Ms. Jaime Loichinger
Assistant Director, Office of Federal Agency Programs
Advisory Council on Historic Preservation
401 F Street NW, Suite 308
Washington DC, 20001-2637

Dear Ms. Loichinger:

**SUBJECT: ADVISORY COUNCIL ON HISTORIC PRESERVATION COMMENTS ON
NAVAL BASE VENTURA COUNTY'S DETERMINATION OF NO ADVERSE
EFFECT FOR ACTIVITIES ASSOCIATED WITH THE POINT MUGU SEA
RANGE (ACHP CONNECT LOG NUMBER: 012750)**

Thank you for your comments on the subject determination, dated September 23, 2021, in response to the request from the Pechanga Band of Luiseño Indians' (Pechanga Band) that the Advisory Council on Historic Preservation (ACHP) review and object to Naval Base Ventura County's (NBVC) finding of no adverse effect for the activities associated with the Point Mugu Sea Range (PMSR). I appreciate the careful review and consultations conducted by your agency in considering the concerns of the Pechanga Band. After carefully reviewing your comments, I understand that the ACHP finds no basis to disagree with NBVC's finding of no adverse effect to historic properties. I know that NBVC has worked diligently to assess the potential effects to historic properties from the activities comprising the undertaking and to consult with the tribes and the California State Historic Preservation Officer (SHPO). This letter affirms my careful consideration of your comments and my final decision as the Commanding Officer that the finding of no adverse effect is the appropriate outcome, consistent with 36 CFR §§ 800.5(c)(3)(ii)(A-B).

As reflected in the attached consultation summary, NBVC reviewed each of the activities that make up the PMSR training and testing program to assess their potential to affect historic properties. Beyond working to ensure full compliance with 36 CFR 800, NBVC has worked to carefully consider the views of our tribal partners, especially given that they had previously expressed views that San Nicolas Island (SNI) is a traditional cultural property and that the archaeological sites on the island must be considered an archaeological district. In response, I'm proud to say that NBVC promptly initiated technical studies to assess those potential historic properties and I look forward to consulting with the tribes on the outcomes. The NBVC assessment of potential effects considered the possibility that these training and testing activities could affect resources of concern to the tribes.

Consistent with 36 CFR §§ 800.16(d), NBVC defined the Area of Potential Effects (APE) based on the activities and locations on SNI that historic properties could be affected, assuming they were present. This analysis supported a documentation of a discontinuous APE. I appreciate your observation regarding an inconsistency in NBVC correspondence documenting the APE. NBVC provided documentation on Point Mugu terrestrial testing and training

5090
Ser N0000CV/0794
November 8, 2021

activities and their locations to the California SHPO and all consulting tribes. NBVC has come to understand that among all consulting tribes, only the Santa Ynez Band of Chumash Mission Indians have interest in Navy actions at Point Mugu. In the future, we will heed your advice to be consistent in communication with all stakeholders.

In assessing effects from the proposed undertaking, NBVC carefully considered each activity in relation to both known and potential historic properties. The April 6, 2021 letter to the California SHPO fully documents the basis of the NBVC finding of no adverse effect. NBVC took into account past planning, research, studies, the magnitude and nature of the undertaking, the nature and location of historic properties in the APE, and the full nature and extent of the individual activities making up the undertaking and their potential to affect historic properties. After careful review of the information and consultations with the California SHPO and consulting tribes, NBVC determined that the activities comprising the proposed action will have no adverse effect on historic properties. If additional historic properties or potential effects are discovered following this review, NBVC will immediately consult consistent with 36 CFR 800.13.

After thorough consideration of the Pechanga Band's objections and the Advisory Council's comments regarding the adequacy of NBVC's finding of effect for activities associated with the Point Mugu Sea Range, I conclude that the NBVC finding that the PMSR undertaking will have no adverse effect to historic properties is the appropriate resolution of this consultation. That said, I agree with your observation that it is unfortunate we were unable to come to agreement with our consulting parties. As Commanding Officer of NBVC, I will continue to consult with the Pechanga Band and all consulting tribes regarding our ongoing studies to assess the potential presence of additional historic properties, and I will continue government-to-government consultation to provide tribal access to SNI before and after PMSR training and testing activities. I am confident that more direct information about these activities will afford greater understanding of the Navy's utilization of SNI.

Again, thank you for your comments and recommendations. In accordance with 36 §§ CFR 800.5(c)(3)(ii)(B), I provide this letter and supporting documentation on the rationale for my decision that the NBVC finding of no adverse effect is appropriate to the California SHPO and consulting tribes.

Sincerely,



R. B. KIMNACH III
Captain, U.S. Navy
Commanding Officer

5090
Ser N0000CV/0794
November 8, 2021

- Enclosure 1: ACHP Letter to Captain Kinnach III, NBVC (ACHP Connect Log Number:
012750)
2: Summary of the NBVC Finding of No Adverse Effect for the Point Mugu Sea
Range Undertaking

Copy to:
Commander, Navy Region Southwest
Attn: Environmental Department
Cultural Resources Management Program
San Diego, CA 92147

The Honorable Mr. Mark Macarro, Tribal Chairman
c/o Ms. Michele Fahley, Deputy General Counsel
Pechanga Band of Luiseño Indians
P.O. Box 2183
Temecula, CA 92593

The Honorable Mr. Bo Mazzetti, Tribal Chairman
c/o Ms. Cheryl Madrigal, THPO
Rincon Band of Luiseño Indians
Rincon Tribal Hall,
Valley Center, CA 92082

The Honorable Mr. Temet A. Aguilar, Tribal Chairman
c/o Mr. Chris Devers, Pauma Cultural Committee
Pauma Band of Luiseño Indians
P.O. Box 369
Pauma Valley, CA 92061

The Honorable Mr. Kenneth Kahn, Tribal Chairman
c/o Ms. Nakia Zavalla, Tribal Cultural Director
Santa Ynez Band of Chumash Indians
P.O. Box 517
Santa Ynez, CA 93460

The Honorable Ms. Norma Contreras, Tribal Chairwoman
c/o Mr. James Trujillo
La Jolla Band of Luiseño Indians
22000 Highway 76
Pauma Valley, CA 92061

5090
Ser N0000CV/0794
November 8, 2021

The Honorable Robert H. Smith, Tribal Chairman
c/o Ms. Shasta Gaughen, THPO
Pala Band of Mission Indians
12196 Pala Mission Road
Pala, CA 92059

The Honorable Mr. Isaiah Vivanco, Tribal Chairman
c/o Mr. Joseph Ontiveros, THPO
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581

Ms. Diane Silva, Command Records Manager
NAVFAC Southwest, Code EV33
750 Pacific Highway, NBSD Bldg. 3519
San Diego, CA 92132-1280

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816-7100

ENCLOSURE 1



September 23, 2021

Robert B. Kinnach
Captain, U.S. Navy
Commanding Officer
Naval Base Ventura County
311 Main Road, Suite 1
Point Mugu, CA 93042-5033

*Ref: Point Mugu Sea Range Testing and Training
Naval Base Ventura County, California
ACHPConnect Log Number: 012750*

Dear CAPT Kinnach:

In June 2021, the Advisory Council on Historic Preservation (ACHP) received a request from the Pechanga Band of Luisefño Indians (Pechanga Band) for the ACHP to review a finding of No Adverse Effect (NAE) made by Naval Base Ventura County (NBVC) regarding the referenced undertaking in accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800). The request was made as the Pechanga Band could not concur with the proposed Area of Potential Effect (APE), the identification of historic properties, and the NBVC's finding for the referenced undertaking. Since receiving the Pechanga Band's request, the ACHP has sought additional information from both the Pechanga Band and the NBVC in order to better understand the consultation and the undertaking's finding.

The Naval Air Warfare Center Weapons Division, Point Mugu is currently evaluating the overall use of the Point Mugu Sea Range (PMSR), to meet the mission as a Major Range and Test Facility Base, to conduct weapons systems testing and evaluation by providing a safe, realistic, and instrumented sea range testing environment and to maintain the operational readiness of the military services by providing a realistic training environment to include both at sea and terrestrial actions. The current evaluation addresses proposed increases in activity frequency of military research, development, acquisition, testing, and evaluation (referred to as "testing") and scheduled training activities. The testing and training activities could be conducted at sea and in designated airspace within the PMSR, as well as missile launch operations and directed energy activities originating from NBVC components Point Mugu and San Nicolas Island (SNI). As we understand, many of these actions are the continuation of testing and training activities that have occurred within the PMSR for the past 20 years, such as the Combat Systems Ship Qualifications Trials and use of the Directed Energy Systems Integrations Laboratory, PM-55 Launch Complex, Land Impact Site, Alpha Launch Complex, and Building N-807 Launch Complex. For the purposes of Section 106, NBVC is defining the undertaking to be those training or testing activities that would be proposed and implemented.

In accordance with Section 106, the NBVC initiated consultation with the California State Historic

ADVISORY COUNCIL ON HISTORIC PRESERVATION
701 - Street NW, Suite 308 • Washington, DC 20001-2637
Phone: 202-517-0200 • Fax: 202-517-6381 • achp@achp.gov • www.achp.gov

Preservation Officer (SHPO), the Pechanga Band, the Rincon Band of Luiseño Indians (Rincon Band), the La Jolla Band of Luiseño Indians, the Pala Band of Mission Indians, the Pauma Band of Luiseño Indians, the Santa Ynez Band of Chumash Indians (Santa Ynez Band), and the Soboba Band of Luiseño Indians in June 2020. The NBVC established an APE to identify historic properties and provided consulting parties an opportunity to comment on its identification efforts. In April 2021, the NBVC provided consulting parties with a finding of NAE for the suite of testing and training activities. The NBVC received responses from the SHPO, Rincon Band, and Santa Ynez Band all stating non-concurrence with the NAE.

ACHP Review of Consultation and Findings

In accordance with 36 CFR § 800.5(c)(2)(iii), a federal agency should seek the concurrence of any Indian tribe that has made known to the agency official that it attaches religious and cultural significance to a historic property subject to a finding of NAE. If such Indian tribe disagrees with the finding, it may, within the 30 day review period of such a finding, specify the reasons for disagreeing with the finding and request the ACHP to review and object to the finding pursuant to Section 800.5(c)(2)(ii). It should be noted that the Pechanga Band's request to the ACHP was made outside of the 30 day review period, and that the NBVC could have requested the ACHP to review its finding given non-concurrence directly under Section 800.5(c)(2). However, the ACHP believes all parties involved are committed to ensuring the Section 106 process is met. Accordingly, the ACHP is providing the following review of the NAE finding and our opinion as to whether the adverse effect criteria have been correctly applied.

- For the purposes of Section 106, NBVC defined the APE as discrete geographical areas within the PMSR. For example, only specific areas at the northern end of SNI and at NBVC-Point Mugu were made part of the APE. Given that NBVC is trying to establish a new baseline of information regarding the management of PMSR, it would have been reasonable for NBVC to have defined the APE as the entire PMSR. In defining the entirety of PMSR as the APE, NBVC would not be required to identify every historic property but to make a reasonable and good faith effort to identify historic properties including properties of religious and cultural importance to Indian tribes.
- In reviewing the administrative record, the documentation provided to the SHPO differed from what was provided to the tribes. For example, the APE as described in the letters to the tribes did not include terrestrial testing and training locations on Point Mugu, as it did in the SHPO's letter, and only identified the APE on SNI. It is always recommended that information is consistent for all consulting parties in order to ensure there is meaningful discussion and understanding of the undertaking among all consulting parties.
- The Pechanga Band has previously identified the entirety of SNI as a property of religious and cultural significance to them, and notified NBVC that it should be officially designated as a Traditional Cultural Property (TCP). It is understood that NBVC has started the process to complete an ethnographic study in consultation with all tribes that attach religious and cultural significance to SNI in order to document the island as a TCP. For the purpose of this Section 106 consultation, NBVC did acknowledge the Pechanga Band's concern, and has indicated that information resulting from that study will be taken into consideration for this and future undertakings on SNI once available.
- As the activities identified in this type of undertaking are theoretical in nature, and there is no guarantee that they will actually be implemented, NBVC should continue the discussion regarding the designation of SNI as a TCP and initiate a discussion regarding how the actual use of PMSR to complete individual training and testing activities are reviewed in accordance with

Section 106. This could address the concern raised by the Pechanga Band that NBVC focused its finding of effect too narrowly on sites that are archaeological in nature, and could more appropriately address the direct, indirect, and cumulative effects from the undertaking.

In reviewing the administrative record provided by NBVC, the ACHP does not find a basis to object to the adequacy of NBVC's efforts to comply with Section 106 and its implementing regulations. The ACHP notes that the Department of the Navy (Navy) handles Section 106 consultations regarding "training and testing" differently among its regions, and we will be sharing our observations and recommendations for improving the consistency of these efforts with the Navy's Deputy Federal Preservation Officer.

The ACHP acknowledges the comments and concerns voiced by the SHPO, the Pechanga Band, and other consulting parties regarding the considerations of effects. While we do not find a basis to object to the NBVC's finding in this review of a "planning" document, we do not believe that the opportunity to address effects to historic properties within the PMSR has been closed for any party, to include NBVC. Again, NBVC should continue the consultation regarding the designation of SNI as a TCP and initiate a discussion regarding the continued use of PMSR and the individual review process for training and testing activities to determine effects to historic properties.

Next Steps

While it is unfortunate that NBVC and consulting parties could not concur on the results of the evaluation efforts, we acknowledge that NBVC did make a reasonable and good faith effort to do so and we find no basis to disagree with its finding of NAE. In reaching this conclusion, we acknowledge that the Section 106 regulations place the responsibility on and give discretion to the federal agency in determining the level of effort to conduct appropriate identification efforts taking into account past planning, research and studies, the magnitude and nature of the undertaking and the degree of federal involvement, the nature and extent of potential effects on historic properties, and the likely nature and location of historic properties within the APE. In this case, while such efforts could have more intensive as they relate to some proposed activities, overall we do not object to NBVC's approach. In accordance with 36 CFR §§ 800.5(c)(3)(ii)(A-B), NBVC must take these advisory comments into account and reach a final decision on the appropriateness of its finding. It must then prepare a summary of that finding with the rationale for the decision and provide it to the ACHP, the SHPO, and the consulting parties.

Should you have any questions or require additional assistance, please contact Ms. Katharine R. Kerr at (202) 517-0216 or by email at kkerr@achp.gov and reference the ACHP Project Number above.

Sincerely,



Jaime Loichinger
Assistant Director
Office of Federal Agency Programs

ENCLOSURE 2: SUMMARY OF THE NAVAL BASE VENTURA COUNTY FINDING OF NO ADVERSE EFFECT FOR THE POINT MUGU SEA RANGE UNDERTAKING

RE: Project Number 12750, supplemental information documenting Navy National Historic Preservation Act (NHPA) Section 106 compliance efforts and final determination of effect for activities associated with the Point Mugu Sea Range (PMSR) (the undertaking), Naval Base Ventura County (NBVC), California.

Location: The undertaking proposed during the NHPA Section 106 review process includes areas of air and sea space adjacent to Los Angeles, Ventura, Santa Barbara, and San Luis Obispo Counties along the Pacific Coast of Southern California. This area includes 36,000 square miles of controlled sea and airspace designated for testing and training activities. Land-based activities associated with the proposed undertaking are limited to NBVC San Nicolas Island (SNI) and areas of NBVC Point Mugu (Point Mugu), within Ventura County, California. SNI and Point Mugu lands are owned and managed by NBVC under Title 10 of the United States Code.

Undertaking: For the purposes of compliance with Section 106 of the NHPA, the Navy's proposed undertaking comprises military readiness activities within the PMSR, which are the types of activities that could affect historic properties. These activities include testing and training associated with missile and target launches, intercepts, and inert weapon impacts on SNI. The activities in the proposed undertaking are consistent with those previously analyzed under the National Environmental Policy Act (NEPA) and NHPA Section 106 in the 2002 PMSR Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) and separate Environmental Assessments completed for activities within the PMSR since 2002. Following is a summary of activities that the Navy and consulting parties determined to have the potential to affect historic properties at sea, at NBVC Point Mugu and SNI:

- **At Sea Testing and Training** – A frequent test conducted at the PMSR is the NAVSEA Combat Systems Ship Qualifications Trial (CSSQT). This is a series of comprehensive tests and trials designed to show that the equipment and systems included in the CSSQT program meet combat system requirements. Live and inert weapons, along with chaff, flares, jammers, and lasers, may be used. Weapons testing may include both flight and surface elements (targets, weapons, launch, aircraft or vessel, or range support aircraft). Fixed-winged and rotary-winged aircraft, including both manned and unmanned systems, also conduct weapons tests. Tests may be captive carry (i.e., the weapon is not released from the aircraft) or involve the release of ordnance or other expendables, including non-explosive and telemetry-only warheads and live fire munition rounds. Chaff or flares may be used during weapons tests, with the restriction that they are expended offshore in compliance with environmental regulations. Collectively, these materials released at sea are considered military expended materials (MEM).
- **Directed Energy on Point Mugu** – At Point Mugu, continued use of Directed Energy (DE), or laser, shooter sites and testing associated with the Directed Energy Systems Integration Laboratory (DESIL). Shooter sites are locations from which DE tests are fired at a target located either at sea or in the air. The DESIL facility will mimic ship operations of DE lasers and high-powered microwave systems. The DE activities on Point Mugu include firing DE high-energy laser (HEL) and high-power microwave (HPM) systems at air or surface targets at sea. The proposed tempo would not exceed 70 days per year.
- **Launch Complex Building PM-55 on Point Mugu** – Continued launch activities associated with the Building PM-55 Launch Complex, including the Alpha, Bravo, Charlie, and Nike Zeus launch complexes. Launch Complex activities include target or missile launches, which typically require the use of rocket-assisted takeoff (RATO) bottles or jet-assisted takeoff (JATO) bottles to propel the target or missile into flight. JATO/RATO bottles expend one to two seconds after the

missile is airborne. These bottles primarily fall into the wetland immediately in front of the launch pad if the event occurs at Building PM-55. If the launch occurs from Pad Alpha, Bravo, Charlie, or Nike Zeus, JATO/RATO bottles may expend into the near shore environment.

- **Land Impact Site on SNI** – At SNI, continued use of the Land Impact Site, a targeted impact area located on the western portion of the island historically associated with the Standoff Land Attack Missile (SLAM) testing program. The Land Impact Site is used for air-to-surface or surface-to-surface tests with inert weapons systems, which impact targets located on an elevated pad of imported fill and gravel. The Land Impact Site consists of multiple targets situated on the elevated pad; however, individual events are directed at a specific target within the site. The proposed tempo for the continued use of the Land Impact Site would not exceed a maximum of 26 inert impacts per year.
- **Alpha Launch Complex on SNI** – Continued use of the Alpha Launch Complex (Buildings N-189, N-192, N-306, N-307, N-314, N-315, N-316, and N-511) on SNI to launch supersonic targets from existing launch pads within the complex. The proposed tempo for the combined use of both the Alpha Launch Complex and the Building N-807 Launch Complex (see below) would not exceed a maximum of 40 launch events per year.
- **Building N-807 Launch Complex near the Rock Crusher Site on SNI** – The Navy proposes continued use of the Building N-807 Launch Complex near Rock Crusher on SNI to launch supersonic targets, similar to launch activities at the Alpha Launch Complex. As noted above, the proposed tempo for the combined use of the Building N-807 Launch Complex and the Alpha Launch Complex would not exceed 40 launches per year.
- **Directed Energy on SNI** – The DE activities associated with SNI include testing and training events using HEL and HPM systems from land, vessels, and aircraft. On SNI, the DE activities include a DE shooter site at Tender Point (from which HEL or HPM is fired), and DE target site at Vizcaino Point (used to calibrate HEL or HPM). The shooter system's siting allows a DE system to attack airborne or seaborne targets as well as land-based targets. DE activities at Tender Point are currently conducted via temporary/mobile equipment brought to the site on a trailer. DE targets at Vizcaino Point are also temporary/mobile and are brought to the site on foot. The proposed tempo for use of the DE facilities on SNI would be approximately 125 days per year.

Area of Potential Effects (APE): For the purposes of compliance with Section 106 of the NHPA, the Navy consulted with the California State Historic Preservation Office (CA SHPO) to define the APE in accordance with 36 CFR 800.4(a)(1). In determining the APE, the Navy considered the scale and nature of the undertaking, as well as the proposed activities and the geographic areas within which these activities may directly or indirectly affect historic properties. Anti-surface missile and projectile explosions at or near the water surface (less than 10 m above the surface) would produce vibrations over areas of deep water; these vibrations would dissipate before they reach potential cultural resources on the seafloor. Additionally, sonic booms generated by supersonic aircraft overflights will occur in areas beyond 15 NM from shore. Therefore, effects from offshore explosions and sonic booms were not considered when defining the APE for the undertaking. General activity types with the potential to effect historic properties for this undertaking include physical disturbance or strikes caused by MEM from air- or sea-based launches directed at sea or at the Land Impact Site, and impulsive noise from land-based launch activities.

While the majority of testing and training activities subject to the undertaking occur at sea and in designated airspace within the PMSR, all activities with the potential to cause effects to historic properties, pursuant to 36 CFR 800.3(a)(1) were considered when defining the APE. Consistent with 36 CFR 800.16(d), the APE was defined as the geographic area within which the proposed undertaking may directly or indirectly cause effects to historic properties. The discontinuous APE for terrestrial properties includes several sub-areas throughout the PMSR:

- **Directed Energy Systems Integrations Laboratory** – The APE for the DESIL at Point Mugu includes the DESIL facility, with a 30-meter buffer surrounding the facility.
- **Launch Complex Building PM-55** – The APE for the Launch Complex Building PM-55 on Point Mugu includes Building PM-55, Alpha launch pad, Bravo launch pad, Charlie launch pad, and Nike Zeus launch pad. A 30-meter buffer surrounding each facility is also included in the APE.
- **Land Impact Site** – The APE for the Land Impact Site on SNI includes the target pad and surrounding area subject to falling debris associated with weapon impact tests. This area encompasses approximately 52 acres and measures approximately 520 meters (N/S) by 400 meters (E/W). It also includes an approximately 300-meter road segment located south of the target pad. The APE for the Land Impact Site is informed by analysis conducted during 1997 data recovery efforts at CA-SNI-168 and includes both the Area of Direct Effects and the Area of Indirect Effects identified during that study. The Area of Direct Effects includes the target pad and its surrounding area, accounting for cleanup efforts resulting from missile impacts. The Area of Indirect Effects is a larger area whose extent is represented by the boundary of the currently defined APE. The Area of Indirect Effects was identified in the 1997 study as an area where there could be a light debris scatter and periodic foot traffic to remove the debris. Recent field visits by Navy Archaeologists verified the previously defined Areas of Direct and Indirect Effects as the APE for Land Impact Site activities.
- **Alpha Launch Complex** – The APE for the Launch pad areas associated with the Alpha Launch Complex on SNI includes the Coyote Launch Pad and an area with miscellaneous launch pads located to the south of the Coyote Launch Pads. In addition to the launch pads, a 30-meter buffer around the launch pads is included in the APE.
- **Building N-807 Launch Complex near the Rock Crusher Site** – The APE for the areas associated with the Building N-807 Launch Complex near the Rock Crusher site on SNI includes the Tomahawk Launch Pad and the rolling airframe (RAM) Launch Pad as well as a gravel area located adjacent to the launch pads, with a 30-meter buffer around the launch pads and associated gravel area.
- **Directed Energy Test and Target Areas** – The APE for the DE test and target areas on SNI include a DE shooter site at Tender Point and a DE target site at Vizcaino Point. The APE for the DE shooter and target sites includes a 30-meter buffer surrounding the test and target pads. Mobile/temporary DE equipment will continue to be used at the Tender Point Shooter site until a permanent facility can be constructed in the future. This facility is not part of the current undertaking, and the Navy will consult with the CA SHPO and Tribes when appropriate.

Identification of historic properties: For the purposes of compliance with Section 106 of the NHPA, the Navy took into account past planning, research, and studies, the magnitude and nature of the undertaking, the degree of Federal involvement, the nature and extent of potential effects, and the likely nature and location of historic properties within the APE, consistent with 36 CFR 800.4(b)(1). The Navy reviewed information from multiple sources, including:

- Previous planning for the associated range areas within the current PMSR APE and consultations for previous PMSR undertakings, including the 2002 PMSR EIS and subsequent EAs.
- The National Register of Historic Places (NRHP).
- Navy database of cultural resources records, reports, and documentation.
- The National Oceanic and Atmospheric Administration (NOAA) Automated Wreck and Obstruction Information System.
- The Bureau of Ocean Energy Management (BOEM) online index of shipwrecks by state.
- Channel Islands National Park and Channel Islands National Marine Sanctuary documentation of submerged cultural resources.
- California State Lands Commission Shipwreck Database.

- Navy shipwreck and submerged aircraft documentation.
- Publicly available sources about Tribal territories and resources, including Tribal websites.
- Information solicited directly during Tribal consultations to identify properties of traditional religious and cultural significance within the APE.

Through these efforts, the Navy identified six types of historic properties potentially present within the offshore and terrestrial APE. These six types were identified in two broad categories, submerged and terrestrial historic properties:

Submerged Historic Properties:

- Pre-Contact sites and features: may include Paleocoastal and Early Holocene archaeological sites in waters surrounding island and coastal areas of the PMSR. These sites are most likely to occur nearshore within water depths of 100 meters below mean high tide, representing areas that were inundated by rising sea levels since the Last Glacial Maximum ~20,000 years ago.
- Historic sunken craft sites: shipwrecks and submerged aircraft wreck sites.

Terrestrial Historic Properties:

- Pre- and Post-Contact archaeological sites and features.
- Historic-era architectural resources: buildings, structures, and features.
- Archaeological district: a geographically definable area possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical development. A district may also comprise individual elements separated geographically but linked by association or history.
- Traditional Cultural Property (TCP): historic property associated with the cultural practices or beliefs of a living community that are rooted in that community's history and are important in maintaining the continuing cultural identity of the community.

To identify submerged pre-Contact archaeological sites within the offshore APE, the Navy reviewed the databases previously listed, as well as the following additional literature:

- Morris and Lima 1996. Channel Islands National Park and Channel Islands National Marine Sanctuary: Submerged Cultural Resources Assessment.

To identify submerged historic sunken crafts sites within the offshore APE, the Navy reviewed available wreck and obstruction databases, including the NOAA Automated Wreck and Obstruction Information System, the BOEM online index of shipwrecks by state, and Navy shipwreck and submerged aircraft documentation. This research identified 287 possible historic crafts within the offshore APE.

To identify pre- and post-Contact archaeological sites within the terrestrial APE, the Navy reviewed the databases previously listed, as well as the following additional literature:

- *Final Integrated Cultural Resources Management Plan (ICRMP) for Naval Base Ventura County, Point Mugu and Port Hueneme, and the Final Integrated Cultural Resources Management Plan for Naval Base Ventura County, San Nicolas Island.* The ICRMPs for NBVC Point Mugu and Port Hueneme and NBVC SNI include a history of archaeological studies conducted at Point Mugu and SNI. The ICRMPs also identify all known historic properties within both installations.
- The NBVC Point Mugu and NBVC SNI Geographic Information Systems. Spatial data collected from archaeological studies and historical research conducted on Point Mugu and SNI are maintained on the Navy's Geographic Information Systems. The Navy accessed this information to identify known historic properties within the APE.

To identify historic-era architectural resources, the Navy reviewed the databases previously listed, as well

as the following additional literature:

- *Final Integrated Cultural Resources Management Plan (ICRMP) for Naval Base Ventura County, Point Mugu and Port Hueneme, and the Final Integrated Cultural Resources Management Plan for Naval Base Ventura County, San Nicolas Island.* The ICRMPs for NBVC Point Mugu and Port Hueneme and NBVC SNI include a history of archaeological studies and building evaluations conducted at Point Mugu and SNI. The ICRMPs also identify all known historic properties, including buildings, within both installations.
- The NBVC Point Mugu and NBVC SNI Geographic Information Systems. Spatial data collected from historical research conducted on Point Mugu and SNI are maintained on the Navy's Geographic Information Systems. The Navy accessed this information to identify known historic properties within the APE.
- JRP Historical Consulting Services (1998): Inventory and Evaluation of National Register of Historic Places Eligibility for Buildings and Structures at NAVAL AIR WEAPONS STATION (NAWS), POINT MUGU, Ventura County, California: VOLUME 1: REPORT. Davis, California.

To identify archaeological districts, the Navy sought information from consulting parties likely to have knowledge of historic properties in the area, consistent with 36 CFR 800.4(a)(3). Through government-to-government consultation with tribal consulting parties, a potential archaeological district was identified. The Navy has initiated an archaeological district study to support consultation to assess the proposed archaeological district. The study is expected to be complete in September 2022. For the purposes of this consultation, the proposed SNI archaeological district was considered as a potentially eligible historic property. To identify historic properties within the APE which tribes ascribe religious and cultural significance, the Navy gathered information from Indian tribes pursuant to 36 CFR 800.3(f)(2) and consistent with 36 CFR 800.4(4). During government-to-government consultations, Tribal consulting parties identified a potential TCP. The Navy has initiated an ethnographic study to support consultations to define and characterize the proposed historic property. The ethnographic study is expected to be complete in September 2022. For the purposes of this consultation, the proposed SNI Traditional Cultural Property was considered as a potentially eligible historic property.

Description of historic properties:

Submerged Historic Properties:

- No submerged pre-Contact archaeological sites were identified in the APE.
- 287 possible historic sunken craft sites were identified in the offshore portion of the APE.

Terrestrial Historic Properties:

- *Building PM-55 Launch Complex – Historic Building and Launch Complex.* There is one (1) historic property within the APE area associated with Building PM-55 Launch Complex at Point Mugu.
 - Building PM-55 and its associated Launch Complex is considered an exceptionally significant Cold War-era resource and was determined eligible for listing on the NRHP under criteria A and C, with concurrence from the CA SHPO in 1999.
- *Land Impact Site – Pre-Contact Archaeological Sites.* There are two (2) historic properties within the Land Impact Site APE.
 - CA-SNI-168 is a large shell midden with six (6) loci that is subject to wind erosion. Archaeological testing of the site to support construction of the Land Impact Site target pad (formerly SLAM) in 1997 indicate this is a habitation site where general domestic production and maintenance activities occurred year-round, primarily between ~3,200 and 2,400 years ago. The site contained numerous ground stone tools (manos, mortars,

pitted stones, net sinkers and weights), lithic debitage, a large chert biface, whalebone tools, several fishhook blanks, and ornamental items including pendants and shell/stone beads. The site is largely deflated with limited intact midden soils at the location of the Land Impact Site target pad, located on top of site CA-SNI-168. In consultation with the CA SHPO, data recovery efforts in 1997 mitigated impacts from construction and use of the Land Impact Site. Three (3) burials were removed from an apparent cemetery area at this site, one (1) in the 1970s, one (1) in the 1980s, and one (1) in 2000. Site CA-SNI-168 was determined eligible for listing on the NRHP under criterion D, with concurrence from the CA SHPO in 1996.

- CA-SNI-169 is a dispersed midden area consisting of at least three (3) deflating midden remnants in a dune environment. Cultural material identified on site includes cores, flakes, ground stone, marine shell, bird bone, and fish bone. The presence of several fishhook fragments and blanks, combined with the diversity of fish taxa recovered, indicates fishing occurred in nearshore kelp forests and pelagic waters further out. Occupation at the site occurred primarily between ~2,000 and 3,000 years ago. CA-SNI-169 was considered eligible for listing on the NRHP under criterion D, with concurrence from the CA SHPO in 1996.
- *Alpha Launch Complex – Historic Buildings.* There is one (1) historic property within the APE associated with the Alpha Launch Complex on SNI. This property is comprised of the Alpha Launch Complex facility and includes the architectural resources: Buildings N-189, N-192, N-306, N-307, N-314, N-315, N-316, N-511 and its associated Launch Complex.
 - The Alpha Launch Complex buildings were built between 1962 and 1968 in support of launch activities during the Cold War era and are still in use supporting launch activities today. The buildings associated with the launch complex were inventoried in 1998 and determined not eligible for the NRHP under Criteria Consideration G for properties that are less than 50 years old. Currently, these buildings are all over 50 years old. The Navy has determined that for the purposes of this consultation and assessing potential effects, they are assumed eligible for listing on the NRHP.
- *Alpha Launch Complex – Pre-Contact Archaeological Sites.* There are two (2) historic properties within the Alpha Launch Complex APE on SNI.
 - CA-SNI-44 is a lithic scatter and low-density midden dated to the Late Holocene that has been heavily impacted by past military construction of the launch pad. The site is largely disturbed and deflated, but buried, intact midden deposits occur in Locus B near the intersection of Tufts Road and the launch pad access road. Lithic materials include metavolcanics, quartzite, breccia, and chert; and ground stone artifacts consisted of a sandstone pestle and two (2) manos. Midden constituents include black abalone, owl limpet, California mussel, and sea mammal. CA-SNI-44 was determined ineligible for listing on the NRHP, with concurrence from the CA SHPO in 2015; however, for the purpose of this consultation the site was considered a potential contributing element of the proposed archaeological district (see below).
 - CA-SNI-61 is a large site consisting of six (6) loci dated to the Late Holocene with low densities of shell midden and lithic debitage, almost exclusively concentrated in near-surface contexts. The site has been extensively disturbed by construction of Tufts Road, buildings, and the original launch pad. Site CA-SNI-61 was determined ineligible for listing on the NRHP, with concurrence from the CA SHPO in 2015; however, for the purpose of this consultation the site was considered a potential contributing element of the proposed archaeological district (see below).
- *Building N-807 Launch Complex near the Rock Crusher Site – Pre-Contact Archaeological Site.* There is one (1) historic property within the APE for the launch pad associated with the Building N-807 Launch Complex at the Rock Crusher site.
 - CA-SNI-41 is a habitation site with a large, dense, eroding shell midden complex situated

on a large sand dune, dated primarily to between 3,000 and 5,000 years ago. The site consists of several loci of buried midden flanked by eroded caliche outcrops. It contains lithics, a large quantity of marine shell, some ground stone, miscellaneous tools, and exotic material such as chert. Modern disturbance to the site includes several pipes and cables that run across the site, especially at the western and eastern ends. A road is located across the southern flank of the site crossing the dune, but this road has long been abandoned. The western part of the dune has been disturbed by the construction of the road to the Rock Crusher site. Early site investigations between the 1930s and 1950s resulted in the removal of seven (7) burials from the site. In 2010, two (2) burials were noted eroding on the surface during NHPA Section 110 archaeological testing at the site. The burials are located more than 360 meters from the edge of the launch complex boundary and were left in situ. The 2010 evaluation of site CA-SNI-41 recommended the site eligible for listing on the NRHP under criterion D. During consultation with the CA SHPO for the current undertaking, the Navy requested concurrence on the eligibility of CA-SNI-41.

- *Directed Energy Test and Target Areas – Pre-Contact Archaeological Site.* There is one (1) historic property within the Directed Energy Test and Target APE on SNI.
 - CA-SNI-12 is a large, eroding midden complex located on a low coastal terrace within sand dunes. The site consists of dense deposits of marine shell, lithics, some ground stone, and faunal remains dated to the Middle Holocene (~5,000 BP). The site is disturbed by aeolian erosion and the presence of a road that bisects the site. Stabilized areas are present and contain buried deposits and human burials, within two (2) cemetery areas located in the northwestern and eastern portions of the site. Six (6) burials were removed from the site by previous researchers from the 1930s through 1970s and additional burials are currently at risk of being exposed by erosion. Site CA-SNI-12 was determined eligible for listing on the NRHP under criterion D, with concurrence from the CA SHPO in 2010.
- *SNI Archaeological District.* During consultation for another undertaking on SNI, the Pechanga Band of Luiseno Indians (Pechanga) informed the Navy they believe all the archaeological sites on SNI comprise an archaeological district. In response to Pechanga's identification of this potential historic property, the Navy has initiated an archaeological district study, currently underway and in consultation with Indian tribes that attach religious and cultural significance to SNI. As it becomes available, the information resulting from this study will be taken into consideration for this and future NHPA consultations for undertakings on SNI.
- *SNI Traditional Cultural Property.* During consultation for another undertaking on SNI, Pechanga informed the Navy that they view the entire island as a TCP. In response to Pechanga's identification of this potential historic property, the Navy has initiated an ethnographic study, currently underway and in consultation with Indian tribes that attach religious and cultural significance to SNI. As it becomes available, the information resulting from this study will be taken into consideration for this and future NHPA consultations for undertakings on SNI.

Potential effects on historic properties:

In analyzing the potential effects, the Navy assessed three types of activities included in the proposed undertaking.

MEM: Military expended munitions result from testing and training activities within at-sea portions of the PMSR. Expended materials such as chaff, flares, casings, non-explosive practice munitions, ballast weights, parachutes, and guidance wire could settle on the ocean floor on or near submerged pre-Contact sites or historic sunken craft sites.

MEM resulting from testing and training activities on NBVC Point Mugu consists of expended JATO and RATO bottles at Building PM-55 and its associated Launch Complex. These bottles primarily fall into the wetland immediately in front of the launch pad (the drop zone) if the event occurs at Building PM-55. If the launch occurs from an operational pad adjacent to the beach (Pad Alpha, Pad Bravo, Pad Charlie, or Pad Nike Zeus), JATO/RATO bottles may expend into the near shore environment. The RATO and JATO bottles are retrieved during periodic clean-up processes.

MEM resulting from testing and training activities on SNI includes inert missiles and associated debris produced from impacts to targets sited on the Land Impact Site. Operations include target practice with inert munitions on empty Container Express (commonly known as CONEX) boxes configured to simulate buildings, helicopter or aircraft bodies, as well as other constructed simulated targets. The Land Impact Site was constructed on archaeological site CA-SNI-168 and adjacent to archaeological site CA-SNI-169. The Navy previously assessed effects to historic properties within the APE for construction/establishment of the Land Impact Site, including sites CA-SNI-168 and CA-SNI-169. In particular, disturbances caused by MEM impacts and retrieval of MEM were analyzed.

Equipment Positioning: Activities associated with the positioning of temporary DE targets and shooter equipment occur on existing pads/roads that are within close proximity of sensitive cultural resources at CA-SNI-12.

Impulsive Noise: The Navy assessed effects to historic properties from non-explosive impulsive noise, such as that resulting from sonic booms which can create intense shock waves that cause airborne vibration, similar to thunder. Land-based launch activities at the Alpha Launch Complex and Building N-807 Launch Complex on SNI would continue and could result in intermittent impulsive noise.

Application of the criteria for adverse effects:

Finding of Effect

Pursuant to 36 CFR 800.4(b)(1), the Navy took into account past planning, research, and studies, the magnitude and nature of the undertaking and the degree of federal involvement, the nature and extent of potential effects on historic properties, and the nature and location of historic properties within the APE. As a result of its research and analysis, and in consideration of information received during consultation, the Navy has determined the proposed undertaking will have no adverse effects to historic properties, consistent with 36 CFR 800.5(b).

Description of Analysis for Finding of Effect

Submerged Historic Properties:

The Navy identified the potential for historic properties at sea within the PMSR. The Navy assumes that these properties are potentially susceptible to effects from proposed Navy activities. Shipwrecks have been recorded in offshore waters, and most are located near islands or the mainland. Additionally, submerged pre-contact resources within the PMSR may include Paleocoastal and Early Holocene archaeological sites in waters surrounding island and coastal areas of the PMSR. These sites are most likely to occur within water depths of 100 m below mean high tide, representing areas inundated by sea level rise within the last 20,000 years. The majority of proposed testing and training activities would occur over open ocean, beyond 3 NM from shore, and the settling of MEM would primarily occur in areas away from where potential pre-contact sites, shipwrecks, or other resources would most likely be found. In the event that MEM occurs near submerged historic properties, there would be no adverse effects

because: 1) Most anticipated expended munitions would be small objects and fragments that would slowly drift to the seafloor after striking the ocean surface; and 2) Settling of MEM on the seafloor would be diffuse and transitory, as MEM is likely to be transported by currents and other turbulence. Therefore, the settling of MEM would not alter the archaeological or cultural characteristics or integrity of submerged cultural resources if they should sink on or in the vicinity of an historic property.

Impulsive noise generated by supersonic aircraft flights associated with PMSR activities can occur. Such activities are limited to altitudes above 30,000 ft. and in locations more than 15 NM from SNI and 30 NM from the mainland shore and other Channel Islands. Boom overpressure dissipates with depth of water (e.g., to a tenth of initial value at a depth of about 122 ft.). Further, the underwater sound field due to transmitted sonic boom waveforms primarily consists of low-frequency components, and frequencies greater than 20 Hz have been found to be difficult to observe at depths greater than 33 ft. (10 m). As such, the underwater sound field and vibration associated with sonic booms would not be transmitted to depths that would affect known or unknown submerged historic properties within the PMSR.

Therefore, consistent with 36 CFR 800.5(b), the Navy finds that activities at sea, including those involving military expended materials and impulsive noise, will have no adverse effect to submerged historic properties.

Terrestrial Historic Properties:

The Navy identified eight (8) potential historic properties within the APE on land, with one (1) at Point Mugu and seven (7) at SNI.

Directed Energy Systems Integrations Laboratory at Point Mugu

The proposed action at the DESIL facility would occur in the vicinity of Building PM-55 and its associated Launch Complex, a historic property eligible for listing on the NRHP under criteria A and C. However, the proposed action will not alter any of the characteristics that qualify Building PM-55 or the associated launch complex for inclusion in NRHP. As a result, consistent with 36 CFR 800.5(b), the Navy has made the determination that activities at the Point Mugu DESIL facilities covered in the PMSR EIS/OEIS will have no adverse effect to historic properties.

Building PM-55 Launch Complex at Point Mugu

The proposed action includes continued launch activities occurring at the Building PM-55 Launch Complex. The proposed action would not change the use or character of the NRHP eligible Building PM-55 or its associated Launch Complex. Therefore, the Navy has determined that the continued use of the Building PM-55 Launch Complex by activities covered in the PMSR EIS/OEIS will have no adverse effect to historic properties.

Land Impact Site on SNI

The proposed action includes the continued use of the Land Impact Site, with activities not to exceed a maximum of 26 inert impacts per year. The target pad at the Land Impact Site was constructed on top of CA-SNI-168. Site CA-SNI-168 has been determined eligible for listing on the NRHP under criterion D, and activities associated with the Land Impact Site were mitigated in the late 1990s through data recovery in consultation with the CA SHPO.

Site CA-SNI-169 is located north of the Land Impact Site footprint yet it is situated within the APE for activities associated with the Land Impact Site. Site CA-SNI-169 was determined eligible for listing on

the NRHP under criterion D, and activities associated with the Land Impact Site were mitigated in the late 1990s through data recovery in consultation with the CA SHPO.

The impacts from inert missile strikes are limited to the target pad itself, which is built up of compacted fill material. The inert missiles tested at the Land Impact Site are precision guided to ensure impact of the target pad only. However, debris generated from these tests does occasionally fall off the pad, and land on the surrounding archaeological site CA-SNI-168, and possibly CA-SNI-169 to the north. The increased precision of missile technology since the late 1990s has reduced the potential for debris to land on CA-SNI-169, but it is possible. Debris that lands off the target pad typically consists of metal fragments, mostly lighter weight aluminum alloy that are hand-sized or smaller.

Protective measures are currently in place at the Land Impact Site to ensure effects from testing and training activities are limited to previously mitigated areas of site CA-SNI-168. Prior to each event, a Navy archaeologist briefs personnel as to where they can and cannot go. The archaeologist is onsite during the staging and demobilization of equipment. Further protective measures include: 1) Pre-event surveys by a Navy archaeologist to ensure no human remains are present in the vicinity that may have been newly exposed by erosion; 2) Post-event surveys by the archaeologist to recover any larger missile impact debris; 3) Site access to the target pad is limited to pre/post-test and training activities, and personnel must be accompanied by a Navy archaeologist.

Vibrations from inert impact events may affect intact archaeological deposits away from the target pad. These vibrations may make the deposits looser and therefore subject to increased aeolian erosion. However, the entire area is in an active dune field, and site deposits occur within Holocene dune sand that is susceptible to aeolian erosion even in the absence of vibrations caused by inert missile impacts on the target pad. Erosion in the vicinity of the Land Impact Site led to the exposure of a burial east of the pad in 2000. The burial was exhumed in 2000, and subsequently repatriated and reburied on SNI in October 2019. The Navy acknowledges the potential for additional human remains in this location, which is why an archaeological survey is conducted before and after each impact event.

In the event of post-review discovery of historic properties or unanticipated effects to historic properties, the Navy will follow the statutory prescriptions outlined in 36 CFR 800.13(b). If the archaeologist determines NAGPRA items are present, Tribes will be notified pursuant to NAGPRA.

Due to previous mitigation of site CA-SNI-168 for areas affected by testing and training activities at the Land Impact Site, and protective measures put in place to avoid effects to other areas of CA-SNI-168, as well as CA-SNI-169, the Navy has determined that the proposed activities covered in the PMSR EIA/OEIS will not directly or indirectly alter any of the characteristics that qualify sites CA-SNI-168 or CA-SNI-169 for inclusion on the NRHP. Based on these findings, the Navy has determined that the continued use of the Land Impact Site will have no adverse effect to CA-SNI-168 or CA-SNI-169, consistent with 36 CFR 800.5(b).

Alpha Launch Complex on SNI

Potential effects to historic properties at the Alpha Launch Complex are restricted to launch activities at the Coyote and Vandal launch pads. Between 2014 and 2019, the number of launch events ranged from two (2) to three (3) per year, with an average of 2.6 launches per year. The pre-contact archaeological sites within the APE of the Alpha Launch Complex (CA-SNI-44 and CA-SNI-61) were both heavily damaged by initial construction of the launch pads in the late 1950s/early 1960s, and the CA SHPO has concurred both are ineligible for listing on the NRHP. Current launch activities at the Coyote and Vandal launch pads take place at permanent launchers on concrete pads, and no ground disturbance occurs as a result of launch activities. In assuming that the Alpha Launch Complex is eligible for the NRHP, the

continued use of the active facilities associated with the launch complex for the same purposes for which they were build does not present the potential for adverse effects to this historic property.

Based on the results of its identification and evaluation of historic properties, the Navy has determined that no adverse effects to historic properties will be caused by the proposed continued use of the Alpha Launch Complex for activities covered in the PMSR EIS/OEIS.

Building N-807 Launch Complex near the Rock Crusher site on SNI

Launch activities at the Building N-807 Launch Complex near the Rock Crusher Site occur via mobile or temporary launchers on concrete pads, which were constructed between 1970 and 1996. Between 2014 and 2019, the number of launch events ranged from two (2) to five (5) per year, with an average of 2.8 launches per year. Site CA-SNI-41, located on a large dune immediately east of the launch complex, is within the APE for this activity. The western portion of the site nearest the launch area was previously disturbed by construction of the launch site. The launch complex is used to launch missiles or targets westward over the ocean, within a 60-degree azimuth and steep angle. During launch activities, blowback energy generated from the launches is directed downwards towards the launch pad, rather than towards CA-SNI-41.

Site CA-SNI-41 is situated on a Holocene sand dune that is susceptible to aeolian erosion even in the absence of launch activities. While noise and vibration associated with the launch events are significant enough to startle elephant seals and drive harbor seals offshore, they are not enough to affect archaeological deposits or increase aeolian erosion. To assess the potential impacts on cultural resources from impulsive noise and vibration associated with the undertaking, the Navy utilized available noise studies and guidelines. The National Research Council has developed general guidelines for evaluating overall impacts of various noise levels. The National Research Council guidelines have been cited consistently as the basis for evaluating impacts on historic properties. The sounds, pressures and durations observed for missiles and targets launched from the Building N-807 Launch Complex do not exceed levels identified by the National Research Council as having the potential to impact historic properties.

Prior to each event, a Navy archaeologist briefs personnel as to where they can and cannot go. Off-limits areas are reinforced by physical barriers at the boundary of the launch complex to prevent foot and vehicle traffic onto site CA-SNI-41. The archaeologist is onsite during the staging and demobilization of equipment. Current launch activities at the Building N-807 Launch Complex take place on existing launch pads, angled parallel with CA-SNI-41 to ensure blowback does not occur towards the site. No ground disturbance occurs as a result.

Based on the results of its identification and evaluation of historic properties, and protective measures put in place for this activity, the Navy finds that the proposed continued use of the Building N-807 Launch Complex by activities covered in the PMSR EIS/OEIS will not alter any of the characteristics that qualify site CA-SNI-41 for inclusion on the NRHP. Therefore, consistent with 36 CFR 800.5(b), the Navy has determined the proposed activities will have no adverse effects to CA-SNI-41.

Directed Energy on SNI

The Directed Energy activity proposed for this undertaking involves shooting high-energy laser or high-power microwave systems from a temporary trailer at Tender Point to a temporary target at Vizcaino Point or targets located at sea. Early military construction of a road bisecting CA-SNI-12 and the parking area at Tender Point heavily damaged the northwestern portion of the site. The archaeological site includes two (2) cemetery areas, one of which is located approximately 50 meters from the edge of the

parking area.

DE test events are currently conducted using temporary equipment staged in the parking area at Tender Point. Prior to each event, a Navy archaeologist briefs personnel as to where they can and cannot go. Off-limits areas are also reinforced by signage. The archaeologist is onsite during the staging and demobilization of equipment.

Based on the results of its identification and evaluation of historic properties, and protective measures put in place for this activity, the Navy finds that the proposed DE activities covered in the PMSR EIS/OEIS will not alter any of the characteristics that qualify for CA-SNI-12 for inclusion on the NRHP. Therefore, consistent with 36 CFR 800.5(b), the Navy has determined the proposed activities will have no adverse effects to CA-SNI-12.

Archaeological District

For the purposes of compliance with Section 106 of the NHPA, the proposed SNI archaeological district is assumed to be eligible for listing on the NRHP. While the proposed district encompasses all of SNI, the Navy has defined the APE consistent with 36 CFR 800.16(d) to include locations on SNI where activities associated with the PMSR may directly or indirectly cause alterations in the character or use of historic properties. Therefore, the APE for this EIS/OEIS is limited to the Land Impact Site, Alpha Launch Complex, Building N-807 Launch Complex, and DE target and shooter sites. Analyses of PMSR activities are limited to those identified and carried out within the APE; however, impacts to the proposed archaeological district as a whole are taken into consideration.

As noted above, eligible archaeological sites located within the APE are CA-SNI-12, CA-SNI-41, CA-SNI-168, and CA-SNI-169. Additionally, two (2) sites, CA-SNI-44 and CA-SNI-61, within the APE have previously been determined ineligible. However, for the purposes of this consultation, the Navy considers sites CA-SNI-44 and CA-SNI-61 to be potential contributors to the proposed archaeological district.

The Navy analyzed all activities within the APE with the potential to affect the proposed archaeological district. Because the proposed district is said to be comprised of archaeological sites on SNI, the Navy's analysis consisted of MEM, equipment positioning, and impulsive noise within sites CA-SNI-12, CA-SNI-41, CA-SNI-44, CA-SNI-61, CA-SNI-168, and CA-SNI-169. The Navy determined PMSR EIS/OEIS activities would not alter any of the characteristics that qualify the proposed archaeological district for inclusion on the NRHP. Based on the results of its identification and evaluation of historic properties, and the protective measures put in place for the various activities, the Navy finds that terrestrial activities proposed within the PMSR APE on SNI, including impacts at the Land Impact Site, launch activities from the Alpha Launch Complex and Building N-807 Launch Complex, and directed energy testing and training, will not adversely affect individually eligible historic properties or potential contributors to the archaeological district on SNI. Therefore, consistent with 36 CFR 800.5(b), the Navy has determined the proposed activities will have no adverse effects to the proposed archaeological district in its entirety.

Traditional Cultural Property

For the purposes of compliance with Section 106 of the NHPA for this undertaking, the proposed Traditional Cultural Property (TCP) is treated as a historic property. In Section 106 consultations for a previous Navy undertaking, Pechanga informed the Navy that the Tribe believes SNI is a TCP eligible under criteria A, B, C, and D, and that the island maintains sufficient integrity such that it would be eligible for listing pursuant to 36 CFR 60.4 of the NHPA. The Navy has initiated an ethnographic study to inform a formal evaluation of eligibility. The initial results of this contracted effort will not be available

until late 2021 or early 2022. The Navy will conduct future consultations based on the results of the contracted effort.

While the TCP information provided to the Navy by the Pechanga Band is confidential, the property is generally described as occurring within a ceremonial landscape featuring prominently in Luiseño religion, song, and ceremony. The TCP is further described by the Pechanga Band as retaining integrity of location, setting, feeling, and association to the extent that an ancestor from the beginning of time would recognize the island today. In summary, regarding the TCP, the Pechanga Band has articulated to the Navy that the island retains its “integrity of condition” due to the limited physical alteration of the landscape as a result of Navy management, compared with other areas. Further, the Pechanga Band maintains that an “integrity of relationship” exists as the island is prominently featured in Luiseño culture, song, and oral tradition.

The Navy analyzed all activities within the APE with the potential to affect the proposed TCP. Because the TCP is said to encompass the entirety of SNI, the Navy’s analysis consisted of MEM, equipment positioning, and impulsive noise within all areas of the APE. Based on the results of its identification and evaluation of historic properties, and the protective measures put in place for the various activities, the Navy finds that terrestrial activities proposed within the APE on SNI, including impacts at the Land Impact Site, launch activities from the Alpha Launch Complex and Building N-807 Launch Complex, and directed energy testing and training, will not adversely affect historic properties on SNI. The Navy recognizes that activities associated with the PMSR on SNI may be inconsistent with Tribal values. However, assuming for the purposes of this analysis that the proposed TCP retains integrity of location, design, setting, feeling, and association under existing conditions, because the proposed undertaking includes no new activities or increases in operational tempo within the APE on SNI, consistent with 36 CFR 800.5(b), the Navy finds that activities comprising the proposed undertaking would have no adverse effect on the proposed TCP.

The current undertaking does not propose any changes to the activities previously consulted on between the Navy and the CA SHPO that would result in different determinations of effect on NRHP-listed or -eligible properties, in accordance with Section 106 of the NHPA. However, the Navy included analysis for the potential to effect two (2) newly identified historic properties, the proposed archaeological district and the proposed TCP. These resources were not included in previous consultations with the CA SHPO since they have only recently been identified as potential historic properties on SNI by tribes who were not consulted during previous Section 106 consultations on NBVC.

In June 2020, the Navy requested CA SHPO concurrence on its finding of no adverse effect for the current undertaking. The CA SHPO responded on October 15, 2020, to notify the Navy they had no comments on the Draft PMSR EIS/OEIS at that time. However, CA SHPO directed the Navy to seek comments on project-specific undertakings. In response to this correspondence, and ongoing Tribal consultations, the Navy reinitiated consultation in January 2021 to ensure consulting parties’ concerns were addressed. The Navy provided the CA SHPO key correspondence between the Navy and consulting Tribes and provided updates to the CA SHPO throughout the Section 106 process, including efforts made by the Navy to avoid effects to historic properties. On May 12, 2021, the CA SHPO notified the Navy it did not concur with its finding of no adverse effect due to the potential for cumulative effects. The CA SHPO recommended the negotiation of a programmatic agreement between the Navy, CA SHPO, Native American Tribes, the Advisory Council on Historic Preservation, and interested parties for all activities associated with the undertaking.

In response to the Navy’s invitation to enter government-to-government consultation, and the availability

of the Draft PMSR EIS/OEIS, the Navy received a letter from the Pechanga Band on April 10, 2020, requesting consultation. The tribe expressed concern with the baseline used to determine the effects of the undertaking and the limits of the APE. In December 2020, the Navy reinitiated Section 106 consultation with the CA SHPO and consulting tribes to include newly identified proposed historic properties within the baseline analysis. The Pechanga Band continued to express concerns and requested that sites previously evaluated with CA SHPO concurrence be re-evaluated with Tribal participation. The Navy received Pechanga's TCP report and requested additional information from the Tribe to assist in additional identification of historic properties, in accordance with 36 CFR 800.4; however, following multiple correspondences, including teleconferences, no additional information was provided. Consistent with 36 CFR 800.5(b), the Navy notified the Tribe of its finding of no adverse effect on April 13, 2021. The Tribe responded with continued concerns about the limits of the APE, believing the entire island should be included within the APE. As noted above, the Navy defined the undertaking's APE per 36 CFR 800.16(d) as the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. Furthermore, the APE was influenced by the scale and nature of an undertaking and is different for different kinds of effects caused by the activities comprising the undertaking. As such, the Navy made the determination that the entirety of the island is not included within the APE based upon the nature of proposed activities. The Tribe continues to disagree with this assessment. The Navy has requested information from the Tribes related to specific effects to historic properties, pursuant to 36 CFR 800.5(a) to apply criteria of adverse effect. To date, the Navy has not received this information.

In response to the Navy's invitation to enter government-to-government consultation and receiving the Draft PMSR EIS/OEIS cultural resources chapter for review, the Navy received a letter from the Rincon Band of Luiseño Indians (Rincon) on March 19, 2020, requesting consultation. The tribe expressed concerns about effects to submerged resources and reporting of Navy activities to the Tribe. During consultation, the Navy provided information to Rincon regarding the nature of at-sea project activities and potential effects to submerged historic properties. The Navy also consulted with the Tribe to develop a reporting protocol for future Navy actions on SNI. The Tribe continued to express concerns about the identification of and effect to historic properties on SNI. In particular, Rincon expressed concern because the ethnographic study for the proposed TCP and the investigation and evaluation of the proposed archaeological district on SNI, has not been completed. In December 2020, the Navy reinitiated Section 106 consultation with the CA SHPO and consulting tribes to include these newly identified proposed historic properties. The Navy requested additional information from the Tribe to assist in additional identification of historic properties, in accordance with 36 CFR 800.4; however, following multiple correspondences, including teleconferences, no additional information was provided. Consistent with 36 CFR 800.5(b), the Navy notified the Tribe of its finding of no adverse effect on April 13, 2021. The Tribe responded with continued concerns about effects to historic properties and disagreement with the Navy's findings. Rincon requested that sites previously evaluated with CA SHPO concurrence be re-evaluated under different criteria and with Tribal participation. The Navy has requested information from the Tribes related to specific effects to historic properties, pursuant to 36 CFR 800.5(a) to apply criteria of adverse effect. To date, the Navy has not received this information.

Summary of Section 106 Consultation:

The Navy invited the CA SHPO and seven (7) federally recognized Tribes to consult on the proposed undertaking. The Navy provided all consulting parties with documentation of the undertaking, the APE, and identification of known historic properties within the APE. Because the Luiseño Tribes are not culturally affiliated with Point Mugu, only the CA SHPO and Santa Ynez Band of Chumash Indians were consulted for the activities occurring at Point Mugu. Additionally, because the Tribes did not express interest in the built environment, only the CA SHPO was consulted for historic architectural resources. The Navy acknowledged during Section 106 consultation for a different undertaking that one Tribe had

identified an SNI TCP and an SNI archaeological district. In response, the Navy has initiated an ethnographic study to inform the proposed TCP, and an archaeological district study to inform the proposed archaeological district. These studies are still on-going, and for the purposes of this consultation, the Navy agreed to consider the proposed TCP and proposed archaeological district eligible for listing on the NRHP.

In response to the Navy's Section 106 re-initiation letter, Pechanga and Rincon responded in writing. The Navy held individual government-to-government teleconference calls with Pechanga on February 8, 2021, and Rincon on February 19, 2021. The Navy then exchanged two rounds of a comment matrices addressing specific questions and concerns on the undertaking.

In April 2021, after extensive discussions with the consulting Tribes, the Navy moved forward with assessing the effects of the undertaking to historic properties. As a result of its research and analysis, and in consideration of information received during consultation, the Navy determined the proposed undertaking will have no adverse effects to historic properties, consistent with 36 CFR 800.5(b). The finding of effect letters were sent to the CA SHPO and all seven (7) Federally-recognized Tribes, regardless of whether they expressed interest in the current consultation.

In May 2021, the Navy received written notification from the Santa Ynez Band of Chumash Indians that they wanted to be included in the Section 106 consultation. Further, Rincon provided written disagreement to the Navy's finding of no adverse effects to historic properties, and the CA SHPO stated that they could not concur with the Navy's finding of effect at the time because the Navy did not consider cumulative effects. In response, the Navy held a government-to-government teleconference which was extended to all consulting Tribes.

In response to the Tribes' views and concerns expressed during our ongoing government-to-government consultations, the Navy will work with the Tribes to develop a Tribal Visitation Plan to support greater familiarity with Navy activities on SNI. The Navy maintains its finding of no adverse effect to historic properties for the PMSR undertaking and will ensure that if adverse effects are observed during post-event visits, the Navy will treat those effects as a post-review discovery, pursuant to 36 CFR 800.13(b). Above all, the Navy remains committed to supporting long-term working relationship with the consulting Tribes, through the ongoing government-to-government consultation on: (1) SNI Consultation Protocol Agreement; (2) SNI Section 106 Programmatic Agreement; (3) SNI Tribal Visitation Plan; and (4) SNI NAGPRA Comprehensive Agreement.

G.6 Coastal Zone Management Act

G.6.1 Navy Consistency Determination Letter to the California Coastal Commission



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER WEAPONS DIVISION
1 ADMINISTRATION CIRCLE 375 J AVENUE SUITE 1
CHINA LAKE, CA 93555-6100 POINT MUGU, CA 93042-6049

IN REPLY REFER TO:

5090
Ser EB2R00M/2541
September 2, 2020

Mr. John Ainsworth
Executive Director
California Coastal Commission
455 Market Street, Suite 228
San Francisco, California 94105-2219

Dear Mr. Ainsworth:

SUBJECT: CONSISTENCY DETERMINATION FOR PROPOSED MILITARY READINESS
ACTIVITIES IN THE POINT MUGU SEA RANGE

In accordance with 15 C.F.R. §930, the Naval Air Warfare Center Weapons Division (NAWCWD) Point Mugu is submitting the enclosed Consistency Determination (CD) for proposed military readiness activities within the Point Mugu Sea Range (PMSR) Study Area. The Navy has determined the proposed action is consistent to the maximum extent practicable with the applicable enforceable policies of the California Coastal Management Program for the reasons identified in the enclosed CD. The Navy is requesting that the Coastal Commission consider the CD at the November 4-6, 2020 meeting in San Diego. These military readiness activities are a continuation of activities that have been conducted in the same areas for decades and have been the subject of prior consistency review by the Commission, since 2002 and most recently in 2015.

In addition to the Coastal Zone Management Act federal consistency requirements addressed by the submission of the enclosed CD, the Navy is addressing compliance with other environmental laws as follows:

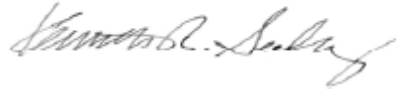
- a. National Environmental Policy Act and Executive Order 12114. Navy released the Draft Environmental Impact Statement (EIS)/Overseas EIS in April, 2020.
- b. Marine Mammal Protection Act. Navy is seeking a Letter of Authorization (LOA) from the National Marine Fisheries Service (NMFS).
- c. Endangered Species Act. Navy is consulting with NMFS and U.S. Fish and Wildlife Service under Section 7 of the ESA.

Information and reporting regarding on-going Navy activities occurring from San Nicolas Island is available at <https://www.navy.marinespeciesmonitoring.us/reporting/pacific/>, as well as other Navy sponsored research and monitoring. The PMSR Draft EIS/OEIS and other supporting documents are available at <https://pmsr-eis.com/>.

5090
Ser EB2R00M/2541
September 2, 2020

If you have any questions please contact Ms. Cory Scott, NAWCWD, (619) 767-8215, cory.l.scott@navy.mil or Ms. Deborah McKay, Commander Navy Region Southwest, at (619) 532-2284, deborah.mckay@navy.mil.

Sincerely,



Kenneth Seeley
By direction

Enclosure: CD for the PMSR

Copy to:
Commander, Navy, Region Southwest (N40) (w/o enclosure)

G.6.2 California Coastal Commission Adopted Findings

STATE OF CALIFORNIA - NATURAL RESOURCES AGENCY

GAVIN NEWSOM, GOVERNOR

CALIFORNIA COASTAL COMMISSION

455 MARKET STREET, SUITE 228
SAN FRANCISCO, CA 94105-2219
FAX (415) 904-5400
Voice (415) 904-5200



F13b

Filed: 9/3/20
60th Day: 11/2/20
75th Day: 11/17/20
Staff: CT-SF
Staff Report: 11/20/20
Hearing Date: 12/11/20

Adopted Findings

Consistency Determination No.: CD-0003-20

Federal Agency: U.S. Navy

Location: Point Mugu Sea Range, 36,000 square mile area offshore of southern California (Exhibit 1).

Project Description: Continuation and expansion of military readiness training and testing activities on the Point Mugu Sea Range and portions of San Nicolas Island, Naval Base Ventura County (NBVC) Point Mugu and NBVC Port Hueneme.

Commission Action: Concurrence

SUMMARY

The Navy has submitted a consistency determination for testing and training activities conducted by the Naval Air Warfare Center Weapons Division on the Point Mugu Sea Range (Sea Range) offshore of southern California. The proposed activities include continuation of existing historic levels for some testing and training activities and expansion from current levels for other activities. The Sea Range is a 36,000 square mile area of ocean and controlled airspace, roughly 200 nautical miles long and extending approximately 180 nautical miles offshore and includes San Nicolas Island and portions of the northern Channel Islands. The purpose of the proposed activities is to allow for continued testing and training "in support of military readiness and

CD-0003-20 (Navy)

Department of Defense (DoD) mission requirements as required by Title 10 to provide combat ready forces.”

Most of the proposed activities are within the range and scope of historic Navy activities conducted on the Sea Range and previously reviewed by the Commission (most comprehensively in its 2001 concurrence with the Navy’s consistency determination (CD-002-01)). In addition to proposing continuation of these activities, the Navy is also proposing to increase flight and vessel operations above historic levels and to increase the use of ordnance and surface and aerial targets.

The primary coastal resource concerns raised by the proposed project are potential effects to marine mammals found throughout the Sea Range and cultural and tribal resources on San Nicolas Island. Effects to marine mammals include the potential for collisions between Navy vessels and large whales (“ship strikes”) and the proposed use of explosives (bombs, missiles, and other explosive munitions) at or above the ocean surface within the Sea Range. To address these concerns, the Navy proposes to continue its implementation of previously established adverse impact avoidance, minimization and mitigation measures. For example, the Navy would continue to monitor “mitigation zones” around surface targets and seal and sea lion haul-outs and rookeries on San Nicolas Island, provide seasonal marine mammal awareness notifications to vessel operators and event managers, operate vessels and boats at the slowest necessary speeds, and use vessel and aircraft based observers and lookouts. Further, the Navy would focus training and testing activities involving the use of explosives within the open ocean portions of the Sea Range, away from shoreward areas of high marine mammal use and density including the waters of the Santa Barbara Channel, Channel Islands National Park, the Channel Islands National Marine Sanctuary and Biologically Important Areas for harbor porpoises, blue, gray and humpback whales established by the National Marine Fisheries Service.

The Navy has also committed to increase transparency, information sharing and engagement with the Commission by providing annual reports noting if any training and testing activities involving the use of explosives or gunnery exercises were carried out within Biologically Important Areas for marine mammals and sharing copies of any ship strike incident reports submitted to the National Marine Fisheries Service.

In addition to impacts to marine mammals, the Navy’s activities could affect potential cultural and tribal resources on San Nicholas Island. The Pechanga Band and Rincon Band of Luiseño Indians have identified the potential for San Nicolas Island to be classified as a Traditional Cultural Property encompassing several known individual sites on the Island and contributing to an overall archaeological district. The Navy is in active consultation with both affected Tribes and has agreed to conduct ethnographic and archeological district studies called for in previous consultations with the affected Tribes and to continue to implement the Integrated Cultural Resource Management Plan for the island that contains guidance for complying with the National Historic Preservation Act and Native American Graves Protection and Repatriation Act, including standard operating procedures for the inadvertent discovery of cultural

CD-0003-20 (Navy)

resources. The Navy has also committed to providing the Commission with the completed studies within two years with the understanding that if the studies identify new cultural and tribal resources protected under the Coastal Act that are subject to spillover effects from the Navy's activities, the Commission may choose to exercise its ability to re-open this Consistency Determination to assess whether the Navy's activities remain consistent to the extent practicable with the Coastal Act.

Even with these important commitments in place, the Navy falls short of fulfilling several requests by Commission staff and environmental organizations for additional marine protection and monitoring measures. The Navy maintains that it has no evidence of harm to marine mammals or other marine organisms from its activities, and that further protective measures are therefore not warranted. Based on available information, staff believes that such additional protective measures could be beneficial but are not necessary to achieve Coastal Act consistency. However, the Commission will continue to review all available information regarding effects to marine wildlife from Navy activities within the Sea Range and will reserve the right to re-open this Consistency Determination if new information on effects becomes available.

Further, this concurrence is only for the activities currently proposed and described by the Navy, including the current levels of proposed training and testing activities to be carried out within BIAs, continued operation of Navy vessels at speeds that are largely consistent with a ten knot speed limit and with measures to minimize ship strike risk, and a commitment to study and report on the effectiveness of the Navy's marine mammal lookouts and to continually work to improve the effectiveness of marine mammal monitoring over time with the goal of minimizing ship strikes and other harm. If the Navy's activities change such that the Navy begins testing and training activities using explosives in the five BIAs that it historically has avoided, or if it begins to operate its vessels at average speeds that exceed those average ranges provided in the Mintz (2016) study (except in those instances where testing and training activities require a deviation), or if it does not provide information sufficient for staff to affirm that such changes have not occurred, Commission staff will report back to the Commission so that the Commission can determine whether or not these changed activities are having an effect on any coastal use or resource substantially different than originally described and, as a result, whether the activities are no longer consistent to the maximum extent practicable with the enforceable policies of the CCMP, as provided in CFR Section 930.45. In addition, at the completion of the Navy's Lookout Effectiveness Study, the Navy will submit a report to the Commission describing how it will use the results of the study to improve its monitoring methods and protocols.

Thus, based on available information and incorporating the Navy's stated commitments and the continued implementation of avoidance, minimization and mitigation measures, the project is consistent with the cultural resources, marine resources and water quality policies (Sections 30244, 30230 and 30231) of the Coastal Act. As proposed, the project is also consistent with the commercial and recreational fishing policies (Sections 30234 and 30234.5) and coastal access and recreation policies (Sections 30210, 30211, 30212, 30213 and 30220) of the Coastal Act.

CD-0003-20 (Navy)

The Commission concurs with the Navy's consistency determination CD-0003-20. The motion and resolution are on Page 5 of this report. The standard of review for this consistency determination is the Chapter 3 policies of the Coastal Act.

CD-0003-20 (Navy)

Table of Contents

I. FEDERAL AGENCY'S CONSISTENCY DETERMINATION	6
II. MOTION AND RESOLUTION.....	6
III. FINDINGS AND DECLARATIONS	6
A. Project Description and Background	6
B. Consultations and Other Agency Approvals.....	9
National Marine Fisheries Service.....	9
U.S. Fish and Wildlife Service	9
Tribal Governments.....	10
C. Marine Resources and Water Quality	11
Water Quality	12
Marine Debris.....	14
Explosives Use.....	18
Biologically Important Areas.....	21
Adverse Impact Avoidance, Minimization and Mitigation Measures.....	25
Ship strikes	29
NRDC Recommendations.....	37
Conclusion	40
D. Cultural Resources.....	41
E. Coastal Access and Recreation	47
F. Commercial and Recreational Fishing.....	50
APPENDIX A – SUBSTANTIVE FILE DOCUMENTS	53

EXHIBITS

[Exhibit 1 – Point Mugu Sea Range Location and Extent](#)

[Exhibit 2 – Expanded Project Description](#)

[Exhibit 3 - Predicted Marine Mammal Effects per Year from Explosives](#)

[Exhibit 4 – Biologically Important Areas within Point Mugu Sea Range](#)

[Exhibit 5 - November 4, 2020 letter to Commission staff from the Natural Resources](#)

[Defense Council](#)

CD-0003-20 (Navy)

I. FEDERAL AGENCY'S CONSISTENCY DETERMINATION

Based on the review of the Proposed Action's compliance with the Coastal Zone Management Act (CZMA), the Navy has determined that the Proposed Action is consistent to the maximum extent practicable with the California Coastal Management Program, pursuant to the requirements of the CZMA.

II. MOTION AND RESOLUTION

Motion:

I move that the Commission concur with consistency determination CD-0003-20 that the project described therein is fully consistent, and therefore consistent to the maximum extent practicable, with the enforceable policies of the California Coastal Management Program (CCMP).

Staff recommends a **YES** vote on the motion. Passage of this motion will result in a concurrence with the determination and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

Resolution:

The Commission hereby **concurs** with consistency determination CD-0003-20 by the U.S. Navy, on the grounds that the project described therein is fully consistent, and therefore consistent to the maximum extent practicable, with the enforceable policies of the California Coastal Management Program.

III. FINDINGS AND DECLARATIONS

A. Project Description and Background

The U.S. Navy (Navy) submitted a consistency determination seeking the Commission's concurrence with a program that combines a variety of training and testing activities that have been separately reviewed and concurred with by the Commission over the past two decades. In addition, the Navy proposes modest to significant increases in some operations, primarily the number of ordnance used and aircraft and vessel exercises. All of these activities would occur within the Point Mugu Sea Range (Sea Range), an approximately 36,000 square mile area of ocean and controlled airspace, roughly 200 nautical miles (NM) long (north to south) and extending west into the Pacific Ocean from its nearest point at the mainland coast (three NM) at Ventura County out to approximately 180 NM offshore ([Exhibit 1](#)). The Sea Range includes San Nicolas Island and portions of the northern Channel Islands (Anacapa, Santa Barbara, Santa Cruz, Santa Rosa and San Miguel Islands) and is directly north of the Southern California Range Complex, an approximately 120,000 square nautical mile area also used for Navy training and testing activities (and reviewed by the Commission under Consistency Determination No. CD-0001-18). Proposed activities include flight and vessel operations throughout the Sea Range as well as directed energy (laser and high-powered microwave) activities, missile and target launch operations originating from Naval Base Ventura County (NBVC) Point Mugu and San Nicolas Island and other

CD-0003-20 (Navy)

training and testing activities within the Sea Range as described in the Navy's Consistency Determination and [Exhibit 2](#).

Although the Navy has been carrying out testing and training within the Sea Range since its establishment in 1946, the types and tempo of activities have fluctuated as technologies, systems, operational needs, and procedures have evolved. With this consistency determination, the Navy integrates the numbers and types of platforms and systems that have been brought into use since the Commission last considered overall training and testing operations on the Sea Range in 2001 (CD-002-01).¹

The Navy also proposes to increase several of these ongoing readiness activities:

to provide modern instrumented airspace, sea space, testing and training areas, testing and training facilities, and range infrastructure to fully support current, emerging, and foreseeable future [research, development, acquisition, testing and evaluation] and Fleet testing and training requirements; and to ensure the long-term viability of the [Sea Range] while protecting human health and the environment. The Navy's need for the Proposed Action is to allow for continued testing and training in support of military readiness and Department of Defense (DoD) mission requirements as required by Title 10 to provide combat ready forces.

The table below lists the various categories of training and testing operations carried out on the Sea Range each year. The past annual level of activity is listed as the "baseline" and the proposed increase in operational tempo and activity are the "proposed action."

Table 1 - Representative Annual Baseline Activities Compared to the Proposed Action

Activity	Activity Sub Category	Baseline	Proposed Action
Flight Operations (# of sorties)	Scheduled Range Flights	3,934	5,288
Sea Range Vessel Operations (# of activities)	N/A	300	333
Support Boat Operations (# of activities)	N/A	198	199
Sea Range Aerial Targets (# of targets)	N/A	104	176
Sea Range Surface Targets (# of targets)	N/A	430	522
Ordnance (# of ordnance)	Bombs	22	30
	Gun Ammunition	11,670	281,230
	Missiles	231	584
	Rockets	30	40

¹ Operations involving several of these individual systems have been separately reviewed and concurred with by the Commission in recent years as well. For example, in 2009, the Commission concurred with the Navy's negative determination (ND-017-09) for a laser testing and training program at NBVC Point Mugu and San Nicolas Island; in July 2013, the Commission concurred with the Navy's negative determination (ND-0207-13) for countermeasures testing and training for the Sea Range; in August 2013, the Commission concurred with the Navy's negative determination (ND-0213-13) for the construction and use of directed energy test facilities on San Nicolas Island; in 2017, the Commission concurred with the Navy's consistency determination (CD-0006-16) for the replacement and installation of communications cables on the seafloor; and in 2019, the Commission concurred with the Navy's negative determination (ND-0012-19) for construction and use of a directed energy systems integration laboratory on the NBVC Point Mugu shoreline.

CD-0003-20 (Navy)

	Chaff	20	16
	Flares	28	10
Directed Energy (# of days)	Lasers/High Power Microwave	624	624

In its consistency determination submittal, the Navy provides the following overview of its proposed ocean-based training and testing activities:

The Navy categorizes its at-sea activities into eight functional warfare areas called primary mission areas. The Navy has determined that three of those primary mission areas conducted on PMSR [Point Mugu Sea Range] have the potential to affect coastal uses or resources of the state's coastal zone. PMSR activities in the Proposed Action and addressed for this CZMA CCD [consistency determination] are categorized under three of those primary mission areas. These mission areas encompass five broad categories that reflect all testing and training activities.

- air warfare (air-to-air, surface-to-air)
- electronic warfare (EW) (DE – lasers and HPM systems)
- surface warfare (surface-to-surface, air-to-surface, and subsurface-to-surface)

[Research, development, acquisition, testing and evaluation] of new technologies by the DoD occurs continually to ensure that the U.S. military can counter new and anticipated threats. All new Navy systems and related equipment must be tested to ensure proper functioning before delivery to the Fleets for use. The PMSR is the Navy's primary ocean testing area for guided missiles and related ordnance. Testing operations on the Sea Range are conducted under highly controlled conditions, allowing for the collection of empirical data to evaluate the performance of a weapon system or subsystem. Testing conducted in the PMSR is important for maintaining readiness.

...
A frequent test conducted at the PMSR is the NAVSEA Combat Systems Ship Qualification Trials (CSSQT). This is a series of comprehensive tests and trials designed to show that the equipment and systems included in the CSSQT program meet combat system requirements. Live and inert weapons, along with chaff, flares, jammers, and lasers, may be used. CSSQTs are conducted within the primary warfare mission areas discussed above.

Weapons testing may contain both flight and surface elements (target, weapon, launch aircraft or vessel, or range support aircraft). Fixed-wing and rotary-wing aircraft, including both manned and unmanned systems, also conduct weapons tests. Tests may be captive carry (i.e., the weapon is not released from the aircraft) or involve the release of ordnance or other expendables, including non-explosive and telemetry (TM)-only warheads and live-fire munition rounds. Chaff or flares may be used during weapons tests, with the restriction that they are expended offshore in compliance with environmental regulations.

CD-0003-20 (Navy)

Training conducted in parallel with testing activities provides Fleet operators unique opportunities to train with ship and aircraft combat weapon systems and personnel in scripted warfare environments, including live-fire exercises. Combat ship crews train in conjunction with scheduled NAVSEA ship testing and qualification trials, to take advantage of the opportunity to provide concurrent training and familiarization for ship personnel in maintaining and operating installed equipment, identifying design problems, and determining deficiencies in support elements (e.g., documentation, logistics, test equipment, or training).

Concurrent with testing, surface training typically available on the PMSR includes tracking exercises, missile-firing exercises, gun-firing exercises, high-speed anti-radiation missile exercises, and shipboard self-defense system training (e.g., Phalanx [Close-in Weapons System], Rolling Airframe Missile, and Evolved Sea Sparrow Missile). These events are limited in scope and generally focus on one or two tasks. Missiles may be fired against sub-sonic, supersonic, and hypersonic targets. Certain training events designed for single ships are conducted to utilize unique targets only available for training at the PMSR.

Aviation warfare training conducted at PMSR, categorized as unit level training, is designed for a small number of aircraft up to a squadron of aircraft. These training events occur at PMSR as it is the only West Coast Navy venue to provide powered air-to-air targets. These events are limited in scope and generally focus on one or two tasks. These scenarios require planning and coordination to ensure safe and effective training.

Further detail and specificity on proposed training and testing activities is provided on pages 12 to 18 of the Navy's consistency determination, included in [Exhibit 2](#).

B. Consultations and Other Agency Approvals

National Marine Fisheries Service

The Navy initiated formal consultation with the National Marine Fisheries Service (NMFS) under the Endangered Species Act in November 2020. The Navy also submitted a request for authorization to NMFS under the Marine Mammal Protection Act in early September 2020 and initiated essential fish habitat consultation under the Magnuson-Stevens Fishery Conservation and Management Act in July 2020. NMFS review of all three is ongoing and will be completed prior to issuance of a final Record of Decision and implementation of the proposed project. The Navy expects to have a final Record of Decision in the Fall of 2021.

U.S. Fish and Wildlife Service

The Navy currently carries out training and testing activities on the Point Mugu Sea Range (including San Nicolas Island and Naval Base Ventura County Point Mugu) under Biological Opinions issued in 2001, 2006, 2012, 2014, and 2016 by the U.S. Fish and Wildlife Service (USFWS) under the Endangered Species Act. These Biological Opinions evaluate effects on the federally endangered California least tern (*Sterna*

CD-0003-20 (Navy)

albifrons browni), and light-footed clapper rail (*Rallus longirostris levipes*), and the federally threatened western snowy plover (*Charadrius nivosus nivosus*). The Navy determined that the Proposed Action will have no effect on least Bell's vireo (*Vireo bellii pusillus*), tidewater goby (*Eucyclogobius newberryi*), or federally endangered salt marshbird's-beak (*Cordylanthus maritimus ssp. maritimus*).

The Navy proposes to continue implementing measures to avoid or minimize the effects on California least tern, light-footed clapper rail, and the western snowy plover outlined in the 2016 Biological Opinion and does not anticipate the effect of these activities from the proposed project will be different from those discussed in that Biological Opinion. Accordingly, the Navy has stated that no further consultation is required with USFWS based on its concurrence that the activities are the same as those previously consulted upon. USFWS Biological Opinions for San Nicolas Island and Point Mugu remain valid and would be followed during the proposed project.

Tribal Governments

As part of its preparation of an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA), the Navy invited government to government consultation from the seven tribal contacts listed below. On April 10, 2020, Mr. Gary DuBois, Tribal Historic Preservation Officer, provided a response on behalf of the Pechanga Band of Luiseño Indians (Tribe). Mr. DuBois' letter described the importance of San Nicolas Island as a Traditional Cultural Property and Archeological District and expressed the Tribe's interest in being included in all phases of the Navy's environmental review process. Specifically, Mr. DuBois' letter expressed the Tribe's interest in a consultation meeting and in assisting the Navy to ensure that every effort is made to avoid effects to human remains, funerary objects, and tribal cultural resources.

- The Honorable Temet A. Aguilar
Chairperson, Pauma Band of Luiseño Mission Indians
- The Honorable Fred Nelson
Chairperson, La Jolla Band of Luiseño Mission Indians
- The Honorable Robert H. Smith
Chairperson, Pala Band of Luiseño Mission Indians
- The Honorable Mark Macarro
Chairperson, Pechanga Band of Luiseño Mission Indians
- The Honorable Bo Mazzetti
Chairperson, Rincon Band of Luiseño Mission Indians
- The Honorable Kenneth Kahn
Chairperson, Santa Ynez Band of Chumash Mission Indians
- The Honorable Scott Cozart
Chairperson, Soboba Band of Luiseño Mission Indians

As described in its email to Commission staff on October 13, 2020, the Navy is engaged in additional ongoing consultation efforts with the two Tribes that responded to its outreach efforts:

CD-0003-20 (Navy)

The Navy is in active government to government consultation with the Pechanga and Rincon Tribes, the only two tribes that responded to the Navy's invitation. During a government to government meeting held on September 1, 2020, members of the Pechanga Tribe indicated they would provide the Navy with a set of questions in anticipation of the next meeting. The Navy has indicated it is currently awaiting these questions. On November 19 and 20, 2020, Commission staff heard from both the Navy and Pechanga Tribe that the Navy would be restarting its consultation process and would be including additional information the Pechanga Tribe was recently able to provide.

The Navy's last call with the Rincon Tribe was on November 10, 2020, at which time the Navy committed to providing annual activity reports via an appendix to the Integrated Cultural Resources Management Plan. This commitment will be stated in the Final EIS and Record of Decision.

Commission staff reached out to both Tribes to inform them of the Commission's federal consistency review process and timing and to invite further consultation. The results of this consultation are discussed below in the section on cultural resources.

C. Marine Resources and Water Quality

Section 30230 of the Coastal Act states:

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

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats and minimizing alteration of natural streams.

The Navy proposes a modest expansion of testing and training activities carried out within the Point Mugu Sea Range (Sea Range). Historically, the scale and frequency of Navy activities have varied from year to year. For comparison purposes, levels of testing and training conducted in 2001, as described in Consistency Determination No. CD-002-01, are defined as the existing or baseline condition. Comparing the current

CD-0003-20 (Navy)

Navy proposal to baseline conditions, future Navy operations on the Sea Range would include: (1) a 34% increase in aircraft activity; (2) a 7% increase in ship and boat operations; (3) a 153% increase in missiles fired; (4) a 2310% increase in gunnery rounds expended; (5) a 31% increase in aerial and surface targets deployed; and a roughly 33% increase in the number of rockets and bombs used (see Table 1, page 6 for specific numbers of each).

The Navy's consistency determination and accompanying Draft EIS/OEIS (DEIS) describe the effects of both baseline levels and expanded operations on marine resources, including water quality, marine biological productivity, marine mammals, fish and sea turtles.² As discussed further below, these effects are most likely to be associated with: (1) the release of contaminants and debris into marine waters, (2) death or injury of marine mammals from the use of explosives, and (3) collisions of Navy vessels with marine mammals (ship strikes).

Water Quality

The proposed project would affect marine water quality through the release of explosive residues, fuels and propellants, metals and other materials into the marine environment. The project's DEIS discusses the likelihood and magnitude of potential adverse impacts to marine water quality from the proposed training and testing activities as follows:

The highest concentrations of munition residues result from detonation failure (i.e., low-order detonations or unexploded ordnance). As a general rule, between 10,000 and 100,000 high-order detonations deposit the same mass of explosive residue as one low-order detonation of the same munition (U.S. Environmental Protection Agency, 2012b). Over 98 percent of explosives byproducts introduced into the environment result from low-order detonations or unexploded ordnance; when a munition successfully detonates, over 99 percent of constituents are burned and little to no explosive material remains in the environment (Hewitt et al., 2003). Therefore, an estimate of the amount of explosives material and byproducts from an explosion that would be introduced into the environment is based solely on the failure rate for each type of munition, discounting the negligible contribution from munitions that successfully detonate. The military does not track failure rates for all munitions. The available data typically report failure rates ranging from less than 2 percent up to 10 percent. For the purpose of estimating the amount of explosives and explosive byproducts entering the marine environment, a 5 percent failure rate is applied to all types of munitions used. The amount of explosive materials is estimated by multiplying the failure rate by the number of explosive munitions and the net explosive weight of each munition used during testing and training activities.

The majority of explosive material would result from munitions used at least 3 NM [nautical miles] from shore and often more than 12 NM from shore, which diminishes any potential impact on nearshore sediments and water quality. Additionally, an important consideration for offshore areas is the massive volume of

² For additional information on this analysis, please refer to the project's DEIS, available online: <https://pmsr-eis.com/Documents/2020-Draft-EIS-OEIS-Documents/2020-Draft-EIS-OEIS>

CD-0003-20 (Navy)

water in the PMSR [Sea Range] Study Area, which is constantly mixed by currents moving throughout the water column. Since there are no fixed aim points or permanent targets, munitions would be widely distributed in the PMSR Study Area and would not accumulate in particular areas. As such, the ocean's volume and the dilution caused by the currents would reduce long-term adverse impacts. Explosive material entering the environment due to failed detonations would result in short-term minor adverse impacts on water quality and sediment immediately adjacent to the point of release. As the concentrations dissipate due to mixing and dilution, the effects would be reduced to negligible as concentrations would fall below detection levels beyond the point of release and over the long-term from degradation (Briggs et al., 2016; U.S. Department of the Navy, 2010a, 2010b, 2013c).

...
Although there is a substantial increase in explosive usage under Alternative 1 [the proposed project] (see Table 3.0-7), studies conducted at several Navy ranges where explosives have been used more frequently and for longer periods of time indicate that explosives constituents are released into the aquatic environment over long periods of time and do not result in water or sediment toxicity (Briggs et al., 2016; U.S. Department of the Navy, 2010a, 2010b, 2013c). The fate and transport of munitions constituents in underwater environments is affected by numerous physical, chemical, and biological processes that typically combine to attenuate the concentrations of munitions constituents and their degradation products at a given site. Based on these and other analyses conducted for similar activities (U.S. Department of the Navy, 2018), there would be minor short-term and negligible long-term impacts on sediments and water quality from explosives and explosive byproducts, but overall potential impacts are expected to be less than significant.

Although the proposed project would involve increases in the amount of explosives and ordnance used within the Sea Range, the large size of the Sea Range and dispersion of the activities involving explosives and ordnance across its outer waters (typically beyond 12 nautical miles from shore), would significantly limit the potential for concentrations of explosive residues to accumulate and/or pass into the nearer-shore waters of California's Coastal Zone.

Fuel and propellant materials would be similarly dispersed and diluted to low concentrations if they enter coastal waters, as discussed in the DEIS:

The distribution of munitions that use propellants, fuels, and initiators is uniform throughout the PMSR Study Area. Under Alternative 1 [the proposed project], propellants, fuels, and initiators would be associated with several types of munitions used during testing and training activities, specifically missiles and rockets. The largest quantities of chemicals would be expended from the use of propellants and fuels. Rocket motors are over 99 percent efficient at burning propellant; therefore, no measurable amounts of propellant or combustion products would enter the water column. The propellant used by rockets and missiles is typically consumed prior to impact at the water's surface, even if the munition fails to detonate upon impact, leaving little residual propellant to enter the water.

CD-0003-20 (Navy)

For properly functioning munitions, chemical, physical, or biological changes in sediments or water quality would not be detectable. Impacts would be negligible for the following reasons: (1) the size of the area in which expended materials would be distributed is several square miles; (2) most propellant combustion byproducts are benign, while those of concern would be diluted to below detectable levels within a short time; (3) 98 percent of propellants are consumed during normal operations; (4) the failure rate of munitions using propellants and other combustible materials is less than 5 percent; and (5) most of the constituents of concern are biodegradable by various marine organisms or by physical and chemical processes common in marine ecosystems. Therefore, potential impacts of propellants, fuels, and initiators on sediments and water quality from testing and training activities would be less than significant.

The project's DEIS also concludes that the proposed release of metals associated with munitions and other expended materials would have negligible effects to water quality:

Chemical, physical, or biological changes to sediments or water quality in the Study Area would not be detectable and would be similar to nearby areas without munitions or other expended materials containing metals. This conclusion, which has been supported by research studies in similar locations with similar testing and training activities, is based on the following assumptions: (1) most of the metals are benign, and those of potential concern make up a small percentage of expended munitions and other metal objects; (2) metals released through corrosion would be diluted by currents or bound up and sequestered in adjacent sediment; (3) elevated concentrations of metals in sediments would be limited to the immediate area around the expended material; and (4) the areas over which munitions and other metal components would be distributed are large.

Therefore, for the reasons described above, the proposed project is not expected to result in adverse impacts to water quality within the coastal zone due to the release of explosive residues, fuels/propellants or metals.

Marine Debris

As part of the proposed project, the Navy would also intentionally and accidentally release other materials into the marine environment. As noted in the project DEIS, "These other expended materials include flares, chaff, expendable towed and stationary targets, wires and cables, and miscellaneous components." The following excerpts from the project DEIS provide more information on these different materials and their compositions:

Target-Related Materials

At-sea targets are usually remotely operated airborne and surface traveling units, many of which are designed to be recovered for reuse. However, if they are used during activities that use high-explosives, they may result in fragments and ultimate loss of the target. Expendable targets that may result in fragments include air-

CD-0003-20 (Navy)

launched decoys and surface targets (e.g., marine markers, cardboard boxes, and 10 ft. diameter red balloons). Most target fragments would sink quickly to the seafloor. Floating material, such as Styrofoam, may be lost from target boats and remain at the surface for some time.

Chaff

Chaff consists of reflective, aluminum-coated glass fibers used to obscure ships and aircraft from radar-guided systems. Chaff, which is stored in canisters, is either dispensed from aircraft or fired into the air from the decks of surface ships when an attack is imminent. The glass fibers create a radar cloud that mask the position of the ship or aircraft. Chaff is composed of an aluminum alloy coating on glass fibers of silicon dioxide (U.S. Department of the Air Force, 1997). Chaff is released or dispensed in cartridges or projectiles that contain millions of fibers. When deployed, a diffuse cloud of fibers is formed that is undetectable to the human eye. Chaff is a very light material, similar to fine human hair. It can remain suspended in air anywhere from 10 minutes to 10 hours and can travel considerable distances from its release point, depending on prevailing atmospheric conditions (Arfsten et al., 2002); (U.S. Department of the Air Force, 1997). Doppler radar has tracked chaff plumes containing approximately 900 g of chaff drifting 200 mi. from the point of release, with the plume covering greater than 400 mi. (Arfsten et al., 2002).

...

Chaff cartridge plastic end caps and pistons would also be released into the marine environment, where they would persist for long periods and could be ingested by marine animals. Chaff end caps and pistons sink in saltwater (Spargo, 2007).

Flares

Flares are pyrotechnic devices used to defend against heat-seeking missiles, where the missile seeks out the heat signature from the flare rather than the aircraft's engines. Similar to chaff, flares are also dispensed from aircraft. The flare device consists of a cylindrical cartridge approximately 1.4 in. in diameter and 5.8 in. in length. Flares are designed to burn completely. The only material that would enter the water would be a small, round, plastic compression pad or piston (0.45–4.1 grams depending on flare type). The flare pads and pistons float in sea water.

Miscellaneous components include decelerators and parachutes. The project DEIS states:

Decelerators/parachutes used during testing and training activities are classified into four different categories based on size: small, medium, large, and extra-large. Aerial targets (drones) use large (between 30 and 50 ft. in diameter) and extra-large (80 ft. in diameter) decelerators/parachutes. Large and extra-large decelerators/parachutes are also made of cloth and nylon, with suspension lines of varying lengths (large: 40–70 ft. in length [with up to 28 lines per decelerator/parachute]; extra-large: 82 ft. in length [with up to 64 lines per decelerator/parachute]). Some aerial targets also use a small drag parachute (6 ft. in diameter) to slow their forward momentum prior to deploying the larger primary

CD-0003-20 (Navy)

decelerator/parachute. Unlike the small- and medium-sized decelerators/parachutes, drone decelerators/parachutes do not have weights attached and may remain at the surface or suspended in the water column for some time prior to eventual settlement on the seafloor.

The project DEIS also provides the following discussion of the fate of these materials in the ocean:

Plastics and other floating expended materials (e.g., rubber components) would either degrade over time in the water column or on the seafloor or wash ashore. Materials that sink to the seafloor would be widely distributed over the PMSR Study Area. As described in Section 3.2.4.1.2 (Marine Debris in Nearshore and Offshore Areas of the Point Mugu Sea Range Study Area), the worldwide use and disposal of plastics is rapidly increasing the amount of plastic accumulating in large areas of the world's oceans. Small pieces of plastic associated with the use of chaff, flares, and targets would likely persist in the marine environment as floating debris in the water column or on the seafloor. Plastic floating near the surface and exposed to the sun and mechanical wear and tear would break down over time. Plastic that sinks in the water column below the photic zone or to the seafloor would degrade more slowly or not at all. Only small pieces of plastics would be expended—larger pieces from targets are recovered—and dispersed over a large area. Therefore, potential impacts from military expended material, such as chaff and flares, on sediments or water quality would be less than significant.

In addition to these materials released into the ocean, jet-assisted take-off (JATO) and rocket-assisted take-off (RATO) operations at Naval Base Ventura County Point Mugu and San Nicolas Island result in the release of metal cannisters into the environment. While efforts are made to collect these cannisters, approximately 2,000 have accumulated over the years, some within sensitive wetland and estuary habitats.

To help address this accumulation of JATO/RATO cannisters and offset the expended materials like those described above that are discharged into the marine environment and not able to be recovered, the Navy recently awarded a new contract with the intent of increasing the number of cannisters removed up to approximately 350 per year. Previously, the cannister removal program had a goal of 100-200 per year but wasn't always able to meet it, thus slowing the progress of addressing the backlog. In addition to the JATO/RATO cannister recovery efforts, the Navy has been working with the National Marine Fisheries Service to establish an annual marine debris clean-up effort for San Nicolas Island.

This program is set to begin in 2020, continue on an annual basis and is expected to result in the collection, removal and disposal of large quantities of marine debris and lost fishing gear on an annual basis. For example, a recently completed clean-up of the island's shoreline by the Navy resulted in the recovery of over a ton of accumulated debris. Although the composition of this material in the past has been primarily lost and abandoned fishing gear rather than Navy expended materials, those materials are often

CD-0003-20 (Navy)

discharged far from shore in areas that make them unlikely to wash up on the island's shoreline. While recovery of these materials is not practical, the Navy's recovery and disposal of general marine debris from San Nicolas Island on an annual basis is expected to provide an adequate offset and result in a net reduction in the total amount of marine debris offshore of California. Further, the Navy would collect data on the type and volume of debris collected from SNI and submit it to the Ocean Conservancy's marine debris tracking database for analysis.

In addition to the increased clean-up efforts on SNI, the Navy will also be funding a marine debris sampling and characterization study in 2022 using protocols developed by the National Oceanic and Atmospheric Administration (NOAA). The results of this study and the data provided to Ocean Conservancy's database will help target marine debris response and reduction efforts carried out by the Navy, NOAA, the Commission and environmental organizations.

Finally, the Navy has also stated in correspondence with Commission staff on November 19, 2020 that the:

SNI Integrated Natural Resources Management Plan (INRMP) will be revised to include a section on marine debris clean-up for SNI. It will include records for historical clean-ups as well as methods for future clean-ups. Data sheets and where they are disseminated to will be formalized, as well as a priority list of beaches and rocky shoreline to be cleaned. Conservation recommendations will be included in this section as well as a discussion on marine debris impacts to natural resources within the INRMP boundary. Funding requirements for supporting clean-up logistics will also be described and introduced as an environmental program requirement (EPR) in the INRMP implementation table.

These new efforts and measures would all be added to the existing and historic efforts carried out by the Navy on the Sea Range to collect and remove marine debris. A summary of recent past events was provided to Commission staff by the Navy in correspondence received on October 12, 2020 and categorized by Navy installation within the Sea Range:

[Naval Base Ventura County] Point Mugu - Over the last 10 years, the Navy has conducted three beach cleanups with USFWS on Point Mugu's Holiday Beach and Eastern Arm. Additionally, there were three marsh clean up events and multiple events on Family beach conducted by volunteers and coordinated by installation environmental staff. Unfortunately, specific numbers for quantities of trash collected were not recorded.

SNI – The clean-up events for SNI are tracked by Ocean Conservancy. The most recent past events were held in 2014, 2016 and 2020. In 2014, 485 pounds of debris was collected, in 2016, 2,142 pounds of debris was collected off two beaches, and on November 11, 2020, 2,194 pounds of lost fishing gear and marine

CD-0003-20 (Navy)

debris was removed. Much of the debris collected was fishing nets, hoses, tires, and smaller items that fit in trash bags.

[Naval Base Ventura County] Port Hueneme – The most recent cleanup event was held in 2018 and focused on the major canals that transect the base. Over a two day event approximately 440 pounds of debris was collected by 58 volunteers. Debris characterization identified that by volume the majority came from fast food containers, bags, and plastic covering from Glovis car lots, while by weight, the majority came from scrap metal, bolts, misc metal, and wood. ting efforts include

The continuation of these existing marine debris removal efforts, the increased JATO/RATO cannister recovery work and the addition of the new efforts that the Navy is initiating on SNI (annual cleanups, debris characterization study and inclusion of marine debris in the island's Integrated Natural Resources Management Plan) would offset expended materials that are discharged into the marine environment and cannot be immediately recovered and provide for an overall net reduction in marine debris within the Sea Range and surrounding areas.

Explosives Use

The Navy is proposing an expansion in the historic levels of training and testing activities involving explosives. Specifically, the Navy proposes a 2300% increase in gunnery rounds, a 150% increase in surface-to-surface missiles, a 50% increase in air-to-surface missiles and a 35% increase in air-to-surface bombs (see Table 1 on page 6 for exact numbers of each). However, as discussed in further detail below, not all of the ordnance proposed to be used would result in explosions or high levels of underwater sound – in particular, the approximately 281,000 gunnery rounds proposed for use would include many smaller sized rounds that would not generate significantly elevated levels of underwater sound or result in explosions. Additionally, some munitions would be directed at in-air targets and would pose little risk of acoustic or direct injury to marine wildlife.

The explosive munitions proposed to be used at or near the ocean surface are summarized in Table 2 below, adapted from the project's DEIS. In this table, the proposed project is Alternative 1 and the explosive sources are listed in ascending order by explosive weight. In total, the Navy proposes to use up to 3,407 explosive sources per year that would involve five or more pounds of explosive. This would be roughly ten times more than the 355 used per year currently under the baseline condition.

Table 2 - Explosive Sources Quantitatively Analyzed

Bin	Net Explosive Weight1 (pounds [lb.])	Example Explosive Source	Baseline		No Action Alternative		Alternative 1		Alternative 2	
			Annual	7-year Total	Annual	7-year Total	Annual	7-year Total	Annual	7-year Total
E1	0.1–0.25	Medium-caliber projectiles	1,470	10,290	0	0	52,000	364,000	14,200	99,400

CD-0003-20 (Navy)

E3	> 0.5–2.5	Large-caliber projectiles	2,000	14,000	0	0	10,000	70,000	2,230	15,624
E5	> 5–10	5 in. projectile	200	1,400	0	0	3,030	21,210	200	1,400
E6	> 10–20	Hellfire missile	40	280	0	0	160	1,120	40	280
E7	> 20–60	HARM missile	57	399	0	0	50	350	114	798
E8	> 60–100	Standard missile	40	280	0	0	110	770	58	406
E9	> 100–250	500 lb. bomb	12	84	0	0	37	259	15	105
E10	> 250–500	Harpoon missile	6	42	0	0	20	140	5	35

Notes: HARM = High-speed Anti-Radiation Missile, > = greater than. The increase in tempo under each Alternative is mostly a result of an increase in Combat Systems Ship Qualification Trials, as discussed in Section 2.1.4 (Combat Systems Test).

In the DEIS, the Navy explains the proposed activity level as:

...the highest potential annual level of increased tempo for planned operations as identified during interviews with range test managers, test and scheduled training mission requirements, or existing NEPA documents for flight operations, vessel operations, aerial targets, surface targets, and ordnance... Using the anticipated maximum level of potential testing and scheduled training ensures that Alternative 1 meets the purpose of and need for the Proposed Action, ensures adequate capacity to meet surge years to accommodate wartime conditions, and provides the Navy with the capacity to meet long-term testing and scheduled training requirements.

...
Alternative 1 is the preferred alternative because it supports the full spectrum of potential testing and training necessary to respond to a future national emergency crisis and is based on increasing requirements to meet the current geopolitical environment.

These types of activities have the potential to adversely affect marine mammals and wildlife through direct and acoustic injury if they are in proximity to associated explosions. Direct injury would occur to marine mammals located within an explosive blast radius or exposed to materials or fragments ejected from an explosion. Exposure to explosive energy waves underwater are particularly likely to result in injury to air- or gas-filled organs such as lungs and digestive organs. Acoustic injury could result in temporary or permanent loss of hearing ability, either of which would be significant for marine mammals that rely on sound and hearing to communicate and maintain social cohesion, find food, avoid predators, reproduce and care for young.

The analysis in the project DEIS estimates that explosions occurring at or near the ocean surface with five to ten pounds of explosive materials (bin E5 on the table above) would pose a risk of direct injury (non-auditory) to a marine mammal within 115 to 450 feet and a risk of mortality to a marine mammal within 36 to 147 feet. With an increase

CD-0003-20 (Navy)

in explosive weight, these injury and mortality ranges increase. The largest types of explosive munitions proposed to be used (bin E10 in the table above) have much larger predicted ranges to marine mammal injury and mortality (within 328 to 1575 feet and 131 to 623 feet, respectively). Smaller classes of explosives would only be expected to pose a direct (non-acoustic) injury or mortality risk to marine mammals in the immediately surrounding area (80 feet or less).

The Navy's analysis also includes estimates of the ranges predicted for the onset of temporary disturbance and permanent acoustic injuries associated with the use of explosives at or near the ocean surface. Because of the hearing sensitivity of marine mammals, acoustic disturbance and injury can be triggered at much greater distances than the direct (non-acoustic) injury and mortality ranges described above. The specific ranges are estimated for different types of marine mammals based on the latest research on hearing frequencies, sensitivities and sound level thresholds for disturbance and injury. For the most sensitive species (i.e., cetaceans such as harbor porpoises that specialize in high frequency sounds), effects ranges for acoustic disturbance and injuries would be within 558 feet for the smallest types of explosives (bin E1 in Table 2) and within 16 miles for the largest types of explosives (bin E10).

The Navy summarizes the results of its analysis in Appendix C of the project DEIS, the "Predicted Marine Mammal Effects Resulting from Navy Activities Involving Use of Explosives at or Near the Ocean's Surface" (https://pmsr-eis.com/portals/pmsr-eis/files/EIS/Draft_EIS/section/PMSRDEISAppendixCEstimatedMarineSpeciesImpactsTablesApril2020.pdf). This analysis provides a worst-case estimate of adverse impacts in that it assumes no avoidance behavior on the part of marine mammals and does not integrate the likely benefits that would result from the impact avoidance and minimization measures proposed to be implemented by the Navy.

The project's DEIS further describes the analysis as follows:

Basically, the quantitative analysis for use of explosives detonating at or near the water surface takes into account the type of Navy activity, the marine species density in locations where activities occur, acoustic modeling of underwater sound, and other environmental factors such as seasonal changes in the density and distribution of marine mammals. It is important to note that underwater acoustic effects numbers, as presented in this appendix, are the summations of estimated fractional probability of marine mammal exposures to underwater sound, not necessarily the number of individuals impacted. For example, some individual marine mammals could be impacted several times, while others in the population may not experience any impacts as a result of Navy activity.

Of the 35 marine mammal species analyzed as present within the Sea Range area, the DEIS analysis estimates that adverse impacts would occur to 20 of them on an annual basis as part of the proposed project. These impacts would be limited to those from acoustic stressors (behavioral responses, temporary or permanent impacts to hearing). The DEIS concludes that no direct injury or mortality to any marine mammals would

CD-0003-20 (Navy)

occur and the Commission is not aware of any past reports of such incidents within the Sea Range. [Exhibit 3](#) to this report provides a table showing the species that would be affected as well as the type of effects and number of occurrences.

The most numerous impacts under the worst-case scenario analyzed are anticipated to occur to species of dolphin and porpoise commonly found within the open ocean portions of the Sea Range, with 406 annual incidents of temporary hearing impairment (also referred to as a temporary threshold shift or TTS) and 49 annual incidents of permanent hearing impairment (permanent threshold shift or PTS) to the Dall's porpoise and 65 TTS incidents and 15 PTS incidents affecting the short-beaked common dolphin per year. Harbor seals are also anticipated to experience large numbers of acoustic impacts under the worst-case scenario analyzed in the project DEIS: 120 incidents of TTS and 14 incidents of PTS per year.

Of the large whale species, acoustic impacts to blue, fin, gray and humpback whales are all analyzed to include between four and seven incidents of TTS per year. Only one incident to PTS is predicted under the worst-case scenario analyzed. This would affect the fin whale. All other predicated effects to large whales would be behavioral disturbance.

Across all 20 species of marine mammals likely to be affected, the DEIS analysis indicates a combined total of 772 incidents of behavioral disturbance, 771 incidents of TTS and 116 incidents of PTS per year are predicted.

As previously noted, however, these impact estimates are based on worst-case modeling that does not integrate those risk avoidance and minimization measures that the Navy proposes to implement or those that may be successfully employed by marine mammals (such as moving out of the affected area). Regarding the measures proposed to be implemented by the Navy, two are expected to reduce acoustic impacts, particularly for large whales: (1) the avoidance of most of the portions of the Sea Range that have been designated Biologically Important Areas for whales and porpoises due to the consistently high densities of animals observed within them; and (2) the use of vessel- and aircraft-based monitors to help confirm that proposed training and testing sites are devoid of marine mammals prior to the initiation of training and testing activities. These and other mitigation measures are discussed in detail later in the report.

Biologically Important Areas

As the Commission found in Consistency Determination No. CD-0001-18:

The [Biologically Important Areas] designation was created to synthesize decades of scientific research, monitoring and marine mammal surveys and to serve as a tool for resource management agencies responsible for integrating the best available scientific understanding into decision making. Each Biologically Important Area (BIA) was established as a result of a four year long process involving scores of scientific experts and decades of research results and data on marine mammal

CD-0003-20 (Navy)

biology, behavior, and spatial use trends. The BIA sites represent spatially explicit migratory corridors, feeding grounds, breeding aggregations, and critical habitats for small resident populations of marine mammals. The only sites that received the designation are those for which an overwhelming amount of data and scientific consensus is available. As noted in the report describing the BIA designation process and intent of the designation (Calambokidis et al, 2015):

The goal of identifying BIAs is to synthesize existing biological information in a transparent format that is easily accessible to scientists, managers, policymakers, and the public for use during the planning and design phase of anthropogenic activities for which U.S. statutes require the characterization and minimization of impacts on marine mammals.

As such, the BIAs identified off the coast of California represent areas of special biological significance under Section 30230 of the Coastal Act and are therefore required to be provided with special protection.

The National Marine Fisheries Service has identified seven distinct sites partially or wholly within the Sea Range as Biologically Important Areas (BIAs). Each area is focused on an individual species and a particular life stage or season. All seven BIAs and their location relative to the Sea Range boundaries is shown in [Exhibit 4](#). Although marine mammals are found throughout the entirety of the Sea Range, these seven areas represent critically important sites for some of the most endangered and imperiled species known to be present within it.

For example, the northern portion of the Sea Range overlaps with a section of the BIA established for the small, year-round resident Morro Bay population of harbor porpoise. The southern end of this BIA also partly overlaps with two others near Point Conception that were established for seasonal feeding aggregations of humpback and blue whales. Two other areas designated as BIAs for seasonal blue and humpback whale feeding aggregations are also found around San Miguel and Santa Rosa Islands and another includes migratory pathways for gray whales that extend along the mainland Santa Barbara and Ventura County coasts and on both sides of the Channel Islands. The seventh BIA within the Sea Range is located near San Nicolas Island in an area frequently used by blue whales from June through October.

In its November 4, 2020 letter to Commission staff (included as [Exhibit 5](#)), NRDC highlights the importance of these BIAs and densities of whales they support [footnotes provided in original]:

NMFS and its experts focused their BIAs for the west coast on areas with consistently high sighting concentrations, using data from years of coastal small-boat surveys that were designed to maximize encounters with target species, as well as from other sources.⁵ The nine BIAs for blue whales represent only 2% of U.S. waters in the West Coast region but encompass 87% of the sightings documented; similarly, the seven BIAs for humpback whales represent 3% of U.S.

CD-0003-20 (Navy)

waters in the West Coast region, but the areas encompass 89% of the sightings documented.⁶ As further evidence of the importance of these areas, a concordance was observed between a number of the BIAs—including the three blue whale and two humpback whale BIAs overlapping with the Point Mugu range—⁷ and the mean predicted densities from habitat density models generated from the Southwest Fisheries Science Center's line-transect data, which have been collected systematically since the 1990s at 3- to 5-year intervals.⁸

Because the BIAs in the Sea Range support such consistent use by endangered whale species, much of the discussion between Commission staff and the Navy regarding anticipated adverse impacts to marine mammals from its proposed use of explosives have focused on these areas. Specifically, Commission staff requested that the Navy consider potential limitations on the type and frequency of training and testing activities that would take place within the BIAs as a means of impact avoidance and minimization. The Navy highly values operational flexibility and its ability to access and use the entirety of the Sea Range, and thus opposes implementation of area-based restrictions. However, through discussions with Commission staff, the Navy has been able to confirm that five of the seven BIAs are very unlikely to be used for training and testing activities involving explosives or gunnery exercises. These BIAs include those established for the Morro Bay population of harbor porpoise, and seasonal blue and humpback whale feeding aggregations near Point Conception and San Miguel Island. The Navy has no current plans to use these areas for activities involving explosives or ordnance and has provided documentation showing the historic lack of use of the areas for such activities, including during the recent five year period from 2014 through 2018.

In addition to the potential risk to marine mammals that the use of explosives and gunnery in these areas would present, these BIAs are also located near shore in areas with high levels of existing human use as well. Commercial and recreational fishing activities and vessels are commonly found in these areas and they are located in close proximity to commercial shipping lanes and existing oil and gas production facilities such as platforms and pipelines. Accordingly, these five BIAs present a variety of logistical and safety challenges for the Navy and are therefore rarely, if ever used for training and testing activities involving explosives or gunnery exercises. The limited use that does occur is most typically associated with through transit to or from other areas of the Sea Range. During its federal consistency review process, the Navy confirmed that the majority of its proposed training and testing activities involving explosives or gunnery exercises within the Sea Range would be located further from shore and beyond 12 nautical miles – outside of the seaward extent of most of the area's BIAs.

The two remaining BIAs (the gray whale migration BIA and the blue whale feeding BIA near San Nicolas Island) that fully or partly overlap the Sea Range would likely experience greater levels of use by the Navy as part of the proposed project. However, the majority of the gray whale migratory corridor BIA is located outside of the Sea Range or within close proximity to the shoreline in the area typically avoided by the Navy. These portions of the BIA typically experience the highest levels of use by gray whales. While the BIA was established to include all the known pathways through the

CD-0003-20 (Navy)

Southern California Bight for gray whales migrating both north and south along the California coast, the highest numbers are typically close to the mainland coast – particularly during the most vulnerable northward migration for gray whales with calves. As noted in Calambokidis et al 2015:

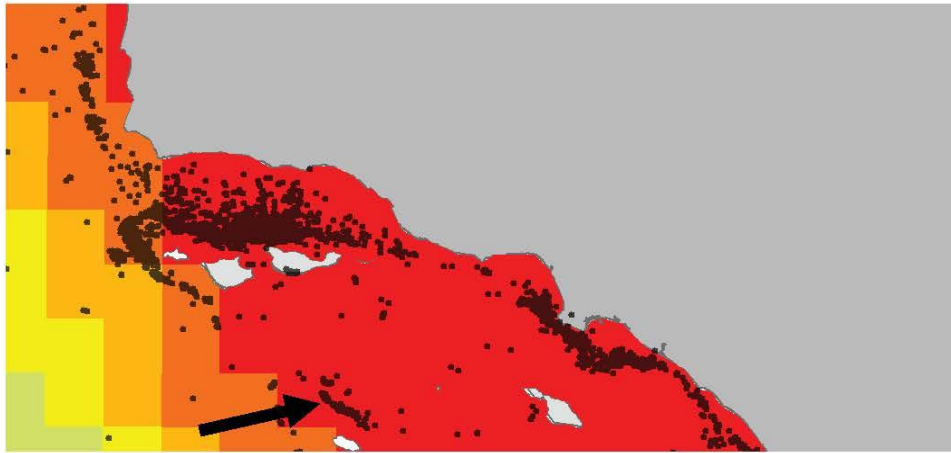
Some gray whales may take a migration path farther offshore, so an additional potential presence buffer extending 47 km from the coastline was added to the BIAs. Although gray whales typically tightly follow the coastline near the mainland, they have been observed taking a more direct route across larger bodies of water in California (Rice & Wolman, 1971; Mate & Urbán-Ramirez, 2003). Particularly during the northbound migration, gray whales with calves migrate closer inside the bay than adults and juveniles. In the Southern California Bight, migrating gray whales may deviate farther from the mainland as some are routinely seen near the Channel Islands (Daily et al., 1993).

Therefore, although a portion of the gray whale migration BIA extends across the Sea Range and into areas more likely to experience greater use for Navy training and testing activities, these portions of the large BIA are expected to support lower densities of gray whales during typical migrations. Further, information regarding past training and testing activities (during the five year period from 2014 through 2018) provide a strong indication that those involving explosives and gunnery exercises are sited in the seaward-most portion of the Sea Range, well beyond the outer edge of the Channel Islands used by gray whales during migration. In its September 24, 2020 response to the Commission staff's request for the Navy to consider limiting its activities within the gray whale migration BIA, the Navy stated:

Almost all gray whales moving through the PMSR [Sea Range] are from the non-endangered Eastern North Pacific stock. There are no indications that Navy activities would significantly affect the migration behavior of individuals. The gray whale migration area covers the entire eastern portion of the PMSR Study Area, including the high use area around SNI. The Navy cannot avoid or reduce the use of this large portion without significant impact on Navy readiness.

The final BIA located within the Sea Range is a small area north of San Nicolas Island consistently shown to support blue whale feeding during the months of June through October. As shown the figure below (adapted from Calambokidis et al 2015), the area was established to include the site identified with the black arrow. This is a discrete zone in which a large number of sightings have occurred (black dots) and in which the predicted density of blue whales is high (as indicated by the red color). However, relative to the BIAs established to encompass the sightings within the Santa Barbara Channel and around the Palos Verdes Peninsula farther south (the more dense accumulations of black dots in the figure), fewer whales have been observed in this area near San Nicolas Island (this may be partially due to differences in observation effort, however).

CD-0003-20 (Navy)



Throughout its discussions with Commission staff, the Navy has maintained that this site is essential for training and testing operations due to its proximity to San Nicolas Island, a key land facility within the Sea Range. In its September 24, 2020 response to questions from Commission staff, the Navy summarizes the challenges associated with limitations on its use of the blue whale BIA near San Nicolas Island:

The San Nicolas Island (SNI) blue whale feeding area overlaps a primary testing and training area used for decades (Enclosure 3). The area is essential for testing and training given its proximity to SNI. The area is used during activities requiring an aerial target impact area, missile launches from SNI, aerial and ship-based gunnery events, and sea surface missile launches. Moving these activities farther from SNI and outside of the SNI Feeding Area would not be possible, because the added distance would substantially limit the capabilities of the extensive range support infrastructure, such as ground-based telemetry, radar, antenna, and other ground-based command transmitter systems that provide for the safe, controlled testing of unmanned targets, platforms and missiles.

Adverse Impact Avoidance, Minimization and Mitigation Measures

Rather than avoiding the use of the blue whale BIA near SNI and the entirety of the gray whale BIA located within the Sea Range, the Navy would instead rely on the range of adverse impact avoidance and minimization measures it has developed over the years for marine mammals. These measures would also be implemented during all Navy operations and activities involving explosive materials and gunnery exercise throughout the Sea Range and primarily rely on the establishment of "mitigation zones" around the intended targets.

As described in Section 5.0 of the project DEIS - Standard Operating Procedures and Mitigation - these mitigation zones can vary in diameter from 200 yards to 2,500 yards around the intended target based on the weight of explosives proposed to be used. The

CD-0003-20 (Navy)

DEIS excerpt below describes the protocol implemented for the mitigation zone for deployment of explosive bombs. Nearly identical protocols are used for explosive missiles and other types of ordnance:

- Prior to the initial start of the activity (e.g., when arriving on station):
 - Observe the mitigation zone for floating vegetation; if observed, relocate or delay the start until the mitigation zone is clear.
 - Observe the mitigation zone for marine mammals and sea turtles; if observed, relocate or delay the start of bomb deployment.
- During the activity (e.g., during target approach):
 - Observe the mitigation zone for marine mammals and sea turtles; if observed, cease bomb deployment.
- Conditions for commencing/recommencing of the activity after a marine mammal or sea turtle sighting before or during the activity:
 - The Navy will allow a sighted marine mammal or sea turtle to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment) until one of the following conditions has been met: (1) the animal is observed exiting the mitigation zone; (2) the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended target; (3) the mitigation zone has been clear from any additional sightings for 10 min.; or (4) for activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.
- After completion of the activity (e.g., prior to maneuvering off-station):
 - When practical (e.g., when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe the vicinity of where detonations occurred; if any injured or dead marine mammals or ESA-listed species are observed, follow established incident reporting procedures.
 - If additional platforms are supporting this activity (e.g., providing range clearance), these assets will assist in the visual observation of the area where detonations occurred.

In addition to the establishment and monitoring of mitigation zones, the Navy also uses a notification system to alert training and testing event participants if the presence of marine mammals within a proposed activity area is likely. This notification process is described in correspondence to Commission staff from the Navy as follows:

The Navy uses recent marine mammal sighting data to determine general presence of marine mammal species in the Southern California area and issue alerts to event managers. These data are not used to alter schedules or siting of events because of geographic bias in marine mammal reporting, lag times in data reporting, and the highly dynamic nature of cetacean movements. We instead focus efforts on event

CD-0003-20 (Navy)

participant awareness and marine mammal surveys in a hazard area within hours or minutes of an event.

[In addition], there are general notifications to the fleet units each whale season and more specific alerts when there are recent reports of marine mammal activity in the region. At these times, participants in PMSR [Sea Range] events are reminded to be particularly vigilant for marine mammal activity, reporting procedures are reviewed and reinforced when marine mammals are sighted. These types of notifications are in addition to the marine mammal surveys required prior to an event. Below are a couple of recent examples of language used for briefings prior to an event:

October 2020:

Large whales are now congregating and foraging along the coast of California. Blue, fin and humpback whales and large aggregations of dolphins may be present in the area of the event. Area-wide requirements apply. The crews of vessels associated with the event must be vigilant for marine mammals when transiting and maintain a safe distance from any marine mammals that are observed - 500 yards from large whales and 200 yards from other marine mammals (excluding bow-riding dolphins). Test managers and test conductors are advised to: 1) Brief all event participants that marine mammals may be present in the vicinity of the event and to be particularly vigilant for whales or large aggregations of dolphins; 2) Remind Naval units to access the Protective Measures Assessment Protocol tool, as required by their respective commands; 3) Ask all participants to report to the control room sightings of large whales and/or large aggregations of marine mammals where surface detonations may occur; 4) Lookouts on the firing vessel should scan an area 1000 yards around intended target(s) carrying live munitions immediately prior to firing; and, 5) Relocate, delay or cease-fire if marine mammals are observed or may swim within 1000 yards of munitions that may detonate at or near the sea surface.

March 2020:

During this time of year, gray whales may be traveling north through the hazard area with most whales traveling within 5-8 miles of shorelines (islands and coast). We received a recent report of increased humpback whale activity in the Santa Barbara channel. This is consistent with usual patterns of increased humpback whale numbers this time of year as whales come to the area to feed. Fin whales are often observed in areas offshore, including the hazard area for this event. It is a little early in the year to be seeing blue whales but they could show up at any time. Remind vessel crews that marine mammals may be present, to be particularly vigilant for large whales and to maintain safe distances when in the vicinity of marine mammals (as described above). Ask all participants to report to the control room sightings of large whales and/or large aggregations of marine mammals. Information on marine mammal activity in the vicinity of events is especially valuable for assessment of risk for

CD-0003-20 (Navy)

future activities and may be useful should marine mammals be in harm's way during this event.

The time spent surveying for marine mammals varies with the size of the area being searched. A typical flight would include approximately 1-1.5 hours of search time for an area within 5 miles of the target location. Smaller search areas would require less time. In all cases, multiple passes are made over the target location.

Effort does not change when there have been recent sightings in the general vicinity. In this way, our survey and notification efforts parallel efforts to notify ships to be more vigilant as they traverse designated shipping lanes.

Navy personnel and event managers also consider available sources of recent information regarding whale presence and locations. However, as noted in the following excerpt from correspondence provided to Commission staff in response to an informational request, these data sources can have limited utility due to their focus on portions of the Sea Range in which activities involving explosives are unlikely to be sited (the area around the Channel Islands National Marine Sanctuary, for example) and areas outside the Sea Range such as the Santa Barbara Channel:

The Navy queries "real-time" whale/dolphin sighting record sources in the days leading up to an event. These include Whale Safe (whalesafe.com), Island Packers marine mammal sightings updated on their website daily (islandpackers.com/marine-mammal-sightings) and any recent reports of cetacean strandings in the local area. Whale Safe focuses on three large cetacean species (blue, humpback and fin whales) whereas Island Packers reports on a broad range of cetacean species they observe.

Unfortunately, these sources of information focus on the Santa Barbara Channel area and are highly biased towards areas where whale watch boats travel (particularly the route between Santa Barbara Harbor and Painted Cave at Santa Cruz Island). The Whale Safe acoustic buoy is located on the north side of Santa Cruz Island favoring whale detections in the Santa Barbara channel and there is a lag time in reporting whale detections based on time needed to upload of data, analysis and quality control (24-48 hours). Aerial surveys conducted by the Channel Islands National Marine Sanctuary are relatively infrequent and target the shipping lanes in the Santa Barbara Channel. The blue whale distribution model used by Whale Safe provides a general view of predicted distributions but it is not updated on a frequency that is useful for day-to-day or even week-to-week predictions.

As additional sources of real-time and near real-time data become available in other portions of the Sea Range, however, the Navy has confirmed that they will continue to be integrated into planning and event management decisions. For example, future deployments of passive acoustic monitoring devices in other portions of the Sea Range may provide greater insights into marine mammal presence within more heavily used

CD-0003-20 (Navy)

portions of the Sea Range to assist with scheduling and siting of training and testing activities.

In addition, the Navy has also committed to be more transparent in reporting the extent of training and testing activities that are carried out within BIAs. This commitment includes reporting to the Commission, on an annual basis, if any training or testing activities were carried out within BIAs and the number of events held in such areas. The Commission will use these annual reports to determine if they provide new information relevant to the Commission's federal consistency review. If they do provide new information or changed circumstances related to marine resources that calls into question whether the activities are continuing to be carried out in a manner consistent to the maximum extent practicable with the Coastal Act, the Commission may re-open its federal consistency review, as provided in CFR Sections 930.45.

Ship strikes

Collisions with large vessels ("ship strikes") is recognized as the leading cause of death for blue and fin whales, and the second highest source of mortality for humpback whales off of the U.S. West Coast (Carretta et al 2015; Rockwood et al 2017). All three species are recognized as Endangered under the federal Endangered Species Act. Along with gray whales, these are four of the most common whale species found off of the southern California coast and within the Sea Range. The Navy is proposing to carry out 532 training and testing activities per year involving boat and/or vessel operations within the Sea Range. This is estimated to be a roughly 10% increase over baseline levels from previous years.

In the DEIS prepared for the proposed project, the Navy acknowledges the risk ship strikes pose to whales. The DEIS also establishes the high number of ship strikes involving commercial shipping vessels in and around the Santa Barbara Channel and absence of recent or historic incidents involving Navy vessels within the Sea Range³:

In areas of both high whale density and a high volume of commercial vessel traffic, whales are predicted to be susceptible to elevated risk for commercial vessel strike (McKenna et al., 2015; Moore et al., 2018; Rockwood et al., 2017). As detailed in Section 3.0.5.5.1 (Vessel Noise), the existing marine environment in the PMSR [Sea Range] Study Area is dominated by non-Navy commercial vessel traffic into and out of the Ports of Los Angeles and Long Beach (see Figure 3.0-1). As detailed in that section, vessel traffic in the PMSR Study Area is mainly associated with the ports of Los Angeles and Long Beach, which are adjacent to one another, and together form the busiest commercial port in the U.S. and the sixth busiest commercial port traffic in the world (Port of Los Angeles, 2017). Data from the ports of Los Angeles/Long Beach indicate there are on average in excess of approximately 7,000 commercial vessel transits per year associated with visits to just those ports (American Association of Port Authorities, 2017; Port of Los

³ The Navy does, however, note the occurrence of two ship strike events involving fin whales near the Sea Range in 2009. The Navy has noted that these events occurred during transit and normal underway vessel operations.

CD-0003-20 (Navy)

Angeles, 2017; U.S. Army Corps of Engineers, 2017), which does not account for a substantial number of additional commercial vessels transiting the PMSR bound for other major ports.

For recent five year reporting periods, NMFS Technical Memoranda documented 65 vessel strikes to marine mammals off the U.S West Coast (Carretta et al., 2019a) and approximately 28 vessel strikes to marine mammals in Alaska (Helker et al., 2019). While some risk of a vessel strike exists for all the U.S. West Coast waters, 74 percent of blue whale vessel strikes, 82 percent of humpback whale vessel strikes, and 65 percent of fin whale vessel strikes resulting in mortalities occur in the shipping lanes associated with the ports of San Francisco and Los Angeles/Long Beach (Rockwood et al., 2017).

...
Records of Navy vessel strikes have been kept since 1995. Navy policy (Chief of Naval Operations Instruction 3100.6 H) is to report all whale strikes by Navy vessels. By information agreement, the information from those reports has been provided to National Oceanic and Atmospheric Administration and NMFS on an annual basis. Since 1995, only the Navy and the U.S. Coast Guard have been reporting vessel strikes to NMFS in this manner, so all whale strike statistics are skewed by a lack of comprehensive reporting by all non-Navy vessels that may experience vessel strike. In the 24 years of reporting by the Navy, there have been no known Navy vessel strikes to marine mammals in the PMSR Study Area, up to and including the present (April 13, 2020).

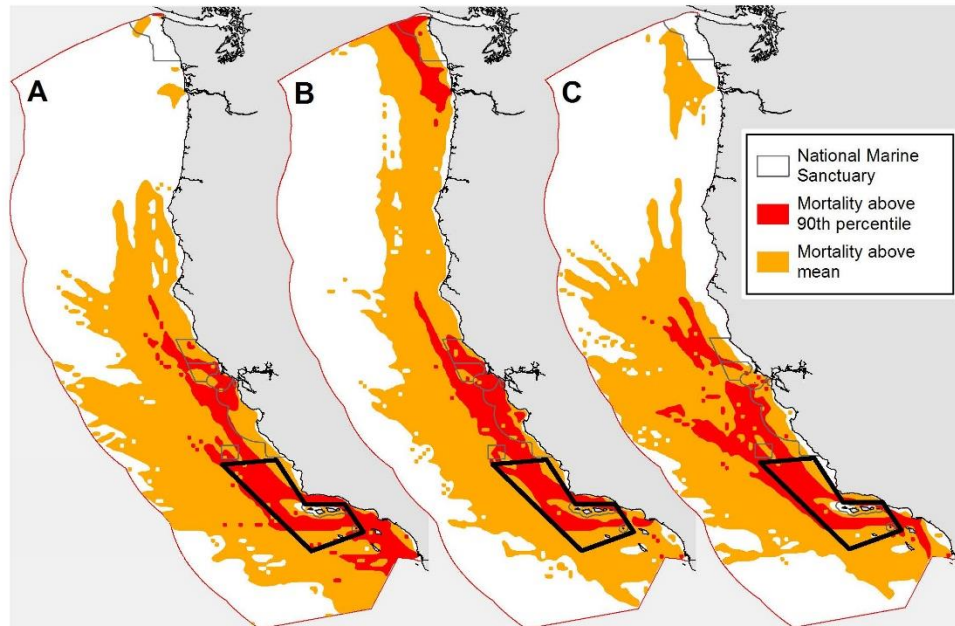
The project DEIS also notes that Navy vessels only made up roughly 4% of total vessel traffic offshore of southern California between 2011 and 2015, logging approximately one million ship hours compared to over 27 million by commercial vessels during one monitoring effort.

The project DEIS therefore argues that although the issue of ship strikes is a significant one – particularly in southern California – activities and transits by non-Navy vessels present the largest risk to whales. While true, the Navy is nevertheless proposing a substantial amount of vessel activity within the Sea Range as part of its project. While small in comparison to the amount of commercial shipping traffic the area receives, the 532 proposed activities and operations involving Navy vessels and support boats would still be a large amount in absolute terms.

In addition, portions of the Sea Range that would be used for these Naval activities have been specifically identified as areas in which the risk of ship strike to whales is particularly high for all types of vessels. Specifically, in their comprehensive spatial assessment of ship strike risk to blue, fin and humpback whales across the West Coast, Rockwood et al (2017) found that: (1) the number of ship strike mortalities to these species is likely much higher than is indicated in formal records and observations; and (2) consistent spatial patterns of high risk areas emerge for all three species. The figure below shows in darker orange the areas in which the majority of predicted ship strike mortalities for each species occur and in lighter orange the areas in which 93 to 98% of

CD-0003-20 (Navy)

mortalities occur. In other words, vessel activity within these areas poses the most significant threat to the three whale species. For reference, the general location of the Sea Range in southern California is outlined in black in each figure.



Areas classified as above the study area mean (orange) and greater than the study area 90th percentile (red). Panels depict whale mortality for blue (A), humpback (B), and fin (C). Dashed lines represent the National Marine Sanctuaries.

It is therefore important to help ensure that ship strike risk is minimized in the Sea Range for all vessels and that the focus not rest solely on commercial shipping traffic and shipping lanes (also referred to as Traffic Separation Scheme or TSS). As Rockwood et al (2017) notes in the conclusion of its research findings:

While strike intensity is high for all three species in both the San Francisco and Southern California TSSs, the combined mortality for these two areas represents just 12% (blue whale), 17% (humpback whale) and 3% (fin whale) of total mortality. While strike intensity is high, the percent of fin whale mortality is minor in both California lanes. For both blue and humpback whales, strike intensity is moderate for the Washington lanes, but due to the small area within the study area, percent mortality is negligible.

...

Current efforts to mitigate ship strikes on the west coast are limited to the TSSs in the Southern California Bight and outside the San Francisco Bay Area. Indeed, these areas show the highest intensity of mortality for all three whale species (Table 6). While the relatively small area covered by the TSSs makes them most tractable for regulation, it also means that the proportion of mortality represented is

CD-0003-20 (Navy)

small. Under the hypothetical scenario where 90% of strike mortality was eliminated in all three TSSs, remaining Model 2 mortality would total 16, 18, and 41 deaths for blue, humpback and fin whales, respectively. Therefore, while regulation in shipping lanes is an important component of ship strike mitigation and a logical starting place, if limited to the TSSs, even the most successful regulation will not be sufficient to decrease ship strikes to anywhere near PBR levels [levels that would be sustainable].

In the project DEIS, the Navy describes a variety of characteristics of its vessels and their current and proposed operations that would serve to minimize ship strike risk and help account for the lack of ship strike incidents within the Sea Range involving Navy vessels:

The absence of Navy vessel strikes associated with Navy activities occurring at the PMSR can be attributed to a number of factors related to the differences between Navy vessel design and operation and that of commercial vessels. Table 3.0-11 provides the number of vessels used during the various types of Navy's proposed activities. Activities involving Navy vessel movement would be widely dispersed throughout the Study Area.

...

Large Navy vessels (greater than 18 m in length) operate differently from commercial vessels in ways important to the prevention of whale collisions. For example, the average speed of large Navy ships ranges between 10 and 15 knots, and submarines generally operate at speeds in the range of 8 and 13 knots, while a few specialized vessels can travel at faster speeds. By comparison, this is slower than most commercial vessels where normal design speed for a container ship is typically 24 knots (Bonney & Leach, 2010)... Differences between most Navy ships and commercial ships also include the following disparities:

- The Navy has several standard operating procedures for vessel safety that could result in a secondary benefit to marine mammals through a reduction in the potential for vessel strike. For example, ships operated by or for the Navy have personnel assigned to stand watch at all times, day and night, when moving through the water (i.e., when the vessel is underway). Watch personnel undertake extensive training in accordance with the U.S. Navy Lookout Training Handbook or civilian equivalent. A primary duty of watch personnel is to ensure safety of the ship, which includes the requirement to detect and report all objects and disturbances sighted in the water that may be indicative of a threat to the ship and its crew, such as debris, a periscope, surfaced submarine, or surface disturbance. Per safety requirements, watch personnel also report any marine mammals sighted that have the potential to be in the direct path of the ship, as a standard collision avoidance procedure. As described in Section 5.3.4.1 (Vessel Movement) of this EIS/OEIS, Navy vessels are required to operate in accordance with applicable navigation rules... These rules require that vessels proceed at a safe speed so proper and effective action can be taken to avoid collision and so vessels can be stopped within a distance appropriate to the prevailing circumstances and

CD-0003-20 (Navy)

conditions. In addition to complying with navigation requirements, Navy ships transit at speeds that are optimal for fuel conservation, to maintain ship schedules, and to meet mission requirements. Vessel captains use the totality of the circumstances to ensure the vessel is traveling at appropriate speeds in accordance with navigation rules. Depending on the circumstances, this may involve adjusting speeds during periods of reduced visibility or in certain locations.

- Many Navy ships have their bridges positioned closer to the bow, offering good visibility ahead of the ship.
- There are often aircraft associated with the training or testing activity, which can detect marine mammals in the vicinity or ahead of a vessel's present course.
- Navy ships are generally much more maneuverable than commercial merchant vessels if marine mammals are spotted and it becomes necessary to change direction.
- Navy ships operate at the slowest speed possible consistent with either transit needs, or training or testing need. While minimum speed is intended as a fuel conservation measure particular to a certain ship class, secondary benefits include being better able to spot and avoid objects in the water, including marine mammals.
- In many cases, Navy ships will likely move randomly or with a specific pattern within a sub-area of the Study Area for a period of time, from one day to two weeks, as compared to straight line point-to-point commercial shipping.
- Navy overall crew size is much larger than merchant ships, allowing for more potential observers on the bridge.
- When submerged, submarines are generally slow moving (to avoid detection), and therefore marine mammals at depth with a submarine are likely able to avoid collision with the submarine. When a submarine is transiting on the surface, there are Lookouts serving the same function as they do on surface ships.
- The Navy will implement mitigation to avoid potential impacts from vessel strikes on marine mammals (see Chapter 5, Standard Operating Procedures and Mitigation). Mitigation includes training Lookouts and watch personnel with the Marine Species Awareness Training (which provides information on sighting cues, visual observation tools and techniques, and sighting notification procedures), requiring vessels to maneuver to maintain a specified distance from marine mammals during vessel movements.
- The Navy will continue to issue a seasonal awareness notification message for Navy ships and aircraft operating in SOCAL to alert them to the seasonal increased presence of concentrations of large whales, including blue, gray, or fin whales as follows: Blue Whale (June–October), Gray Whale (November–March), and Fin Whale (November–May). To maintain safety of navigation and to avoid interactions with large whales during transits, the message instructs vessels to remain vigilant to the presence of large whale species, that when concentrated seasonally, may become vulnerable to vessel strikes. Platforms will use the information from the awareness notification messages to assist their visual observation of applicable mitigation zones during training and testing activities and to aid in the implementation of procedural mitigation. This Navy message is also consistent with a message issued by the U.S. Coast Guard for vessels operating in the 11th district (covering the waters in and around the PMSR) as a Notice to Mariners that also

CD-0003-20 (Navy)

informs operators about the presence of populations of endangered blue, humpback, and fin whales in the area (see U.S. Coast Guard (2019) for further details).

Among these measures, the use of slow vessel speeds – particularly those at or below 10 knots – would be expected to provide some of the greatest benefits in terms of reducing ship strike risks. As the Commission found in its 2018 Consistency Determination for the California portion of the Navy's Hawaii-Southern California Training and Testing Program (CD-0001-18):

The relationship between vessel speed and the likelihood and consequences of collisions with large whales has been closely evaluated in recent years as a result of the significant threat posed by ships to the highly endangered North Atlantic right whale and the series of ship strike mortalities recorded within the Santa Barbara Channel in 2007 (five blue whale mortalities from ship strikes within two months). This research has shown that a 10-knot speed limit reduced the risk of fatal ship strikes to right whales by 57% (Wiley et al. 2011) and that generally, vessel speed restrictions reduced total ship strike mortality risk levels to whales by 80–90% (Conn and Silber 2013).

In its November 4, 2020 letter to Commission staff recommending certain conditions of concurrence be considered ([Exhibit 5](#)), the Natural Resources Defense Council (NRDC) also highlights the importance of vessel speed reduction as a risk minimization strategy, particularly in areas of expected high fin whale density in the deeper seaward portions of the Sea Range:

Given the localized residency and the tendency of fin whales to congregate, restrictions related to vessel speed constitute an important mitigation measure that has not adequately been analyzed in the Navy's DEIS or consistency determination, and could contribute to effective mitigation of harm to fin whales, both as a result of reduced noise and reduced ship-strike risk.

Commission staff evaluated and asked the Navy to consider the feasibility and potential benefits of implementing additional measures to reduce ship strike risk, including general or seasonal speed limits for Navy vessels and speed limits for certain types of activities (transits to and from training and testing areas, during towing operations, and during activities at night or during inclement conditions). In response, the Navy further emphasized the differences between its operations on the Sea Range and those commercial shipping vessel activities known to be responsible for numerous whale mortalities in recent years. In addition, the Navy also described how the low speeds used by Navy vessels during most of their operations within the Sea Range were already largely consistent with a ten knot speed limit. For example, the median surface speed of two of the classes of vessels used on the Sea Range from 2011 through 2015 was below 12 knots. Considering this median speed includes those training and testing operations that require elevated speeds, its level slightly above ten knots indicates that Naval vessels typically operate at speeds that would be expected to substantially

CD-0003-20 (Navy)

reduce ship strike risk. The Navy has indicated that this would continue with implementation of the proposed project.

Although a more firm adherence to a ten knot vessel speed limit when faster speeds are not required for operational or training and testing needs would undoubtedly reduce ship strike risks further, the low speeds proposed to be used by Navy vessels during typical operations within the Sea Range would be combined with the other measures the Navy is proposing to implement to minimize ship strike risk (including the use of vessel and aerial lookouts, seasonal notifications, and marine species awareness training for vessel personnel). Based on the low number of ship strike incidents involving Naval vessels within the Sea Range, these types of measures have been shown to be effective since the Navy began recording and reporting ship strike incidents to the National Marine Fisheries Service (NMFS) in 1995 and are expected to continue to minimize ship strike risk.

In addition to implementing these measures, the Navy is also continuing to carry out a Lookout Effectiveness Study to evaluate the performance of Navy personnel in spotting marine mammals relative to professional marine mammal observers (MMOs). The results from past years of this study consistently show that the vast majority of marine mammal observations made by MMOs are missed by Navy Lookouts.⁴ The results of the ongoing Lookout Effectiveness Study should continue to be used by the Navy to help identify needs and opportunities for enhancing the abilities of Lookouts to detect marine mammals – including through revisions and improvements to the marine species awareness training module provided to all Navy Lookouts and through the integration of additional data sources from observation tools (such as infrared instruments and passive acoustic listening devices that can aid in determining marine mammal presence). Such efforts appear to have been made by the Navy following two ship strike incidents in southern California in 2009 in the form of an update to Lookout training protocols and appear to be needed once more as Lookouts continue to be significantly outperformed by more trained and experienced MMOs. While activities within the Sea Range often have the benefit of Lookouts and personnel carrying out monitoring duties both on vessels and simultaneously on aircraft – thus increasing observer coverage and success, efforts to improve the effectiveness of Navy Lookouts would nevertheless serve to enhance this impact avoidance and minimization measure. The Navy has not provided a firm commitment to implement any specific strategies for improving the effectiveness of its Lookouts but has confirmed that as new techniques, information sources and methods become available, they will be considered and integrated when practical.

Finally, the Navy has also agreed that if a ship strike incident occurs in the Sea Range in the future and a report is submitted to NMFS (currently the standard protocol), the Commission will also receive a copy of the report. This effort to further increase

⁴ The Commission's adopted findings in support of its decision on the Navy's most recent consistency determination for its training and testing program for the SOCAL Range Complex (CD-0001-18) discuss these past results in additional detail – available here: <https://documents.coastal.ca.gov/assets/marine-acoustics/1%20CD-0001-18%20CD%20Navy%20HSTT%20Adopted%20Findings.pdf>

CD-0003-20 (Navy)

transparency and strengthen the Navy's partnership with the Commission on resource protection would provide a valuable supplement to the Navy's other efforts to reduce the risk of ship strikes within the Sea Range (low vessel speeds, avoidance of areas of expected high whale density, and continually evolving training for Lookouts). If such an incident occurs, the Commission will review the associated report to determine if it provide new information relevant to the Commission's federal consistency review. If it does provide new information or changed circumstances related to marine resources that calls into question whether the activities are continuing to be carried out in a manner consistent to the maximum extent practicable with the Coastal Act, the Commission may re-open its federal consistency review, as provided in CFR Sections 930.45.

In response to the additional concerns raised by the Natural Resources Defense Council (NRDC) in its December 4, 2020 letter to the Commission, the Navy provided Commission staff with the following additional information and clarification regarding the speed of its vessels within the Sea Range:

To NRDC's point on vessel speeds, the Navy already transits at safe speeds and has other protective measures in place during transits, such as using Lookouts and maintaining safe distances from marine mammals (e.g., 500 yards for whales and 200 yd. around other marine mammals except bow-riding dolphins and pinnipeds hauled out on man-made navigational structures, port structures, and vessels). A DoD [Department of Defense] funded study (Mintz, 2016) on commercial and military vessel traffic in SOCAL found that median vessel speed for Navy vessels in the Santa Barbara Channel and nearshore areas of the PMSR [Point Mugu Sea Range] and SOCAL [operational area] was between 3 to 8 knots. Speed increased as vessels transited further offshore, between 10-16 knots, with the higher value on the furthest offshore areas of the PMSR. Commercial tankers and cargo median vessel speeds were between 8-14 knots for the same nearshore areas. Mintz (2016) indicated that Navy vessels make up only 4% of the overall vessel traffic off Southern California (PMSR/SOCAL). The data collected for Mintz (2016) was collected via AIS for commercial vessel data and SeaLink for military vessels (a classified Navy/Coast Guard database maintained by the Office of Naval Intelligence).

The Navy also shared with Commission staff information about the ongoing study being carried out to evaluate the effectiveness of its vessel-based lookouts (the "Lookout Effectiveness Study") and identify potential opportunities for enhancing it:

The Lookout study entails embarking certified Navy civilian scientist observers periodically on Navy ships in support of a comparative lookout effectiveness study to reemphasize the importance of lookout responsibilities to all ships. Results from this study will be used to make recommendations for further improvements to lookout training or any changes in our current mitigation protocols. Upon review of the study by NMFS, the study will be posted on the Navy's monitoring website in the future. The Navy will offer to the Commission updates on our ongoing research

CD-0003-20 (Navy)

and monitoring, including the Lookout Effectiveness Study until such time it is publicly released. At this time, the Navy is not collecting new data for the study due to COVID-19 and other impacts. However, the data is being reviewed and the results will be fully analyzed for completion of the study in 2021 or 2022 at latest. If the results require alterations to Navy's compliance requirements (to include mitigations) for any at-sea training or testing, then Navy would address through any applicable laws, to include CZMA, ESA or MMPA.

With this additional commitment from the Navy to share the results of the Lookout Effectiveness Study with the Commission and keep it updated regarding other ongoing research and monitoring, the Commission will be provided with a further opportunity to gather more information that can be used to determine if new information relevant to the Commission's federal consistency review is available. If such information calls into question whether the activities are continuing to be carried out in a manner consistent to the maximum extent practicable with the Coastal Act, the Commission may re-open its federal consistency review, as provided in CFR Sections 930.45.

NRDC Recommendations

The Natural Resources Defense Council (NRDC) has a long history of careful review of Navy operations and activities and has been the primary interested party involved in most of the Commission's past federal consistency reviews of at-sea operations in southern California. NRDC has been involved in the NEPA process for the proposed project and submitted a letter to Commission staff on November 4, 2020 (included as [Exhibit 5](#)) outlining its recommendations:

In view of the projected increase in Navy activity and its impacts on endangered baleen whales and other marine mammals, we respectfully recommend that the Commission conditionally concur with the Navy's Consistency Determination, setting the following conditions:

- (1) The exclusion of Navy testing and training activities from all current designated Biologically Important Areas on the Point Mugu range, with a reopening of consistency review should an upcoming assessment by NMFS modify the existing areas;
- (2) The adoption of measures to reduce ship-strike risk of fin whales, in areas of seasonally high fin whale concentrations (i.e., the 200 to 1000m isobath in Southern California, during the months of November through February); and
- (3) The development and implementation of an effective dynamic monitoring-and-mitigation system, including (1) the design of a monitoring system that utilizes both Navy and extramural data sources and provides, at minimum, robust passive acoustic monitoring; (2) the publication of a full and transparent mitigation protocol, specifying command chains and real-time actions; and (3) a timely assessment of the system's effectiveness, with results made available to the Coastal Commission and the public.

CD-0003-20 (Navy)

NRDC's letter provides background and explanations for each of these recommended conditions and was carefully considered by Commission staff, shared with the Navy and used by Commission staff to help inform its discussions with the Navy. As described in prior sections of this report, the Navy opposes implementation of additional adverse impact avoidance, minimization or mitigation measures, including those recommended by NRDC. The Navy's general position is that it is confident in the success and effectiveness of the measures it currently employs and there has consistently been a lack of direct evidence of harm to marine mammals due to Navy activities within the Sea Range.

Through discussions with Commission staff, however, the Navy has provided clarifications to its proposal that are responsive to some of the conditions that NRDC recommends. For example, the Navy has demonstrated that most of the BIAs in the Sea Range are rarely used for logistical and human health and safety reasons and that the typical operational speeds used by Navy vessels in the Sea Range are close to or below the 10 knot limit that has been identified as an important ship strike risk reduction measure. The Navy has also expressed its willingness to integrate new tools and data sources for tracking marine mammal presence and density as they become available and committed to providing the Commission with additional information in the future to further demonstrate and reinforce these aspects of its operations (including an annual report of activities carried out within BIAs and reports of any future ship strike incidents that occur with Navy vessels in the Sea Range).

Although these steps are meaningful, they do fall short of NRDC's recommendations and several of the items Commission staff asked the Navy to consider and implement. The weight the Navy places on direct evidence of harm or injury to marine mammals as a trigger for implementing additional protective measures is a logical but challenging aspect of the Commission's review of Navy at-sea activities (including the proposed project and past reviews of training and testing on the SOCAL Range such as the most recent Consistency Determination, CD-0001-18). The challenge is mainly associated with the difficulty of visually observing or documenting injured and dead marine mammals at sea. In their recent study evaluating ship strike risks to whales along the West Coast, Rockwood et al (2017) explore and discuss this issue. In the excerpt below, the focus is on mortality due to ship strike but the concept that deceased whales have a low probability of being seen would also apply to other sources of mortality as well. In this excerpt, the numbers in brackets refer to citations to previous research:

Because of whales sinking, ocean currents and carcass decomposition, the rate of recovery for struck whales is very low. Recovery rates specific to blue, humpback and fin whales are unknown, so proxies from other species must be used.

Carcass recovery rates have been estimated for various cetacean species including 17% [61] for right whales, 6.5% for killer whales [62], <5% for grey whales [63], and 3.4% for sperm whales [34]. Right whales are the most buoyant whale species and thus provide a conservative limit scenario for extrapolation [64,65]. Sperm whales

CD-0003-20 (Navy)

have been shown to have negative tissue buoyancy, but positive total buoyancy near the surface [66] so that recovery rates of sperm whales depend on lung inflation upon mortality with whaling records indicating that most float at death [64]. In contrast, blue whales appear to be negatively buoyant at or near the surface given that gliding descent begins at relatively shallow depths [67]. Thus, sperm whales (which have the lowest recovery rate) as well as grey whales are more likely than blue whales to float when deceased [64,65,68]. To produce an improved recovery estimate relative to the right whale rate, we use the average of the sperm, grey, and killer whales. Given that the available evidence [36,64-66,68] suggests the buoyancy of the study species is similar (humpbacks) or less (blue and fin) than these species, this 'best' estimate provides a better proxy. Using a high recovery rate of 17% to produce minimum strike estimates and 5% recovery (the mean of grey, killer and sperm whales) as a best estimate, we extrapolated ship strike mortality from 2006-2016 stranding data (Table 2). The blue whale stranding rate of 1.0 whales/yr. extrapolates to minimum 5.9 mortalities with a best estimate of 20. There were an average of 1.4 humpback strike strandings per year during the last decade, which extrapolates to a minimum 8.2 and best estimate 28 deaths. Fin whales had 1.1 strike strandings per year, leading to minimum 6.4 and best estimate of 22 deaths by extrapolation.

This research is likely, however, to misrepresent the probability of the Navy detecting marine mammal mortalities that may be associated with ship strikes or the use of explosives. This is because Naval vessels are smaller and more likely to detect a collision with a whale and respond to it with an active search (as compared to commercial shipping vessels that are much larger and have been observed unknowingly transporting struck whales into port across their bows). Additionally, one of the Navy's standard measures following the use of explosives at sea is to visually observe the target area. As specifically described in the DEIS:

- When practical (e.g., when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe the vicinity of where detonations occurred; if any injured or dead marine mammals or ESA-listed species are observed, follow established incident reporting procedures.
- If additional platforms are supporting this activity (e.g., providing range clearance), these assets will assist in the visual observation of the area where detonations occurred.

Implementation of these measures would significantly increase the probability of detection for marine mammal mortalities or serious injuries associated with Navy activities. Given how low that probability can be, (5 to 17%, based on the best available research), however, even a significant increase could still result in mortality incidents going undetected. At this time there remains no direct evidence of harm or indication that such events are indeed going undetected. Accordingly, the Navy retains its position that implementation of additional protective measures for marine mammals is

CD-0003-20 (Navy)

unnecessary and the potential impediment to its operations that those measures may result in is not justified.

Therefore, Commission staff have taken a different approach than to recommend a conditional concurrence that includes conditions such as those recommended in NRDC's letter. Instead, Commission staff worked to engage the Navy to establish more transparency and reporting regarding the locations not used for training and testing activities involving explosives and gunnery exercises as well as to help ensure that the Commission would be notified of any direct evidence of a ship strike incident involving a Navy vessel on the Sea Range. Further, the Commission continues to raise concerns about the efficacy of vessel-based Lookouts and to encourage the Navy to actively work to address this issue, in particular due to the heavy reliance the Navy places on visual observers/Lookouts as an adverse impact mitigation strategy.

Conclusion

Despite several of the proposed project's shortcomings, the Commission concludes that the project is consistent with the marine resources and water quality policies (Sections 30230 and 30231) of the Coastal Act. This conclusion is based on the following factors, described in detail above: (1) the proposed project has a limited potential to adversely affect water quality; (2) includes measures to offset the marine debris it would generate; (3) would not include training and testing activities involving the use of explosives or gunnery exercises within the Santa Barbara Channel and most of the Sea Range's waters identified as Biologically Important Areas for marine mammals; (4) the Navy will implement avoidance and minimization measures to minimize the likelihood of impacts to marine mammals from ship strikes and the use of explosives; and (5) the Navy committed to annual reporting of training and testing activities within BIAs and incident reporting of ship strike events.

Further, the Commission concludes that this concurrence is only for the activities currently proposed and described by the Navy, including the current levels of proposed training and testing activities to be carried out within BIAs, continued operation of Navy vessels at speeds that are largely consistent with a ten knot speed limit and with measures to minimize ship strike risk, and a commitment to study and report on the effectiveness of the Navy's marine mammal lookouts and to continually work to improve the effectiveness of marine mammal monitoring over time with the goal of minimizing ship strikes and other harm. If the Navy's activities change such that the Navy begins testing and training activities using explosives in the five BIAs that it historically has avoided, or if it begins to operate its vessels at average speeds that exceed those average ranges provided in the Mintz (2016) study (except in those instances where testing and training activities require a deviation), or if it does not provide information sufficient for staff to affirm that such changes have not occurred, Commission staff will report back to the Commission so that the Commission can determine whether or not these changed activities are having an effect on any coastal use or resource substantially different than originally described and, as a result, whether the activities are no longer consistent to the maximum extent practicable with the enforceable policies of the CCMP, as provided in CFR Section 930.45. In addition, at the

CD-0003-20 (Navy)

completion of the Navy's Lookout Effectiveness Study, the Navy will submit a report to the Commission describing how it will use the results of the study to improve its monitoring methods and protocols.

D. Cultural Resources

Section 30244 of the Coastal Act states:

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The Navy's evaluation of the proposed project's potential to affect cultural resources is primarily focused on activities that would be carried out on San Nicolas Island (SNI), a long-term component of the Sea Range that supports a wide range of facilities and activities. The Navy proposes to continue its current level of activity on SNI and is not proposing any new construction-related activities. Thus, the Navy is not proposing changes to the type or tempo of operations at SNI from what the Commission has previously analyzed.

San Nicolas Island has a long history of human use that pre-dates the Navy. As stated in the project's EIS:

Archaeological evidence indicates that beginning at least 13,000 years ago, Native Americans hunted, fished, and gathered shellfish on the islands. They also participated in an elaborate trading network between islands and the mainland through the use of canoes.

...
SNI has been the subject of archaeological investigations for at least 100 years, including a complete archaeological survey of the island. During these archaeological investigations, 584 archaeological sites have been recorded across the island. These include kitchen middens, food processing sites, stone quarry sites, burial sites, petroglyph sites, and village areas. Of the 584 sites, 1 site has been formally determined eligible for listing to the NRHP (CA-SNI-169), 1 site has been formally determined not eligible for the NRHP (CA-SNI-170), and 583 sites are unevaluated and potentially eligible [math error in original] (U.S. Department of the Navy, 2019). Many of the other archaeological sites on SNI have preliminary eligibility recommendations. Human remains have been recovered from across the island as well as from the sites on the western end of SNI (U.S. Department of the Navy, 1998).

The Navy's consistency determination summarizes its proposed and ongoing activities on SNI as follows:

For SNI, the Navy proposes the continued use of the Land Impact Site, a 10.5-acre target area located on the northwest corner of the island and historically associated

CD-0003-20 (Navy)

with the Standoff Land Attack Missile (SLAM) testing program. The Land Impact Site is used for air-to-surface tests using inert weapon systems. Targets in the area may include empty Container Express (commonly known as CONEX) boxes configured to simulate buildings, helicopter or aircraft bodies, and other constructed simulated targets. The Land Impact Site is the only active impact site on SNI and has been in use since 1989. The proposed tempo for the continued use of the Land Impact Site will not exceed what was previously analyzed in the 1998 EA for Non-warhead SLAM and Future Model SLAM Firings, approximately 8–26 times annually (U.S. Department of the Navy, 1998). In addition, the Navy proposes the continued use of the existing Alpha Launch Complex and the Building 807 Launch Complex. The Alpha Launch Complex is typically used for launching the GQM-163A supersonic target and the Building 807 Launch Complex is used to launch both targets and missiles. The proposed tempo for the use of the launch complexes would not exceed what was previously analyzed in the 2002 PMSR EIS/OEIS, approximately 40 launches annually (U.S. Department of the Navy, 2002). Lastly, the Navy proposes to conduct testing activities associated with the DE facility on SNI. Construction and use of the DE facility (Shooter Site, Target Site, and Calibration Sites) on SNI were previously analyzed in the 2015 DE Test Facility at SNI EA (U.S. Department of the Navy, 2015a). There is no change in tempo proposed for DE activities on SNI from what was analyzed in the 2015 EA for the DE facility of approximately 125 days/year.

The Navy's consistency determination also describes its current and past evaluations of the effects of these activities on the island's cultural resources:

Air-to-surface operations include the use of the Land Impact Site, which overlays archaeological resources on SNI. The Land Impact Site has been in use since 1989. As mentioned above, the Navy conducted archaeological investigations of sites within the APE [Area of Potential Effects] of the Land Impact Site. Portions of CA-SNI-168 within the Land Impact Site were mitigated by a data recovery program [research] conducted in compliance with federal standards (U.S. Department of the Navy, 1998). After initial evaluations of sites within the Land Impact Site APE, the Navy consulted with the SHPO [State Historic Preservation Officer] to mitigate anticipated effects to CA-SNI-168 from the creation and operation of the Land Impact Site. The mitigation was data recovery. No tribes were consulted at that time since no tribe was known to have attached religious and cultural significance to historic properties on SNI. The Navy developed procedures to avoid or minimize potential adverse effects to other portions of the site not subject to the data recovery efforts. Portions of another archaeological site, CA-SNI-169, are also located within the Land Impact Site's APE. Archaeological sampling at site CA-SNI-169 was conducted in 1997 and the site was also recommended as NRHP eligible (U.S. Department of the Navy, 1998). Protection procedures for sites CA-SNI-168 and CA-SNI-169 were detailed in the 1998 EA for the SLAM site (U.S. Department of the Navy, 1998). Protection procedures included conducting archaeological monitoring of corrective cleanup actions following a test to minimize effects to archaeological sites. Based on the analysis in the EA, the Navy determined that the

CD-0003-20 (Navy)

continued use of the facility would not have an adverse effect on the site (U.S. Department of the Navy, 1998).

The SNI ICRMP [Integrated Cultural Resource Management Plan] contains guidance for complying with the NHPA [National Historic Preservation Act] and Native American Graves Protection and Repatriation Act, and includes standard operating procedures for the inadvertent discovery of cultural resources (see Appendix A, Summary of Standard Operating Procedures and Mitigation Measures, for details on these procedures). Combined, the guidance and procedures are intended to minimize effects to terrestrial cultural resources on SNI, including those near the Land Impact Site (i.e., SNI-168 & SNI-169) (U.S. Department of the Navy, 2019b). The Proposed Action would not change the frequency or type of missile and target activity. Therefore, with continued compliance with the ICRMP and the standard operating procedures and measures (Appendix A, Summary of Standard Operating Procedures and Mitigation Measures), the Proposed Action would not adversely affect cultural resources and impacts on cultural resources on SNI would be less than significant.

...
At SNI, aerial target launches occur at the existing Alpha Launch Complex and the Rock Crusher Launch Site, which is typically used for launching the GQM-163A supersonic target. The Rock Crusher Launch Site is used to launch both targets and missiles. These launch complexes would continue to be used for their current purposes and maintained appropriately. Known cultural resources adjacent to the Alpha complex were determined not eligible for inclusion in the NRHP (Byrd et al., 2014).

The DE Test Facilities EA identified potential impacts to prehistoric archaeological resources (CA-SNI-12) (U.S. Department of the Navy, 2015a). Project construction plans were redesigned and evaluated in an EA, which determined that there would be no impacts to the archaeological site associated with DE testing and personnel training. The SHPO concurred with the findings (U.S. Department of the Navy, 2015a). While the Navy would continue use the DE Test Facility for surface-to-surface testing activities; no changes to the activities previously analyzed in the DE Test Facilities EA are proposed. Therefore, the Proposed Action would not adversely affect cultural resources from surface-to-surface operations.

The Navy's efforts to reach out to and consult with potentially affected Native American Tribes as part of the proposed project are summarized in its consistency determination as follows:

[A]ctions within the Sea Range shall be reviewed through the standard Section 106 process to ensure NHPA [National Historic Preservation Act] compliance, including consultation with SHPO [the State Historic Preservation Officer], tribes, and other parties as appropriate to determine the appropriate actions. The Navy has notified seven federally recognized tribes of the Proposed Action: La Jolla Band of Luiseño Indians, Pala Band of Mission Indians, Pauma Band of Luiseño Indians, Pechanga

CD-0003-20 (Navy)

Band of Luiseño Indians, Rincon Band of Luiseño Indians, Santa Ynez Band of Chumash Mission Indians, and Soboba Band of Luiseño Mission Indians. The Navy also notified 20 non-federally recognized tribes of the Proposed Action, and as recommended in the Sacred Lands search results provided by the Native American Heritage Commission. Two of the federally recognized tribes, the Pechanga Band of Luiseño Indians and the Rincon Band of Luiseño Indians, requested government-to-government consultation with the Navy and, consultation began on July 25, 2020. Past consultation efforts on SNI include consultation with SHPO resulting in the Navy mitigating site effects through data recovery, and consultation with the Pechanga Band of Luiseno Indians, which led to the Navy identifying two additional cultural resources with the potential of being historic properties. The Navy will continue Section 106 consultation regarding the consideration of SNI as a Traditional Cultural Property (TCP) eligible for inclusion in the National Register of Historic Places (NRHP) and the archaeological district as eligible for the NRHP.

...
The proposed increase in testing and training activities does not apply to activities occurring on SNI or the nearshore areas of SNI. Additionally, the Proposed Action does not include the use of explosives on SNI, nor are there any impact (target) areas close to shore or at the water's edge where submerged archaeological sites might be present. The only submerged cultural resources identified within the action area are historic shipwrecks and military aircraft.

During consultation for another undertaking on SNI, the Pechanga Band of Luiseno Indians' Cultural Resources Department provided information to the Navy identifying two cultural resources with the potential of being historic properties. These two potential historic properties are a TCP and an archaeological district. Pechanga Band of Luiseño Indians asserted that the TCP includes the entire island and that each archaeological site on the island is a contributing element to the overall archaeological district. In response to Pechanga Band of Luiseño Indians' identification of these potential historic properties, the Navy is preparing to contract both an ethnographic study and archaeological district study of SNI to identify and define the nature of both property types. Until such time as these studies are completed, the Navy will follow standard procedures set forth in Section 106 of the NHPA and consult as appropriate. The Navy has indicated that, as requested by the Pechanga Band of Luiseño Indians, it would withhold from public disclosure any information about such resources, pursuant to C.F.R. 800.11(c)(1).

The Commission's review of potential effects to cultural resources on SNI has limitations because SNI is federal property and therefore not part of California's Coastal Zone. Therefore, the material components of the tribal and cultural resources, including artifacts, physical sites, and burials, are also outside of the Coastal Zone. This introduces the question of if they can be considered California coastal resources subject to the Commission's federal consistency review authority. However, the Pechanga Band of Luiseño Indians assert that the resources on SNI are part of a larger archeological district and Traditional Cultural Property that spans the entire Island, and further, is part of a larger network of the historical tribal landscape that extends beyond

CD-0003-20 (Navy)

the island to encompass other sites on the other Channel Islands and mainland coast. Thus, adverse impacts to one or more individual sites located on the federal land of SNI can affect a larger network of resources – the bulk of which are located within the Coastal Zone. In this way, those adverse impacts on SNI could be considered to have “spillover effects” on California coastal resources and thus be subject to Commission review under its federal consistency authority. In its objection to the consistency certification (No. CC-018-07) for the TCA Toll Road project on a portion of the Camp Pendleton Marine Base – also federal property – the Commission supported this approach. In its adopted findings, the Commission found that effects to cultural resources on federal property would affect associated cultural resources within the Coastal Zone and therefore have “spillover effects” that allowed them to be considered California coastal resources that qualify for evaluation and protection by the Commission.

As part of its review of the Navy's proposed activities, Commission staff reached out to both the Pechanga Band of Luiseño Indians and the Rincon Band of Luiseño Indians. This outreach resulted in a conference call with representatives of the Pechanga Band of Luiseño Indians (Pechanga Band) as well as collaboration on the following summary of the discussion. During this call representatives of the Pechanga Band conveyed to Commission staff that the Pechanga Band feels strongly that the ethnographic study and archeological district study referred to above need to be completed and the results provided to the Pechanga Band for consideration prior to the completion of the current NEPA process and Section 106 and government-to-government consultations. The Pechanga Band conveyed its belief that the information from these studies is essential to an accurate assessment of the proposed project's potential to adversely affect cultural resources on San Nicolas Island. Further, the Pechanga Band shared with Commission staff its view that the studies will help inform San Nicolas Island's placement within the greater context of a Traditional Cultural Property, and being part of Traditional Cultural Landscape, and add a critical layer to the evaluation of the Navy project's potential impacts to cultural resources. The Pechanga Band finds San Nicolas Island to meet National Register eligibility at a TCP, TCL and an archaeological district and expressed its concern that without this greater context, the Navy's evaluation would be focused solely on discrete individual sites and would not appropriately consider cumulative effects and the gradual erosion of San Nicolas Island's significance and value as a cultural landscape or, property, and as an archeological district. The Pechanga Band has also expressed concerns that the studies will not be completed in a timely manner and the Navy's commitment to carry them out may go unfulfilled. However, the Pechanga Band informed Commission staff that on November 17, 2020, the Navy committed to re-engaging Section 106 consultation to review the proposed project's impacts to cultural resources more fully.

In response to a request from Commission staff regarding the status and timeline for the studies, the Navy stated on November 9, 2020 that:

After considerable coordination with federally recognized Tribes, both studies had to be contracted and the contract award dates were on or near 30 Sep 2020. The

CD-0003-20 (Navy)

archeological district study has been started; the ethnographic study is set to start by the end of this month. Given the intense nature of the studies and the research timelines and tribal involvement planned for each, we do not anticipate the studies being completed before the end of fiscal year 2021 (September 2021). The results of the studies will be used to inform future NEPA, future Section 106 consultations and future G2G [government-to-government] consultations.

The Navy's rationale for not including the study results in the current NEPA and consultation processes is that those processes have already been initiated and are on track to be completed before the study results are expected to be available (the studies are expected to take two years). Specifically, the Navy stated in correspondence to Commission staff dated November 12, 2020 that:

[T]he consistency determination for PMSR [Point Mugu Sea Range] is nearly 20 years old. It was prepared to support the EIS, which is also nearly 20 years old. Due to the age of existing environmental impact analysis, regulatory permitting requirements to support National Marine Fishery Services' letter of authorization under the Marine Mammal Protection Act as well as new activities conducted on the PMSR since the 2002 EIS was completed, a new EIS and consistency determination is required. Of note, these newer activities were the subject of Environmental Assessments completed for the PMSR and were consulted upon as appropriate. The Proposed Action combines these activities into a comprehensive EIS. The current project schedule supports a Final EIS and Record of Decision next summer [or early Fall] based on the best available data we have at the time. The schedule for ethnographic and archeological survey completion notated below does not appear to meet the project timeline. Should the survey results indicate new information that would have the potential to change any of the decisions made in the FEIS or other regulatory consultations such as Section 106, new impact analysis would be completed at that time.

The Commission agrees with the Pechanga tribe that information provided by the requested studies is likely to give important context to the Navy's assessment of impacts on tribal and cultural resources from proposed activities and operations on SNI. The study results may also help establish SNI's regional significance and help inform the connection it has with the mainland California coast and cultural sites located there. This is particularly important due to the large number of recorded cultural resource sites on SNI that have yet to be fully evaluated and may be eligible for listing on the National Register of Historic Places (583 of 584 sites are described in the Draft EIS as "unevaluated and potentially eligible"). The Commission therefore urges the Navy to consider the Pechanga Band's request to wait until the requested studies are complete before finalizing the current NEPA process. Based on its recent decision to re-start the Section 106 consultation process with the Pechanga Band, the Navy appears to be actively working to address the Pechanga Band's concerns and request.

Additionally, the Navy has communicated with staff its understanding that these studies could reveal new information that would necessitate new impact analyses, Tribal

CD-0003-20 (Navy)

consultations, and federal consistency review. Thus, the Navy has committed to report back to the Commission within two years with the results of both studies. This timeline is based on the expected duration of the studies and their availability. This commitment helps address the Pechanga Band's concern that the studies will not be completed in a timely manner and also provides an opportunity for the Commission to evaluate the study results to determine if they provide new information relevant to the Commission's federal consistency review. If the studies do provide new information related to cultural and tribal resources that are relevant to the Commission's federal consistency review, the Commission may re-open its federal consistency review, as provided in Section 930.45 of Title 15 of the Code of Federal Regulations.

Based on the information currently available, however, the Commission agrees with the Navy that the proposed project is consistent with the cultural resource policy of the Coastal Act. The Navy is implementing reasonable mitigation measures for activities carried out on SNI, including the use of Tribal cultural monitors during ongoing construction activities (authorized independently from the proposed project) and, in addition to funding the ethnographic study and archeological district study, is currently developing a Tribal Consultation Protocol Agreement in collaboration with affected Tribes to guide future Tribal consultations. Further, the Navy is working to convene a meeting in the Spring of 2021 between the Tribal Chairs of affected Tribes and the Commanding Officer with authority over Naval activities within the Sea Range.

For these reasons, the Commission concludes that the proposed project is consistent with Coastal Act Section 30244.

E. Coastal Access and Recreation

Section 30210 of the Coastal Act states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211 of the Coastal Act states:

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212 (a) of the Coastal Act states:

a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

CD-0003-20 (Navy)

(1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,

Section 30213 of the Coastal Act states:

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided.

Section 30220 of the Coastal Act states:

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

The Point Mugu Sea Range includes shoreline areas on San Nicolas Island and at Naval Base Ventura County Point Mugu. As has been the case since they began to be used by the Navy many decades ago, access to these active military installations is currently limited to Navy personnel and others with appropriate authorization. No changes to these access restrictions are proposed as part of the project.

The proposed project, however, may result in changed access to ocean waters for recreation. As has historically been the case, Navy testing and training activities necessitate clearance of non-military boats and personnel (including both commercial and non-commercial activities) from the Sea Range for safety purposes. Clearances are typically up to eight hour events, and they most commonly occur within a radius of 10-20 miles around San Nicolas Island. To minimize disruptions, the Navy currently conducts several public notification procedures prior to test and training events, including publishing Notice to Mariners for, among other things, sport boats bringing recreational fishermen, divers, or tourists to the waters surrounding San Nicolas Island and other parts of the Sea Range. The Navy states:

The PMSR [Point Mugu Sea Range] is used by Navy vessels and other recreational boaters. Navy testing and training activities would be coordinated, via a Notice to Mariners (NTM), 24 hours in advance of Navy activities. In addition, daily Very High Frequency (VHF)-FM Marine Radio (Channel 16) would be broadcast to notify recreational boaters and the public of any range closures associated with testing and training activities. For recreational fishing and boating, the testing and training activities could result in closures of SNI to the public during launch events conducted from SNI (up to 40 per year). However, these are likely to be partial area closures, so boats can move to another area near SNI to recreate without leaving the area entirely. In most years, the Navy has only conducted an average of four to eight launches from SNI (U.S Department of the Navy, 2018a). Testing and training activities are not conducted until vessels are clear of the area in accordance with the range clearance procedures. Additionally, most recreational boaters are typically in nearshore areas of Ventura and Santa Barbara Counties and would not likely be in the clearance area prior to a testing and training activity. Recreational

CD-0003-20 (Navy)

activities in the PMSR include hook-and-line fishing and scuba diving. These activities also occur primarily in shallow waters near the coastline and from private and chartered commercial passenger fishing vessels.

...

The proposed Navy testing and training activities would increase the frequency of temporary limited access to existing areas that are currently subject to limited access; no new restricted areas are proposed. Recreational activities that occur in the Action Area include recreational fishing, tourism, diving, surfing, swimming, hiking, camping, boating, and kayaking. Temporary closures of portions of the Action Area for security and safety do not limit public access to adjacent areas. Areas are only closed for the duration of the activity and are reopened at the completion of the activity.

The Proposed Action would affect coastal uses by temporarily limiting access to marine areas in the PMSR for recreational users and the public. The Navy has coexisted with other users in the air and water of the PMSR for decades without significant impacts on recreational activities. For safety reasons, Navy testing and training activities can occasionally limit recreation access to nearshore and offshore water in the PMSR (U.S. Department of the Navy, 2018c). Range closures to certain areas of the PMSR due to Navy testing and training activities could increase from the Proposed Action; however, despite a potential increase in periodic closures of certain areas of the range, access to the Channel Islands National Marine Sanctuary (CINMS) and CINP [Channel Islands National Park] would not be affected. The PMSR is used by Navy vessels as well as other recreational boaters. In addition, recreational diving within the PMSR takes place primarily at known diving sites such as shipwrecks and reefs in nearshore areas where Navy activities would not typically occur. In addition, the locations of the dive site areas are well documented, dive boats are typically well marked, and diver-down flags are visible from a distance. Navy testing and training activities would be coordinated so that no conflicting uses or vessel traffic would occur with recreational boaters. The NAWCWD would issue an NTM 24 hours in advance of Navy activities as well as daily VHF-FM Marine Radio broadcasts to notify recreational boaters and the public of any range closures associated with testing and training activities.

These notices allow the public to select an alternate destination without an appreciable effect on their activities. In addition, the NPS also maintains a website that notifies the public about closures associated with the CINP (<https://www.nps.gov/chis/planyourvisit/conditions.htm>). Testing and training activities are not conducted until vessels are clear of the area in accordance with the range clearance procedures. Recreational boaters would be able to adopt alternate routes to avoid areas subject to range closures, so they would not be affected by testing and training activities.

The Navy strives to operate in a manner that is compatible with recreational ocean uses by minimizing temporary access restrictions. The locations of restricted areas are made public and available to mariners. While mariners have responsibility to be

CD-0003-20 (Navy)

aware of conditions on the ocean, direct conflicts in accessibility can occur. If recreational boats are within a training or testing area at the time of a scheduled operation, Navy personnel will only continue operations where and when it is safe and possible to avoid recreational boats. If avoidance is not safe, Navy activity will be delayed or halted until deemed safe. If safety requires exclusive use of a specific area, recreational users may be asked to relocate to a safer area for the duration of the operation.

Impacts on public and recreational uses within the coastal zone are not anticipated since access to restricted areas would be temporary and of short durations (hours). Due to the Navy's standard operating procedures and the expansive Action Area that would be available to the public, accessibility impacts would remain negligible.

The Navy's consistency determination also evaluates other types of potential adverse impacts to recreation, such as disturbance from aircraft overflights and sonic booms:

Aircraft overflights and sonic booms may be heard from a distance by recreational users in the vicinity, as Navy policy is that sonic booms are limited to altitudes above 30,000 feet and not within 30 NM from shore. Additionally, the Channel Islands regulations prohibit disturbing marine mammals or marine birds by flying motorized aircraft at less than 2,000 feet (609 meters) over the waters within 1 NM of any island, unless coordinated in advance. Therefore, the noise-generating activity will be far from any of the public recreating in the area. Closures due to Navy activities in the CINP and CINMS are highly unlikely. Due to the temporary and short-term duration of the activities (hours), the Navy's standard operating procedures, and the expansive Action Area that would be available to the public, accessibility impacts associated with water-oriented recreational activities would remain negligible.

The Commission concurs with the Navy's finding that proposed Sea Range clearances are necessary both for military security and public safety needs. In addition, given the relatively short duration and small size of any affected area at a given time and the availability of many alternate nearby locations from public access and recreation, the Commission also concurs with the Navy's finding that the proposed project will not affect existing public access opportunities on the Channel Islands or the mainland. The Commission thus concludes that the project is consistent with the public access and recreation policies (Sections 30210-30212) and recreational boating and diving policies (Sections 30213 and 30220) of the Coastal Act.

F. Commercial and Recreational Fishing

Section 30234 of the Coastal Act states:

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. ...

CD-0003-20 (Navy)

Section 30234.5 of the Coastal Act states:

The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

In the evaluation provided in the Navy's consistency determination for these policies, the Navy states:

Southern California's west coast is a leading recreational fishing area. Weather and sea conditions allow for year-round fishing activity. The coastlines around the Channel Islands are popular sport fishing areas; although most kelp beds are within 1 NM of shore, some fishing areas extend as far as 5 NM from shore and include lingcod grounds to the west of San Miguel Island, and kelp beds off the coast of SNI. Commercial passenger fishing vessels frequently offer single-day sport fishing excursions from the Ventura, Santa Barbara, or Channel Islands Harbors (U.S. Department of the Navy, 2002).

The proposed testing and training activities could result in closures of the waters surrounding SNI [San Nicolas Island] for launch events conducted from SNI (up to 40 per year). However, these are likely to be partial area closures, so boats can move to another area near SNI to recreate without leaving the area entirely. Typically, the Navy has conducted an average of four to eight launches annually from SNI (U.S. Department of the Navy, 2018a). Testing and training activities are not conducted until vessels are clear of the area in accordance with the range clearance procedures. Additionally, most recreational boaters are typically in nearshore areas of Ventura and Santa Barbara Counties and would not likely be in the clearance area prior to a testing and training activity. While the Proposed Action could increase the number of closures for recreational boaters, these closures would typically be limited to specific areas and of short duration (typically less than 24 hours), and areas would reopen when the testing and training activity is complete. Therefore, impacts on recreational fishing would be less than significant.

The Commission agrees with the Navy that impacts would be minimal, noting that the Navy has historically conducted numerous military testing and training activities throughout the Sea Range without apparent significant conflicts with commercial and recreational fishing. Many of the proposed activities are similar in scope and frequency to the types and amounts of past Navy activities on the Sea Range, and, as the Navy points out, for any particular operating area the tests would be relatively short term in nature. As discussed in the previous section of this report, limited military preclusion of non-military activity is warranted to protect public safety (as well as military security).

The proposed additional launch events at San Nicolas Island (from about eight per year currently to approximately 40 per year), however, would result in more frequent closures of the waters around the island. This would adversely affect commercial and recreational fishing activities in that area. Despite these additional closures, the level of

CD-0003-20 (Navy)

adverse impacts would remain minimal. The area would still be open and accessible for fishing for most of the year and the Navy's commitment for advance notice to fishermen would enable them to plan around proposed clearances or move to nearby areas until the clearance is lifted. The proposed training and testing activities would therefore not appreciably affect the economics of commercial and recreation fishing. The Commission concludes that the project is consistent with the commercial and recreational fishing policies (Sections 30230, 30234 and 30234.5) of the Coastal Act.

CD-0003-20 (Navy)

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

Naval Air Warfare Center Weapons Division Point Mugu, September 2020. Coastal Zone Management Act Consistency Determination for Point Mugu Sea Range + associated support materials and correspondence.

United States Department of the Navy, April 2020. Draft Environmental Impact Statement/Overseas Environmental Impact Statement, Point Mugu Sea Range.

California Coastal Commission, February 2001. Adopted Findings in support of Consistency Determination No. CD-002-01.

California Coastal Commission, February 2001. Adopted Findings in support of Consistency Certification No. CC-018-07.

California Coastal Commission, August 2018. Adopted Findings in support of Consistency Determination No. CD-0001-18.

Calambokidis J, Steiger GH, Curtice C, Harrison J, Ferguson MC, et al. (2015) 4. Biologically Important Areas for Selected Cetaceans Within U.S. Waters - West Coast Region. *Aquat Mamm* 41: 39-53.

Carretta J V., Muto MM, Wilkin S, Greenman J, Wilkinson K, et al. (2015) Sources of human-related injury and mortality for U.S. Pacific west coast marine mammal stock assessments, 2009-2013. 10.7289/V5/TM-SWFSC-548.

Rockwood RC, Calambokidis J, Jahncke J (2017) High mortality of blue, humpback and fin whales from modeling of vessel collisions on the U.S. West Coast suggests population impacts and insufficient protection. *PLoS ONE* 12(8): e0183052.

Vars T, Bejder M, Hotchkin C, Jefferson T (2019). Cruise Report, Marine Species Monitoring and Lookout Effectiveness Study, Submarine Commanders Course, Hawaii Range Complex.

Wiggins, S.M., Rafter, Macey, Dorman, LeRoy M., Baumann-Pickering, and Hildebrand, J.A. (2020). Comparison of Fisheries and Naval Explosions in SOCAL Range Complex in Marine Physical Laboratory Technical Memorandum 638 (Scripps Institution of Oceanography, University of Southern California San Diego, La Jolla, California.

G.6.3 California Coastal Commission Concurrence Letter to the Navy

STATE OF CALIFORNIA - NATURAL RESOURCES AGENCY

GAVIN NEWSOM, GOVERNOR

CALIFORNIA COASTAL COMMISSION

455 MARKET STREET, SUITE 300
SAN FRANCISCO, CA 94105
FAX (415) 904-5400
TDD (415) 597-5885



February 18, 2021

Commander
Department of the Navy
Naval Air Warfare Center Weapons Division
575 I Avenue, Suite 1
Point Mugu, CA 93042

ATTN: Ms. Deborah McKay

Re: Consistency Determination CD-0003-20 (Point Mugu Sea Range Military Readiness Training and Testing Activities)

Dear Commander:

On December 11, 2020, the California Coastal Commission concurred with the above-referenced consistency determination submitted by the United States Navy for the continuation and expansion of military readiness training and testing activities on the Point Mugu Sea Range, San Nicolas Island and portions of Naval Base Ventura County (NBVC) Point Mugu and NBVC Port Hueneme. The Commission found the proposed activities to be consistent with the California Coastal Management Program.

Sincerely,

A handwritten signature in black ink, appearing to read "John Ainsworth".

(for)

JOHN AINSWORTH
Executive Director

This page intentionally left blank.