



POINT MUGU SEA RANGE

Draft Environmental Impact Statement/ Overseas Environmental Impact Statement



INTRODUCTION

The U.S. Navy has prepared a Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) to assess the potential environmental consequences associated with continuing military readiness activities within the Point Mugu Sea Range Study Area, referred to as the "Study Area" (Figure 1). Military readiness activities include research, development, acquisition, testing, and evaluation (referred to as "testing") and training activities. The Navy welcomes public review and substantive comments on the Draft EIS/OEIS.

This Draft EIS/OEIS consolidates previously analyzed actions addressed in the March 2002 *Naval Air Warfare Center Weapons Division Point Mugu Sea Range Final EIS/OEIS*, referred to as the "2002 PMSR Final EIS/OEIS," and environmental assessments completed for the Point Mugu Sea Range since 2002 into one comprehensive document. In addition, the Navy is also analyzing the potential environmental consequences of proposed increases in testing and training activities. These activities are consistent with those analyzed in the 2002 analysis and are similar to Navy activities that have occurred in the Study Area for decades.

The Draft EIS/OEIS supports the request for federal regulatory permits and authorizations under the Marine Mammal Protection Act and the Endangered Species Act.

The Navy is updating previously analyzed testing and training activities because analytical methods used in the 2002 PMSR Final EIS/OEIS are not consistent with the current modeling and analyses in more recent Navy environmental documents for the same type of activities. Potential impacts will be reexamined based on new science, data, and analytical methods.

As part of the Proposed Action, the Navy is proposing to continue implementing standard operating procedures designed to provide for safety and mission success. Additionally, the Navy is proposing to implement mitigation measures to avoid or minimize potential impacts from the alternatives being considered. The final suite of mitigation measures to be implemented will be determined during the consultation processes with regulatory agencies.



Figure 1 Study Area. 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. Here, the Naval Air Warfare Center Weapons Division 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.

The Naval Air Warfare Center Weapons Division Point Mugu has several unique assets that make it critical for Navy testing:

- Large area of controlled sea and airspace designated for military use.
- Highly instrumented coastline and off-shore islands.
- Two full-service military airfields.
- Target and missile launch facilities.
- Data collection and surveillance aircraft.
- A skilled staff of technical personnel.

The Point Mugu Sea Range provides support functions associated with military readiness activities in portions of Naval Base Ventura County at Point Mugu, Port Hueneme, and San Nicolas Island.

IMPORTANCE OF THE POINT MUGU SEA RANGE FOR MILITARY READINESS

The Navy is committed to being a good steward of the environment. At the same time, the Navy must test and train with new technologies to defend the United States and its interests. The offshore areas of Southern California are critical testing and training areas for the Navy. All systems and equipment must be tested prior to deployment and operational use. Simulators alone are not adequate substitutes for live testing and training in a real-world environment. To ensure accuracy and safety, systems are tested in varying marine environments.

The Point Mugu Sea Range provides test and evaluation information to the U.S. Department of Defense (DoD) and supports weapons system development programs and DoD research. It is the DoD's largest and most extensively

Realistic testing and training are crucial for military readiness, personnel safety, and national defense.

RESEARCH, DEVELOPMENT, ACQUISITION, TESTING, AND EVALUATION of new technologies by the DoD continually occurs to ensure the U.S. military can counter new and anticipated threats. To maintain an edge over potential adversaries, Sailors must have access to technologically advanced vessels, aircraft, and weapons systems. All new Navy systems and related equipment must be tested to ensure proper functioning before delivery to the fleets for use.

The Point Mugu Sea Range is the Navy's primary ocean testing area for guided missiles and related ordnance. Test operations on the sea range are conducted under highly controlled conditions, allowing for the collection of empirical data to evaluate the performance of a weapons system or subsystem.

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.

instrumented over-water test range and offers realistic littoral (nearshore or shallow water) and open-ocean operating environments. The range is also equipped with airspace that can be temporarily expanded as needed through coordination with the Federal Aviation Administration. The airspace is critical to meeting a range of testing and training requirements.

The Navy has conducted testing and training activities in the Study Area for decades, with some activities dating back to 1946 when the range was established. Technology advancements and evolving international threats result in the development of weapons with longer ranges and greater precision. The Point Mugu Sea Range is the only instrumented sea range in the United States that can safely accommodate testing and training of these expanded weapons systems.

PRIMARY MISSION AREAS

Testing and training activities in the Study Area support three primary mission areas, which require unique skills, sensors, weapons, and technologies to accomplish the overall mission:

Air Warfare eliminates or reduces enemy air and missile threats, protects U.S. forces from attacks from the air, and gains air superiority. Air warfare provides U.S. forces with adequate attack warnings, while denying hostile forces the ability to gather intelligence about U.S. forces.



Air-to-air test scenarios involve the employment of airborne weapons systems against airborne targets.



Surface-to-air tests evaluate overall performance, effectiveness, and modifications or upgrades of ground-based and ship-based weapons systems.

Surface Warfare obtains control of sea space from which naval forces may operate. It entails offensive action against other surface targets while also defending against enemy forces.



Air-to-surface tests evaluate the integration of a missile or other weapons system into DoD aircraft and the performance of the missile/system.



Surface-to-surface tests evaluate overall performance, effectiveness, and modifications or upgrades of ground-based and ship-based weapons systems.



Subsurface-to-surface tests involve subsurface launches of subsonic cruise missiles (missiles that travel with constant speed to deliver a warhead at specific targets over long distances with high accuracy) or ballistic missiles (self-guided missiles that follow a trajectory to deliver one or more warheads to a specific target).

Electronic Warfare degrades the enemy's ability to use electronic systems, such as communication systems and radar, and confuses or denies them the ability to defend their forces and assets. Electronic warfare is also used to detect enemy threats and counter their attempts to degrade the Navy's electronic capabilities.



Directed-energy weapons tests include high-energy laser and high-power microwave systems from land, vessels, and aircraft. This testing involves firing laser-guided inert bombs and rockets at stationary targets. Some inert tests include use of small pyrotechnic devices, such as spotting charges and live fuses.



Laser systems involve directing laser energy at various types of fixed or dynamic targets from fixed or dynamic laser sources. Lasers could be operated and directed at targets at sea, in air, or on land.

REDUCING NOISE IMPACTS ON PINNIPEDS

On San Nicolas Island, noise associated with launching missiles and aerial targets can be relatively sudden or loud, which may cause behavioral responses from seals and sea lions (pinnipeds) resting on shore. The Navy strives to keep an adequate distance between missile flight paths and pinnipeds. Additionally, the Navy avoids breeding and pupping seasons to the extent practical. The Navy also monitors for potential impacts on pinniped haul-out sites during launch events. Launch sound is detectable by pinnipeds for a few seconds during each launch event and no long-term consequences for species or stocks are expected.

PROPOSED ACTION

The Navy’s Proposed Action is to continue military readiness activities previously analyzed in the 2002 PMSR Final EIS/OEIS and environmental assessments completed at the Point Mugu Sea Range since 2002, and proposed increases in testing and training activities that are the same as or similar to those currently occurring. The Proposed Action includes ongoing military readiness activities, including missile launch operations and directed-energy activities originating from Naval Base Ventura County Point Mugu and San Nicolas Island. Testing and training activities are conducted at sea and in designated airspace within the Study Area.

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.

ALTERNATIVES

The National Environmental Policy Act (NEPA) requires federal agencies to evaluate a range of reasonable alternatives to achieve the purpose of and need for the Proposed Action. In the Draft EIS/OEIS, the Navy analyzed the potential environmental impacts of three alternatives, including a No Action Alternative.

The Navy’s Proposed Action is needed to allow for continued testing and training in support of military readiness and DoD mission requirements and to provide combat-ready forces.



Alternative 1 (Preferred Alternative)	• Includes activities the same or similar to those currently occurring, but would occur at a more frequent level. • Reflects the highest potential annual level of planned activities. • Based on increasing requirements to meet the current geopolitical environment. • Supports the full spectrum of potential testing and training necessary to respond to a national emergency or crisis.
Alternative 2	• Includes all activities under Alternative 1, but with lower activity levels compared to Alternative 1. • Based on actual highest activity levels between 2011 and 2018. • Accommodates variability in activity levels in any given year due to emerging technologies that need to be tested.
No Action Alternative	• No testing and training would occur in the Point Mugu Sea Range. • Purpose of and need for the Proposed Action would not be met.

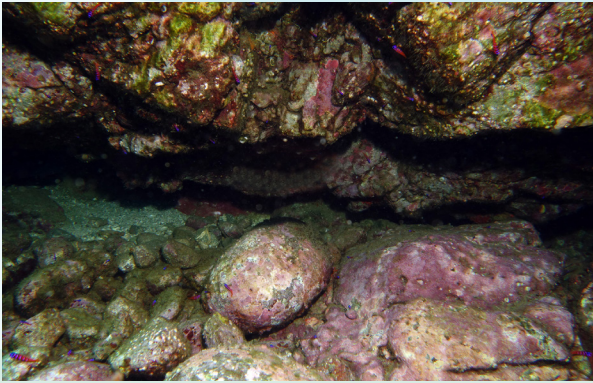
Alternative 1 is the Navy preferred alternative because it includes the highest potential annual level of planned activities needed to ensure the Navy is ready to respond to a national emergency and to meet long-term requirements.



SUMMARY OF THE DRAFT EIS/OEIS FINDINGS

In the Draft EIS/OEIS, the Navy evaluated new, relevant information, such as more recent marine mammal density data and new scientific information, and updated previous environmental analyses as appropriate. The Navy analyzed new or evolving military readiness activities including those associated with new platforms and systems not previously analyzed.

The Navy analyzed the alternatives to determine potential direct, indirect, and cumulative impacts on 14 resource areas. The Draft EIS/OEIS presents the analysis and findings. For more detailed information, please refer to the Draft EIS/OEIS, available at www.pmsr-eis.com.



Physical Resources

- **Air quality:** No significant impacts would occur as a result of criteria pollutants over territorial or non-territorial waters.
- **Sediments and water quality:** Potential impacts would be less than significant; regulatory thresholds and guidelines would not be exceeded.
- **Marine habitats:** The Proposed Action is not expected to result in degradation or loss of habitat.

Human Resources

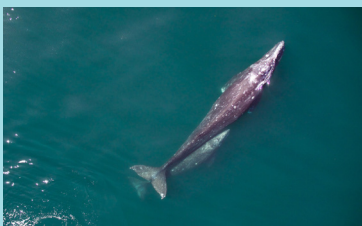
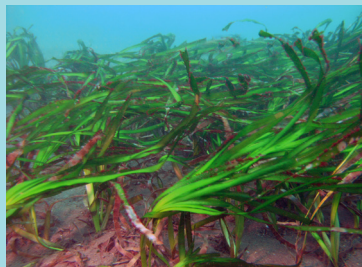
- **Cultural resources:** There would be no impacts on submerged or terrestrial cultural resources from the Proposed Action.
- **Socioeconomic resources:** Impacts are expected to be minor. There would be no disproportionately high impacts or adverse effects on any low-income populations or minority populations.
- **Recreation:** Number of closures for recreational boaters or aircraft could increase, but closures would typically be limited in time and space, and areas would reopen when the activity is complete. Access to the Channel Islands National Marine Sanctuary and Channel Islands National Park would not be affected.
- **Sea and air space:** Given the established notice system and the highly controlled nature of tests and scheduled training, the Proposed Action would not increase the risk to military and non-military aircraft and vessel transit activity.
- **Public health and safety:** The Proposed Action would not adversely affect public health and safety.



SUMMARY OF THE DRAFT EIS/OEIS FINDINGS - CONTINUED

Biological Resources

- **Marine vegetation:** The Proposed Action could affect individual plants or parts of plants; however, detectable changes in growth, survival, propagation, or population-level impacts are not expected.
- **Marine invertebrates:** The Proposed Action could affect individuals of marine invertebrate species, but is not expected to impact survival, growth, recruitment, or reproduction of populations or subpopulations.
- **Marine fishes:** The Proposed Action may have temporary and infrequent impacts on fishes, but is not expected to have overall long-term consequences on populations.
- **Marine mammals:**
 - » The Proposed Action may result in some short-term effects, such as behavioral responses or temporary hearing threshold shifts.
 - » A few animals may experience permanent threshold shifts based on acoustic modeling.
 - » No long-term consequences for species or stocks are expected.
- **Sea turtles:** The Proposed Action may result in some short-term effects on individuals, but no long-term consequences on populations are expected.
- **Marine birds:** The Proposed Action may affect certain species, but is not expected to impact population levels or prey availability.



ENVIRONMENTAL PROTECTION MEASURES

Navy-Wide At-Sea Mitigation Measures

The Navy is committed to being a good steward of the environment and strives to minimize impacts on the marine environment from at-sea testing and training activities. The Navy follows strict guidelines and employs measures to reduce potential effects on marine species while testing and training.

- **Establish mitigation zones:** Mitigation zones are areas at the surface of the water within which testing or training activities would be ceased or modified to protect specific biological resources if observed near or within the mitigation zone. The size of the mitigation zone is determined by each specific activity as well as the ability for the area to be reasonably observed.
- **Post qualified Lookouts:** Navy Lookouts are highly trained individuals who visually observe for the presence of marine species and specific biological resources within mitigation zones. In the Study Area, Lookouts help reduce potential impacts on marine species from testing and training activities, including those that involve:
 - » Acoustic stressors, like weapons firing noise.
 - » Use of explosive and non-explosive munitions.
 - » Vessel movement.

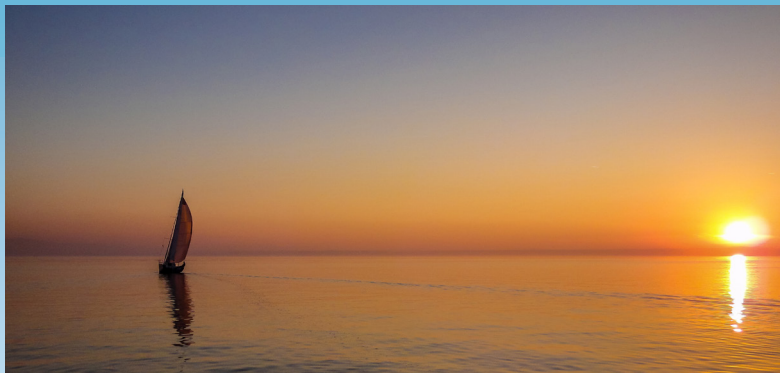
Visit www.youtube.com/watch?v=KKo3r1yVBBA for more information.

- **Observe the area:** From a ship, small boat, or aircraft, Lookouts monitor for marine mammals, sea turtles, and, in some cases, sea birds before and during certain activities. Lookouts serve as an additional layer of protection for endangered or protected species. If spotted, Lookouts are required to immediately communicate sightings of specific biological resources.
- **Modify or cease actions:** If an animal is sighted near or within the mitigation zone, the Navy is required to implement prescribed mitigation measures, including ceasing the activity until the animal leaves the area.

Cumulative Impacts

- Marine mammals and sea turtles are the primary resources of concern for cumulative impacts analysis. The Proposed Action is not anticipated to meaningfully contribute to population decline or affect stabilization and species recovery.





The Navy strives to maintain access to public areas whenever possible while ensuring public safety at all times.

Protective Measures

The Navy implements protective measures to minimize impacts on cultural resources and protected species, such as nesting birds.

San Nicolas Island

- Close some areas year-round and during species' breeding season.
- Restrict location, altitude, and time-of-year of missile launches and aircraft overflights.
- Monitor species near operational sites and before and during missile launches.
- Avoid protected species whenever possible.
- Maintain native vegetation.
- Monitor archaeological sites and track inadvertent discovery of cultural materials.

Naval Base Ventura County Point Mugu

- Restrict location and altitude of missile launches and aircraft flight paths.
- Restrict year-round beach access.
- Coordinate equipment placement.
- Track inadvertent discovery of cultural materials.



Public Access and Safety

The safety of the public and Navy personnel is of utmost importance. The Navy implements multiple safety precautions when planning and conducting testing and training activities.

- Issue notices to mariners and airmen.
- Cancel, delay, or move activities until the area is clear.
- De-conflict use of sea space and airspace to minimize issues.
- Ensure hazard area is clear before proceeding with activity.

NATIONAL ENVIRONMENTAL POLICY ACT AND PUBLIC INVOLVEMENT

NEPA is a U.S. law that requires federal agencies to identify and analyze the potential environmental impacts of a proposed action before deciding whether to proceed with that action. The law encourages and facilitates public involvement to inform decision makers and the public on actions that may affect the community or the environment.

Public and agency input allows decision makers to consider community concerns and benefit from local knowledge. The public participates in the NEPA process during the following stages:

- **Scoping Period:** Help to identify the scope of the analysis, including potential environmental issues and viable alternatives.
- **Draft EIS/OEIS Public Review and Comment Period:** Evaluate and provide substantive comments on the draft analysis.
- **Final EIS/OEIS Wait Period:** Review the Final EIS/OEIS and Navy responses to substantive comments received on the Draft EIS/OEIS.
- **Record of Decision:** Review the Record of Decision for more information about how the Navy made its decision for implementing the Proposed Action.

NEPA Process

Notice of Intent to Prepare an EIS/OEIS
April 27, 2018

Scoping Period
April 27, 2018 – June 8, 2018

Public Release of the Draft EIS/OEIS
April 24, 2020

Draft EIS/OEIS Public Review and Comment Period
April 24, 2020 – June 8, 2020

Public Release of the Final EIS/OEIS
Summer 2021

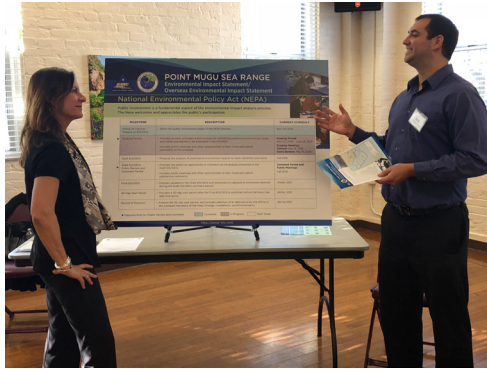
30-Day Wait Period
Summer 2021

Record of Decision
Fall 2021

Opportunity for Public Review and Comment

Public involvement is a fundamental aspect of the environmental impact analysis process. The Navy welcomes and appreciates the public's participation.

Due to current federal and state guidance on social distancing in response to COVID-19, the Navy will not hold in-person public meetings to support the Draft EIS/OEIS public review and comment period. If you have questions about the Proposed Action, the draft environmental impact analysis, or the Section 106 process, please email info@pmsr-eis.com or call 888-238-2375.



National Historic Preservation Act Section 106 Consultation

Concurrent with the NEPA public involvement process, the Navy is consulting with interested parties for the National Historic Preservation Act Section 106 process regarding potential effects of proposed testing and training activities on historic properties. Historic properties include districts, sites, buildings, structures, or objects listed or eligible for listing in the National Register of Historic Places.

Individuals or organizations wanting to participate in the Section 106 process as a “consulting party” should submit a written request to the Navy via the website www.pmsr-eis.com or by mail to:

Commander, Naval Air Warfare Center Weapons Division
Range Sustainability Office
Point Mugu Sea Range
Building 53A, Room 106G, Code EB2R00M
575 I Avenue, Suite 1
Point Mugu, CA 93042-5049
Attn: EIS/OEIS Project Manager

