## Environmental Impact Statement/

## **Overseas Environmental Impact Statement**

## Hawaii-California Training and Testing

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## 6 Regulatory Considerations

Consistent with CEQ regulations for implementing NEPA, federal agencies shall, to the fullest extent possible, integrate the requirements of NEPA with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively. This chapter summarizes environmental compliance for the Proposed Action, consistency with other federal, state, and local plans, policies, executive orders, and regulations not considered in Chapter 3; the relationship between short-term effects and the maintenance and enhancement of long-term productivity in the affected environment; irreversible and irretrievable commitments of resources; and energy conservation.

## 6.1 Consistency with Regulatory Considerations

When implemented, the Proposed Action for the HCTT EIS/OEIS would comply with applicable federal, state, and local laws; regulations; and executive orders. Regulatory agency consultations are underway and will be completed prior to implementing the Proposed Action ensuring all legal requirements are met. Table 6-1 summarizes the additional environmental compliance requirements not specifically assessed in the resource chapters. Section 1.6 provides brief descriptions of NEPA and EO 12114 compliance that form the regulatory framework for the resource evaluations in Chapter 3. Regulatory agency consultation and coordination documents are provided in Appendix J.

Laws, Executive Orders, International Standards, and Guidance	Status of Compliance			
Laws				
Abandoned Shipwreck Act (43 U.S.C. sections 2101–2106)	For abandoned shipwrecks in United States (U.S.) Territorial Waters, the federal government asserts title to the resource. See Section 3.10 for assessment and conclusion that the Proposed Action is consistent with the Act.			
Act to Prevent Pollution from Ships (33 U.S.C. sections 1901– 1915)	The Act to Prevent Pollution from Ships applies to U.S. vessels worldwide and implements the requirements of annexes I (Oil Pollution), II (Noxious Liquid Substances Carried in Bulk), V (Ship-Generated Garbage), and VI (Air Pollution) of the International Convention for the Prevention of Pollution from Ships (MARPOL) for the United States. Act to Prevent Pollution from Ships excludes warships and naval auxiliaries from the preventive measures in annexes I, II, and VI. For annex V, Act to Prevent Pollution from Ships requires Navy ships and submarines to comply fully with discharge restrictions applicable outside of "special areas" designated under annex V and places limitations on Navy ship discharges within annex V special areas. Requirements associated with the APPS are implemented in accordance with the Navy Environmental and Natural Resources Program Manual and related Navy guidance documents governing waste management, pollution prevention, and recycling. At sea, the Navy complies with these regulations and operates in a manner that minimizes or eliminates any adverse effects on the marine environment. See Section 3.2 for the assessment.			

Laws, Executive Orders, International Standards, and Guidance	Status of Compliance				
Antiquities Act (54 U.S.C. sections 320301- 320303)	In accordance with Navy procedures, the Proposed Action is consistent with the Act's objectives for protection of archaeological and historical sites and objects, preservation of cultural resources, and the public's access to them. See Section 3.10 for the assessment.				
California Coastal National Monument Designation (Presidential Proclamation 7264, January 11, 2000), expanded areas including the Point Arena- Stornetta Public Lands (Presidential Proclamation 9089, March 11, 2014), and the Boundary Enlargement of the California Coastal National Monument (Presidential Proclamation 9563, January 12, 2017)	The California Coastal National Monument is located along the California coastline and comprises more than 20,000 unappropriated or unreserved islands, rocks, exposed reefs, and pinnacles occurring within 12 nautical miles off the coast of California between Mexico and Oregon (over 1,100 miles). Navy activities are proposed to occur in these areas. The Navy and the Bureau of Land Management have agreed on the terms of a Memorandum of Understanding dated November 5, 2007, regarding Navy activities in the vicinity of monument resources. Implementation of the Proposed Action would be consistent with the Memorandum of Understanding and would not affect monument resources.				
Coastal Zone Management Act (CZMA) (16 U.S.C. sections 1451– 1468)	Federal Consistency Determinations will be provided to California Coastal Commission and the Hawaii Office of Planning in accordance with CZMA Federal Consistency requirements.				
Endangered Species Act (ESA) (16 U.S.C. 1531-1544)	<ul> <li>Consultation with the National Marine Fisheries Services (NMFS) and United</li> <li>States Fish and Wildlife Service (USFWS) pursuant to Section 7 of the Act is underway. See Sections 3.4, 3.6, 3.7, 3.8, and 3.9 of this EIS/OEIS for the associated effects analyses under NEPA.</li> </ul>				
Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. sections 1801– 1891d)	An Essential Fish Habitat Assessment has been prepared as a separate document. California and Hawaii consultations with National Marine Fisheries Service for affected species and their habitats are underway (as discussed in Section 6.1.3).				
Migratory Bird Treaty Act (16 U.S.C. sections 703–712)	Implementation of the Proposed Action is not anticipated to result in significant adverse effects on migratory bird populations; therefore, the Navy does not need to confer with the USFWS. See Section 3.9 for the assessment.				
National Historic Preservation Act (54 U.S.C. section 300101 et seq.)	I litticers nursuant to Section 106 of this Act is underway. See Section 3 10 to				
National Marine Sanctuaries Act (16 U.S.C. sections 1431–1445c-1)	<ul> <li>Six National Marine Sanctuaries administered by the National Oceanic and Atmospheric Administration Office of National Marine Sanctuaries (ONMS) lie within the Study Area. Two additional proposed (i.e., not yet designated)</li> <li>National Marine Sanctuaries also lie within the Study Area. These are discussed further in Table 6-2.</li> <li>Military readiness activities proposed to occur in the vicinity of or within the Channel Islands National Marine Sanctuary have the potential to cause injury to sanctuary resources. As such, Consultation under Section 304(d) will occur.</li> <li>Military readiness activities proposed to occur in the vicinity of and within the Monterey Bay National Marine Sanctuary have the</li> </ul>				

Laws, Executive Orders, International Standards, and Guidance	Status of Compliance			
	<ul> <li>potential to cause injury to sanctuary resources. As such, Consultation under Section 304(d) will occur.</li> <li>Military readiness activities proposed to occur in the vicinity of or within the Greater Farallones National Marine Sanctuary have the potential to cause injury to sanctuary resources. As such, Consultation under Section 304(d) will occur.</li> <li>Military readiness activities proposed to occur in the vicinity of or within the Cordell Bank National Marine Sanctuary have the potential to cause injury to sanctuary resources. As such, Consultation under Section 304(d) will occur.</li> <li>Military readiness activities proposed to occur in the vicinity of Hawaiian Islands Humpback Whale Sanctuary have the potential to cause injury to sanctuary resources (as defined in 15 CFR 922.182). As such, Consultation under Section 304(d) will occur.</li> <li>Military readiness activities proposed to occur in the vicinity of the Chumash Heritage National Marine Sanctuary have the potential to cause injury to sanctuary resources. As such, consultation under Section 304(d) will occur.</li> <li>Military readiness activities proposed to occur in the vicinity of the Chumash Heritage National Marine Sanctuary have the potential to cause injury to sanctuary resources. As such, consultation under Section 304(d) will occur.</li> <li>The Navy is coordinating with ONMS to ensure the proposed management documents for the proposed Papahanaumokuakea National Marine Sanctuary consider appropriate exemptions for military activities on sanctuary resources for the purpose of determining whether the Navy would consult under Section 304(d) at the appropriate time.</li> <li>Draft national marine sanctuary designation documents for the Proposed National Marine Sanctuary in the Pacific Remote Islands are currently being prepared and are expected to have exemptions for DoD activities. Navy is working with ONMS in the designation process of the sanctuary would not cause injury to sanctuary resources and would not require Section</li></ul>			
Resource Conservation and Recovery Act (RCRA) (42 U.S.C. section 6901 et seq.)/Military Munitions Rule	Military munitions used for their intended purpose during training and testing are exempt from the definition of solid waste under RCRA (40 CFR Section 266.202).			
Rivers and Harbors Act (33 U.S.C. section 401 et seq.)	Under the Rivers and Harbors Act, a permit is required when construction/placement of structures in or over navigable waters of the United States may occur. The Navy will apply for and obtain applicable permits through U.S. Army Corps of Engineers for those activities where Rivers and Harbors Act permitting is required, such as installation of instrumentation.			
Submerged Lands Act (43 U.S.C. sections 1301–1356c)	Navy's activities within and on the submerged lands are authorized in accordance with Section 1314(a) of the Submerged Lands Act, 43 U.S.C. sections 1301, et seq., and U.S. Const. art. I, 8.			
Sunken Military Craft Act (Public Law 108–375, 10 U.S.C. section 113 Note and 118 Stat. 2094– 2098)	The Sunken Military Craft Act does not apply to actions taken by, or at the direction of, the United States. Additionally, no disturbance to sunken military craft is anticipated. See Section 3.10 for the assessment.			

Laws, Executive Orders, International Standards, and Guidance	Status of Compliance			
Presidential Proclamation – Papahanaumokuakea Marine National Monument; Designated by Proclamation 8031 (June 15, 2006) and amended by Proclamation 8112 (February 28, 2007), and 50 CFR part 404 and Presidential Proclamation 9478 – Papahanaumokuakea Marine National Monument Expansion (August 31, 2016)	The proposed activities would be carried out consistent with applicable laws. In accordance with Presidential Proclamations 8031, 8112, and 9478, and Papahanaumokuakea Marine National Monument regulations (50 CFR part 404), all activities and exercises of the Armed Forces shall be carried out in a manner that avoids, to the extent practicable and consistent with operational requirements, adverse effects on Monument resources and qualities. Papahanaumokuakea Marine National Monument plays a critical role for Native Hawaiians with regards to voyaging and wayfinding and is considered a sacred site (81 FR 60225). No new activities are proposed to occur within the Papahanaumokuakea Marine National Monument. Therefore, as analyzed in Section 3.10, no adverse effects on submerged cultural resources would occur as a result of the Proposed Action. However, the Proposed Action may cause disruptions to cultural voyaging and wayfinding, but these would be considered temporary as both military and cultural voyaging activities are considered transitory and there would be minimal to no overlap. In addition, military activities taking place within the National Monument are limited in number and thus are not anticipated to adversely affect biological resources. While there has been no incident to date, should there be an event that causes destruction of, loss of, or injury to a monument resource, a monument expansion resource, or quality (such as spill or grounding), the DoD must promptly coordinate with the Secretaries of Commerce and Interior to respond to, provide mitigation, and if possible, restore or replace the Monument resource or quality. The proposed Papahanaumokuakea National Marine Sanctuary in the same area is discussed in Table 6-2.			
Executive Orders				
Executive Order 11990, Protection of Wetlands	Implementation of the Proposed Action would not affect wetlands as defined in Executive Order 11990, as it occurs within coastal and ocean waters; no wetlands exist in the Study Area.			
Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations	In accordance with Executive Order 12898, this EIS/OEIS considers whether the Proposed Action would result in disproportionately high or adverse health or environmental effects on minority or low-income populations. Although proposed activities occur in the marine environment, minority and low-income populations who practice subsistence fishing or live in nearshore communities may be affected by the Proposed Action. Refer to Section 3.11 for the assessment of effects.			
Executive Order 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All	Executive Order 14096 builds upon and strengthens the nation's existing commitments to address environmental justice in Executive Order 12898. In accordance with Executive Order 14096, this EIS/OEIS considers whether the Proposed Action would result in disproportionate or adverse health or environmental effects on communities with environmental justice concerns. Refer to Section 3.11 for the assessment of effects.			
Executive Order 12962, Recreational Fisheries	In accordance with Navy procedures, the Proposed Action would not affect federal agencies' ability to fulfill certain duties with regard to promoting the health of the public and public access to recreational fishing areas. See Section 3.11 and Section 3.12 for the assessments.			

Laws, Executive Orders, International Standards, and Guidance	Status of Compliance			
Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks	In accordance with Navy procedures, the Proposed Action would not result in disproportionate environmental health or safety risks to children.			
Executive Order 13089, Coral Reef Protection	The Navy has prepared this EIS/OEIS in accordance with requirements that federal agencies whose actions affect U.S. coral reef ecosystems shall provide for implementation of measures needed to research, monitor, manage, and restore them, including reducing effects from pollution and sedimentation. See Section 3.4 for the assessment.			
Executive Order 13112, <i>Invasive</i> Species	In accordance with Navy procedures, the Proposed Action would not increase the number of or introduce new invasive species nor require the Navy to take measures to avoid introduction and spread of those species. Information on invasive species and standard operating procedures used by the Navy related to invasive species is presented in Section 3.0.4. Additionally, Naval vessels are exempt from 33 CFR part 151 subpart D, Ballast Water Management for Control of Nonindigenous Species in Waters of the United States; however, the Navy follows ballast water protocols as required by the Chief of Naval Operations Instructions M-5090.1, <i>Environmental Readiness Program Manual</i> . The Navy has a hull-cleaning program that ensures routine ship performance and fleet capability by preventing fouling of anti-corrosive paint coatings. It includes regular scheduled inspections and periodic cleanings (Naval Sea Systems Command, 2022)			
Executive Order 13158, Marine Protected Areas	The Navy has prepared this EIS/OEIS in accordance with requirements for the protection of existing national system marine protected areas. See Section 6.1.2 for more information.			
Executive Order 13175, Consultation and Coordination with Indian Tribal Governments	In accordance with Navy procedures, the Proposed Action would not have substantial direct effects on one or more Indian tribes, on the relationship between the federal government and Indian tribes, or on the distribution of power and responsibilities between the federal government and Indian tribes. The Navy will continue to coordinate with Indian Tribal Governments in accordance with Executive Order 13175. The Action Proponents are conducting Government to Government consultation as part of the Section 106 consultation process. See Section 6.1.4 for more information.			
Executive Order 13840, Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States	The Proposed Action is consistent with the comprehensive national policy for the Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States (which replaced Executive Order 13547, Stewardship of the Ocean, Our Coasts, and the Great Lakes).			
Executive Order 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis	This executive order revokes Executive Order 13834, <i>Efficient Federal</i> <i>Operations</i> , except for Section 6, 7, and 11. The Proposed Action is consistent with this executive order's goals to empower workers and communities, promote and protect public health and the environment, and conserve national treasures and monuments.			
Executive Order 14008, Tackling the Climate Crisis at Home and Abroad	The Proposed Action is consistent with this executive order's goal of taking a government-wide approach to tackling the climate crisis.			

Laws, Executive Orders, International Standards, and Guidance	Status of Compliance		
Executive Order 14057, Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability	The Navy completed a Navy-wide Climate Action Plan in accordance with this executive order.		
International Standards			
International Convention for the Prevention of Pollution from Ships (MARPOL)	The Navy adheres to all applicable requirements within the Convention and domestic enacting laws (like APPS).)		

Notes: EIS = Environmental Impact Statement, OEIS = Overseas Environmental Impact Statement, CFR = Code of Federal Regulations, DoD = Department of Defense, FR = Federal Register

#### 6.1.1 Coastal Zone Management Act Compliance

The Proposed Action is consistent with activities that were covered in the 2018 HSTT and 2022 PMSR EIS/OEISs. Per the CZMA of 1972 (16 U.S.C. section 1451, et seq.), federal actions that have an effect on a coastal use or resource are required to be consistent, to the maximum extent practicable, with the enforceable policies of federally approved Coastal Management Plans. As such, the Action Proponents will prepare consistency determinations in accordance with federal consistency determinations to be submitted to the California Coastal Commission and the Hawaii Office of Planning (Appendix J).

#### 6.1.2 Marine Protected Areas

The 2018 HSTT and 2022 PMSR EIS/OEISs discussed marine protected areas that were part of the National System of Marine Protected Areas that overlapped with the Study Area (U.S. Department of the Navy, 2018). Since the publication of the 2018 HSTT and 2022 PMSR EIS/OEISs, the National Marine Protected Areas Center has updated their definitions and classification system for marine protected areas to mirror that of the International Union for Conservation of Nature. More information on marine protected areas, as well as an online mapper, can be found at the National Marine Protected Areas Center website (National Marine Protected Areas Center, 2023).

Marine Protected Areas within the Study Area are included in Table 6-2. All resources of the marine protected areas located within the Study Area have been incorporated into the analyses in Sections 3.1 through 3.8. In accordance with Executive Order 13158, the potential effects of the proposed activities under the Preferred Alternative (Alternative 1) to the national system of protected areas that contain marine waters within the Study Area have been considered, factoring in standard operating procedures (Appendix A) and mitigation (Chapter 5) when applicable to the stressor and resource.

#### 6.1.2.1 State Marine Protected Areas

State governments have established marine protected areas, including state parks and species-specific sanctuaries, for the management of fisheries, nursery grounds, shellfish beds, recreation, tourism, and for other uses. These areas have a diverse array of conservation objectives, from protecting ecological functions, to preserving shipwrecks, to maintaining traditional or cultural interaction with the marine environment. There are 72 state or local marine protected areas within the Study Area that are included in the National System of Marine Protected Areas (Table 6-2 and Figure 6-1 through Figure 6-4).

**Special Closures**: Areas designated by the California Fish and Game Commission, where access is restricted to protect seabird rookeries or marine mammal haul-out areas. There are three Special Closures within the California Study Area (Table 6-2 and Figure 6-1).

**Areas of Special Biological Significance (ASBS)**: Established by the California State Water Resources Control Board for ocean water quality maintenance and monitoring to protect diverse varieties of aquatic wildlife. There are 15 ASBS within the Study Area, as listed in Table 6-2 and Figure 6-1.

#### 6.1.2.2 Federal Marine Protected Areas

## 6.1.2.2.1 Federal Conservation Areas and Marine Reserves

The federal government has established marine conservation areas and marine reserves to conserve nature, ecosystems services, and cultural value through effective management and protection. While conservation goals and degree of legal protection varies, all involved levels of fisheries, recreation, and tourism management. There are nine federal conservation areas of marine reserves within the Study Area that are included in the National System of Marine Protected Areas (Table 6-2 and Figure 6-1 through Figure 6-4).

National Estuarine Research Reserves: National Estuarine Research Reserve System sites protect estuarine land and water and provide habitat for wildlife. These sites also provide educational opportunities for students, teachers, and the public; and serve as laboratories for scientists (15 CFR part 921). The National Estuarine Research Reserve Program was established through the Coastal Zone Management Act and is administered in coordination with the National Marine Sanctuary System. Each reserve is managed by a state agency or university with input from local partners on a site-specific basis. There is one National Estuarine Research Reserve System sites within the Study Area (Table 6-2 and Figure 6-3).

#### 6.1.2.2.2 National Monuments

Marine National monuments are designated through Presidential Proclamation under the authority of the Antiquities Act of 1906 (as codified in 54 U.S.C. section 320301). Marine national monuments are often co-managed by state, federal, and local governments as trustees, in order to preserve diverse habitats and ecosystem functions; they can include land and ocean resources. There are three marine national monuments within the Study Area: one in Hawaii (Table 6-2 and Figure 6-4), one in the Pacific Remote Islands (Table 6-2 and Figure 6-4), and one in California (Table 6-2 and Figure 6-4). The Papahanaumokuakea Marine National Monument within the Hawaii Study Area is also a United Nations Educational, Scientific and Cultural Organization World Heritage Sites, as discussed in Section 3.10.

## 6.1.2.2.2.1 California Coastal National Monument

Established on January 11, 2000, the California Coast National Monument encompasses the entire California coastline and provides unique coastal habitat for marine life that inhabit its nearly 20,000 rocks, islands, and exposed reefs (Figure 6-2). The monument provides nesting habitat for nearly 200,000 breeding seabirds, as well as myriad species of marine mammals, fish, invertebrates, and algae (Bureau of Land Management, 2023). Activities proposed to occur within the National Monument are summarized in Table 6-2.

#### 6.1.2.2.2.2 Pacific Remote Islands National Monument

The Pacific Remote Islands Marine National Monument was established through Presidential Proclamation 8336 on January 6, 2009, and expanded via Proclamation 9173 on September 25, 2014.

Pacific Remote Islands Marine National Monument comprises approximately 495,189 square miles and includes Baker, Howland, and Jarvis Islands; and Johnston, Wake, and Palmyra Atoll; and Kingman Reef (Table 6-2 and Figure 6-4). The northeast portion of the Pacific Remote Islands National Marine Monument, specifically Johnston Atoll, is included in the Hawaii Study Area.

The Pacific Remote Islands Marine National Monument is one of the most pristine tropical marine environments in the world and includes approximately 165 seamounts that are hotspots of marine biodiversity, including fish, corals, shellfish, seabirds, and vegetation not found anywhere else in the world. Many threatened or endangered species thrive in the protected waters of the Monument.

Johnston atoll and its islands (Johnston, Sand, North, and East islands) are the northernmost point of the Line Islands and are the portion of the Pacific Remote Islands Marine National Monument that are within the Study Area. It is an ancient atoll and provides habitat for at least 45 coral species, including 12 species that are only found in the Hawaiian and Line Islands.

The Pacific Remote Islands Marine National Monument is cooperatively managed by the U.S. Department of Commerce (NOAA), the U.S. Department of the Interior (USFWS), and the DoD. NOAA and USFWS are working to develop a management plan for the Monument that will help guide conservation management and address concerns such as climate change.

## 6.1.2.2.2.3 Papahanaumokuakea Marine National Monument

Details of the Papahanaumokuakea Marine National Monument are discussed in the 2018 HSTT EIS/OEIS, and the dimensions, species, and descriptions of the area have not changed. The Hawaii Study Area encompasses the Papahanaumokuakea Marine National Monument (Table 6-2 and Figure 6-4), and the activities proposed to occur in the monument in the 2018 HSTT EIS/OEIS have not changed and are summarized in Table 6-2. Mitigation measures, as described in Chapter 5, would be implemented and benefit the monument's resources. Mai Ka Pō Mai (a Native Hawaiian management document for the Monument) will serve as the foundation for the update of the Monument Management Plan. The Management Plan is in the process of being updated, and it is anticipated that the planning process will take 2–3 years.

#### 6.1.2.2.3 National Wildlife Refuges

Details of refuges within the Study Area are included in the 2018 HSTT EIS/OEIS. The boundaries, species present, and regulations have not changed. The National Wildlife Refuge System serves as a national network of lands and waters for the conservation, management, and where appropriate, restoration of fish, wildlife, and plant resources and habitats. National wildlife refuges are managed on a site-specific basis. Activities conducted within a refuge must not impair existing wildlife-dependent recreational uses or reduce the potential of the refuge to provide quality, compatible, wildlife-dependent recreation into the future. The USFWS is directed to continue, consistent with existing laws and interagency agreements, authorized or permitted refuge uses necessary to facilitate military preparedness; however, new agreements permitting military preparedness activities on refuges are discouraged (U.S. Fish and Wildlife Service, 2006). There are four national wildlife refuge areas within the Study Area (Table 6-2 and Figure 6-1, and Figure 6-3).

#### 6.1.2.2.4 National Marine Sanctuaries

Under the Marine Protection, Research, and Sanctuaries Act of 1972 (also known as the National Marine Sanctuaries Act), NOAA establishes a national marine sanctuary for marine areas with special conservation, recreational, ecological, historical, cultural, archaeological, scientific, educational, or

aesthetic qualities. The National Marine Sanctuaries Act and federal regulations prohibit destroying, causing the loss of, or injuring any sanctuary resource managed under the law or regulations for that sanctuary (16 U.S.C. section 1436; 15 CFR part 922). National Marine Sanctuaries are managed on a site-specific basis, and each sanctuary has site-specific regulatory prohibitions. Each sanctuary also has site-specific regulatory exemptions from the prohibitions for certain military activities.

Additionally, 16 U.S.C. 1434(d) of the National Marine Sanctuaries Act requires federal agencies to consult with the Office of National Marine Sanctuaries (ONMS) whenever their proposed actions are likely to destroy, cause the loss of, or injure a sanctuary resource. Within the Study Area, there are eight National Marine Sanctuaries included in the List of National System Marine Protected Areas, six of which are designated, two of which are in the designation process. The National Marine Sanctuaries within the Study Area are mapped in Figure 6-2 and Figure 6-4. Where appropriate, a Sanctuary Resources Statement has been prepared describing potential injury to sanctuary resources, which has been submitted to the ONMS to initiate National Marine Sanctuaries Act 16 U.S.C. 1434(d) consultation. Potential mitigation measures that would afford additional protection to sanctuary resources are described in Chapter 5. Additionally, the Central California Large Whale Mitigation Area, a proposed mitigation area, would limit annual sonar use to no more than 300 hours of hull-mounted mid-frequency active sonar in a few of the sanctuaries in the California Study Area. The Central California Large Whale Mitigation Area overlaps significantly with Cordell Bank, Greater Farallones, Monterey Bay and the Chumash Heritage National Marine Sanctuaries. See Table 6-2 for a listing and details concerning the National Marine Sanctuaries within the HCTT Study Area.

#### 6.1.2.2.5 National Parks

The National Park Service administers all national parks, national seashores, and some of the national recreation areas and national monuments to conserve the scenery and the natural and historic objects and wildlife contained within. Park managers control all park usage to ensure that park resources and values are preserved for the future. Unacceptable effects are those that fall short of impairment but are still not acceptable within a particular park's environment, as determined by the professional judgment of the park manager in accordance with *National Park Service Management Policies 2006* (National Park Service, 2006). Military services may request the use of park areas for noncombat exercises. Permits are approved at the discretion of the park superintendent. There are three National Parks within the Study Area that are included in the National System of Marine Protected Areas (Table 6-2 and Figure 6-4). While the Navy owns infrastructure facilities that support testing and training within Channel Islands National Park, the Navy does not conduct any testing or training activities in the waters of the park (defined as waters within 1 NM of island shorelines).

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
State Marine Protected Are	eas				
Abalone Cove State Marine Conservation Area	#1, Figure 6-1	California	Ecosystem; rocky reef, surf grass, kelp forest, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Abalone Cove State Marine Conservation Area.
Ahihi-Kinau Natural Area Reserve	#2, Figure 6-3	Hawaii	Ecosystem; recent lava flow, unique coral reef assemblages, anchialine ponds	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Ahihi-Kinau Natural Area Reserve.
Anacapa Island State Marine Conservation Area	#3, Figure 6-1	California	Ecosystem; kelp forest, sandy and rocky seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Anacapa Island State Marine Reserve	#5, Figure 6-1	California	Ecosystem; kelp forest, sandy and rocky seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Arrow Point to Lion Head Point (Catalina Island) State Marine Conservation Area	#6, Figure 6-1	California	Ecosystem; kelp forest, sandy and rocky seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Arrow Point to Lion Head Point (Catalina Island) State Marine Conservation Area.
Begg Rock (San Nicolas Island Quad) State Marine Reserve	#7, Figure 6-1	California	Ecosystem; rocky reef	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Big Creek State Marine Conservation Area	#8, Figure 6-1	California	Ecosystem; kelp forest, rock pinnacle reef, submarine canyon	Activities will avoid harm to natural and cultural resources protected by the MPA	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of Big Creek State Marine Conservation Area. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.
Big Creek State Marine Reserve	#9, Figure 6-1	California	Ecosystem; kelp forest, rock pinnacle reef, submarine canyon	Activities will avoid harm to natural and cultural resources protected by the MPA	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of Big Creek State Marine Reserve. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.
Blue Cavern (Catalina Island) Offshore State Marine Conservation Area	#10, Figure 6-1	California	Ecosystem; kelp forests, rocky reef, sandy seafloor, underwater caves	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Blue Cavern (Catalina Island) Offshore State Marine Conservation Area.
Blue Cavern (Catalina Island) Onshore State Marine Conservation Area	#11, Figure 6-1	California	Ecosystem; kelp forests, rocky reef, sandy seafloor, underwater caves	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Blue Cavern (Catalina Island) Onshore State Marine Conservation Area.
Cabrillo State Marine Reserve	#12, Figure 6-1	California	Ecosystem; kelp forest, rocky reef, sandy seafloor, intertidal habitat	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Cabrillo State Marine Reserve.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Cambria State Marine Conservation Area	#13, Figure 6-1	California	Ecosystem; kelp forest, estuaries, marshes, rock reef	Activities will avoid harm to natural and cultural resources protected by the MPA	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of Cambria State Marin Conservation Area. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.
Carrington Point (Santa Rosa Island) State Marine Reserve	#14, Figure 6-1	California	Ecosystem; kelp forest, surf grass beds, offshore sandy seafloors	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Casino Point (Catalina Island) State Marine Conservation Area	#15, Figure 6-1	California	Ecosystem; rocky intertidal habitat, rocky reef, kelp forest	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Casino Point (Catalina Island) State Marine Conservation Area.
Cat Harbor (Catalina Island) State Marine Conservation Area	#16, Figure 6-1	California	Ecosystem; tidal flats	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Cat Harbor (Catalina Island) State Marine Conservation Area.
Crystal Cove State Marine Conservation Area	#17, Figure 6-1	California	Ecosystem: kelp forest, rocky reef, surf grass, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Crystal Cove State Marine Conservation Area.
Dana Point State Marine Conservation Area	#18, Figure 6-1	California	Ecosystem; kelp forest, surf grass, rocky reef	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Dana Point State Marine Conservation Area.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Farnsworth Bank ASBS State Water Quality Protection Area	#19, Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy does not discharge waste in or near this area. Sonar-related activities and other training and testing activities are not likely to harm the area's protected natural resources. A detailed analysis of Water Quality effects in the Study Area is included in Section 3.2. Therefore, no significant effects are expected within the Farnsworth Bank ASBS State Water Quality Protection Area.
Farnsworth Offshore (Catalina Island) State Marine Conservation Area	#20, Figure 6-1	California	Ecosystem; rocky reef, rocky intertidal, kelp forest, surf grass, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA	Sonar-related activities and other training and testing activities are not likely to harm the area's protected natural resources. No explosives are used in this marine protected area. Therefore, no significant effects are expected within the Farnsworth Offshore (Catalina Island) State Marine Conservation Area.
Farnsworth Onshore (Catalina Island) State Marine Conservation Area	#21, Figure 6-1	California	Ecosystem; rocky reef, rocky intertidal, kelp forest, surf grass, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Farnsworth Onshore (Catalina Island) State Marine Conservation Area.
Footprint State Marine Reserve	#22, Figure 6-1	California	Ecosystem; deep coldwater habitat	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Gull Island (Santa Cruz Island) State Marine Reserve	#24, Figure 6-1	California	Ecosystem; rocky reef, pinnacle, kelp forest, sandy seafloor, submarine canyon	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Hanauma Bay MLCD	#26, Figure 6-3	Hawaii	Ecosystem; fringing coral reef, sand bottom	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Hanauma Bay MLCD.
Harris Point (San Miguel Island) State Marine Reserve	#27, Figure 6-1	California	Ecosystem; rocky reef, rocky pinnacle, kelp forest, surf grass, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Irvine Coast ASBS	#29, Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy does not discharge waste in or near this area. A detailed analysis of water quality effects in the Study Area is included in Section 3.2. Therefore, no effects are expected within the Irvine Coast ASBS State Water Quality Protection Area.
Judith Rock (San Miguel Island) State Marine Reserve	#30, Figure 6-1	California	Ecosystem; kelp forest, surf grass, rocky reef	Activities will avoid harm to natural and cultural resources protected by the MPA	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Julia Pfeiffer Burns ASBS	#31, Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of Julia Pfeiffer Burns ASBS. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Kahoolawe Island Reserve	#32, Figure 6-3	Hawaii	Ecosystem: coral reef, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy conducts no activities on or near Kahoolawe Island. Submarines conduct underwater mine detection activities several nautical miles west of Kahoolawe. However, submarine underwater mine detection activities are not likely to harm the area's protected natural resources. No explosives are used in this marine protected area. Therefore, no significant effects are expected within the Kahoolawe Island Reserve.
Kealakekua Bay MLCD	#33, Figure 6-3	Hawaii	Ecosystem; fringing coral reef, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Kealakekua Bay MLCD.
Kure Atoll Wildlife Sanctuary	#90, Figure 6-4	Hawaii	Ecosystem; fringing coral reef, cultural resources, pelagic ocean	Prohibitions on activities within the Kure Atoll Wildlife Sanctuary are the same as those that apply to the Papahanaumokuakea Marine National Monument and World Heritage Site (50 CFR part 404). Activities of the Armed Forces are not subject to those prohibited acts. The regulations state that "all activities and exercises of the Armed Forces shall be carried out in a manner that avoids, to the extent practicable and consistent with operational requirements, adverse effects on Monument	Limited activities under the Proposed Action would be conducted within or in the vicinity of Kure Atoll Wildlife Sanctuary. The Navy conducts activities in a manner that avoids, to the extent practicable and consistent with operational requirements, effects on Refuge resources and qualities. Therefore, no significant effects are expected within the Kure Atoll Wildlife Sanctuary.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
				resources and qualities."	
				Additionally, these	
				regulations require that "in	
				the event of threatened or	
				actual destruction of, loss of,	
				or injury to a Monument	
				resource or quality resulting	
				from an incident, including	
				but not limited to spills and	
				groundings, caused by a	
				component of the DoD or the	
				United States Coast Guard,	
				the cognizant component	
				shall promptly coordinate	
				with the Secretaries for the	
				purpose of taking	
				appropriate actions to	
				respond to and mitigate the	
				harm and, if possible, restore	
				or replace the Monument	
				resource or quality". Activities will avoid harm to	
				natural and cultural	
				resources protected by the	
				MPA.	

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
La Jolla ASBS State Water Quality Protection Area	#34, Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy conducts training and testing in all warfare areas, including mine warfare training activities and underwater communications testing activities just offshore (within 3 NM) of this water quality protection area. The Navy does not discharge any waste in or near this area. A detailed analysis of water quality effects in the Study Area is included in Section 3.2. No explosives are used in this marine protected area. Mine warfare training activities, underwater communications testing activities, and other training and testing activities are not likely to harm the area's protected natural resources. Therefore, no significant effects are expected within the La Jolla ASBS State Water Quality Protection Area.
Laguna Beach State Marine Conservation Area	#35, Figure 6-1	California	Ecosystem; rocky intertidal, rocky reef, kelp forest, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Laguna Beach State Marine Conservation Area.
Laguna Beach State Marine Reserve	#36, Figure 6-1	California	Ecosystem; rocky intertidal, rocky reef, kelp forest, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Laguna Beach State Marine Reserve.
Laguna Point to Latigo Point ASBS State Water Quality Protection Area	#37, Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy does not discharge waste in or near this area. Other testing or training activities are not likely to harm the area's protected natural resources. A detailed analysis of water quality effects in the Study Area is included in Section 3.2. Therefore, no significant effects are expected within this area.

Table 6-2: Marine Protected Areas Within the Hawaii-California Training and Testing Study	(continued)
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Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Lapakahi MLCD	#38, Figure 6-3	Hawaii	Ecosystem; lava fingers, fringing coral reef	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Lapakahi MLCD.
Long Point (Catalina Island) State Marine Reserve	#39, Figure 6-1	California	Ecosystem; kelp forest, rocky reef, surf grass, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Long Point (Catalina Island) State Marine Reserve.
Lover's Cove (Catalina Island) State Marine Conservation Area	#40, Figure 6-1	California	Ecosystem; rocky intertidal, rocky reef, kelp forest	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Lover's Cove (Catalina Island) State Marine Conservation Area.
Manele-Hulopoe MLCD	#41, Figure 6-3	Hawaii	Ecosystem; fringing coral reef, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Manele-Hulopoe MLCD.
Matlahuayl State Marine Reserve	#42, Figure 6-1	California	Ecosystem; kelp forest, rocky intertidal, rocky reef, sur grass, sea caves, submarine canyon	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed training or testing activities are expected to occur in the area. Therefore, no effects are expected within the Matlahuayl State Marine Reserve.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Molokini Shoal MLCD	#43, Figure 6-3	Hawaii	Ecosystem; fringing coral reef, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy conducts sonar in the waters near Molokini Shoal MLCD. No explosives are used in this marine protected area. The Navy avoids affecting Conservation District resources and qualities to the maximum extent practicable. Mitigation measures are employed whenever sonar activities occur, as applicable. The Navy may conduct diver insertion or extraction on or near Molokini. However, diver insertion or extraction is not likely to affect the area's protected natural resources. Therefore, no significant effects are expected to the Molokini Shoal MLCD.
Morro Bay State Marine Reserve	#44, Figure 6-1	California	Ecosystem; tidal flats, coast marsh, eelgrass bed	Activities will avoid harm to natural and cultural resources protected by the MPA.	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of Morro Bay State Marine Reserve. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.
Northwest Santa Catalina Island ASBS State Water Quality Protection Area	#45, Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy does not discharge waste in or near this area. A detailed analysis of water quality effects in the Study Area is included in Section 3.2. No explosives are used in this marine protected area. Sonar-related activities and other training and testing activities are not likely to harm the area's protected natural resources. Therefore, no significant effects are expected within the Northwest Santa Catalina Island ASBS State Water Quality Protection Area.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Northwestern Hawaiian Islands Marine Refuge	#89, Figure 6-4	Hawaii	Ecosystem	Activities will avoid harm to natural and cultural resources protected by the MPA.	Limited activities under the Proposed Action would be conducted within or in the vicinity of Northwestern Hawaiian Islands Marine Refuge. The Navy conducts activities in a manner that avoids, to the extent practicable and consistent with operational requirements, effects on Refuge resources and qualities. Therefore, no significant effects are expected within the Northwestern Hawaiian Islands Marine Refuge.
Old Kona Airport MLCD	#46, Figure 6-3	Hawaii	Ecosystem; lava fingers, fringing coral reef	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Old Kona Airport MLCD.
Painted Cave (Santa Cruz Island) State Marine Conservation Area	#47, Figure 6-1	California	Ecosystem; nearshore, rocky reef, sandy seafloor, sea cave	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Piedras Blancas State Marine Conservation Area	#48, Figure 6-1	California	Ecosystem; rocky reef, surf grass, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of Piedras Blancas State Marine Conservation Area. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Piedras Blancas State Marine Reserve	#49, Figure 6-1	California	Ecosystem; rocky reef, surf grass, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of Piedras Blancas State Marine Reserve. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.
Point Buchon State Marine Conservation Area	#50, Figure 6-1	California	Ecosystem; intertidal, rocky reef, kelp forest, sandy seafloor, offshore pinnacles	Activities will avoid harm to natural and cultural resources protected by the MPA.	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of Point Buchon State Marine Conservation Area. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.
Point Buchon State Marine Reserve	#51, Figure 6-1	California	Ecosystem; intertidal, rocky reef, kelp forest, sandy seafloor, offshore pinnacles	Activities will avoid harm to natural and cultural resources protected by the MPA.	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of Point Buchon State Marine Reserve. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.
Point Conception State Marine Reserve	#52, Figure 6-1	California	Ecosystem; kelp forest, surf grass, rocky reefs, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Point Sur State Marine Conservation Area	#53, Figure 6-1	California	Ecosystem; kelp forest, rocky reef, submarine canyon	Activities will avoid harm to natural and cultural resources protected by the MPA.	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of Point Sur State Marine Conservation Area. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.
Point Sur State Marine Reserve	#54, Figure 6-1	California	Ecosystem; kelp forest, rocky intertidal, rocky reef, submarine canyon	Activities will avoid harm to natural and cultural resources protected by the MPA.	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of Point Sur State Marine Reserve. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.
Point Vicente State Marine Conservation Area	#55, Figure 6-1	California	Ecosystem; kelp forest, rocky reef, soft seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed training or testing activities are expected to occur in the area. Therefore, no effects are expected within the Point Vicente State Marine Conservation Area.
Pupukea MLCD	#56, Figure 6-3	Hawaii	Ecosystem; rocky reef, submarine caves, estuary,	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Pupukea MLCD.
Richardson Rock (San Miguel Island) State Marine Reserve	#57, Figure 6-1	California	Ecosystem; pinnacles, rocky reef	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Robert E. Badham ASBS	#59, Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy does not discharge waste in or near this area. A detailed analysis of water quality effects in the Study Area is included in Section 3.2. Therefore, no effects are expected within the Robert E. Badham ASBS State Water Quality Protection Area.
Salmon Creek Coast ASBS	#60, Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of Salmon Creek Coast ASBS. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.
San Clemente Island ASBS State Water Quality Protection Area	#61, Figure 6-1	California	Water Quality	Military training and testing activities are exempt from the established waste discharge prohibitions within the ASBS. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy conducts training and testing in all warfare areas, including amphibious, anti- surface warfare, anti-submarine warfare, electronic warfare, mine warfare, and expeditionary warfare activities in this area. The military could discharge waste in or near this area in accordance with the exemption provided for military training and testing activities. A detailed analysis of water quality effects in the Study Area is included in Section 3.2. Training and testing activities are not likely to harm the area's protected natural resources because any discharges will be conducted in accordance with ASBS regulations and military exemption policies. Therefore, no significant effects are expected within the San Clemente Island ASBS State Water Quality Protection Area.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
San Diego-Scripps ASBS State Water Quality Protection Area	#62, Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy conducts training and testing in all warfare areas, including mine warfare training activities and underwater communications testing activities just offshore (within 3 NM) of this water quality protection area. However, no explosives are used in this marine protected area. The Navy does not discharge any waste in or near this area. A detailed analysis of water quality effects in the Study Area is included in Section 3.2. Mine warfare training activities, underwater communications testing activities, and other training and testing activities are not likely to harm the area's protected natural resources. Therefore, no significant effects are expected within the San Diego-Scripps ASBS State Water Quality Protection Area.
San Diego-Scripps Coastal State Marine Conservation Area	#63, Figure 6-1	California	Ecosystem; rocky reef, sandy seafloor, submarine canyon	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, unless following the specified exceptions (California Department of Fish and Wildlife, 2016).	Mitigation measures are employed whenever sonar activities occur, as applicable; therefore, sonar-related activities and other training and testing activities are not likely to harm the area's protected natural resources in this marine protected area. Therefore, no significant effects are expected within the San Diego-Scripps Coastal State Marine Conservation Area.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
San Miguel, Santa Rosa, and Santa Cruz Islands ASBS State Water Quality Protection Area	#64, Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy does not discharge waste in or near this area. Other testing or training activities are not likely to harm the area's protected natural resources. A detailed analysis of water quality effects in the Study Area is included in Section 3.2. Therefore, no significant effects are expected within this area.
San Nicolas Island and Begg Rock ASBS State Water Quality Protection Area	#65, Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy does not discharge waste in or near this area. No explosives are used in this marine protected area. A detailed analysis of water quality effects in the Study Area is included in Section 3.2. Therefore, no significant effects are expected within the San Nicolas Island and Begg Rock ASBS State Water Quality Protection Area.
Santa Barbara and Anacapa Islands ASBS State Water Quality Protection Area	#66, Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy does not discharge waste in or near this area. Other testing or training activities are not likely to harm the area's protected natural resources. A detailed analysis of water quality effects in the Study Area is included in Section 3.2. Therefore, no significant effects are expected within the Santa Barbara and Anacapa Islands ASBS State Water Quality Protection Area.
Santa Barbara Island State Marine Reserve	#67, Figure 6-1	California	Ecosystem; sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	Mitigation measures are employed whenever sonar activities occur, as applicable; therefore, sonar-related activities and other training and testing activities are not likely to harm the area's protected natural resources. No explosives are used in this marine protected area. Therefore, no significant effects are expected within the Santa Barbara Island State Marine Reserve.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Skunk Point (Santa Rose Island) State Marine Reserve	#69, Figure 6-1	California	Ecosystem; kelp forest, sandy seafloor, surf grass, eelgrass, lagoon	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
South La Jolla State Marine Conservation Area	#70, Figure 6-1	California	Ecosystem; kelp forest, rocky reef, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	Transits may occur in this area. No proposed training and testing activities are expected to occur in the area. Therefore, no significant effects are expected within the South La Jolla State Marine Conservation Area.
South La Jolla State Marine Reserve	#71, Figure 6-1	California	Ecosystem; kelp forest, rocky reef, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	Transits may occur in this area. No proposed training and testing activities are expected to occur in the area. Therefore, no significant effects are expected within the South La Jolla State Marine Reserve.
South Point (Santa Rosa Island) State Marine Reserve	#72, Figure 6-1	California	Ecosystem; kelp forest, rocky reef, surf grass, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Southeast Santa Catalina Island ASBS State Water Quality Protection Area	#74. Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy does not discharge waste in or near this area. A detailed analysis of water quality effects in the Study Area is included in Section 3.2. Sonar-related activities and other training and testing activities are not likely to harm the area's protected natural resources. No explosives are used in this marine protected area. Therefore, no significant effects are expected within the Southeast Santa Catalina Island ASBS State Water Quality Protection Area.
Swami's State Marine Conservation Area	#75, Figure 6-1	California	Ecosystem; kelp forest, rocky reef, surf grass, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Swami's State Marine Conservation Area.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Vandenberg State Marine Reserve	#76, Figure 6-1	California	Ecosystem; kelp forest, rocky reef, tidal flats, estuary, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of Vandenberg State Marine Conservation Area. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.
Waikiki MLCD	#77, Figure 6-3	Hawaii	Ecosystem; reef flat, fringing coral reef,	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the Waikiki MLCD.
Western Santa Catalina Island ASBS State Water Quality Protection Area	#79, Figure 6-1	California	Water Quality	Waste discharges are prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy does not discharge waste in or near this area. A detailed analysis of water quality effects in the Study Area is included in Section 3.2. Therefore, no effects are expected within the Western Santa Catalina Island ASBS State Water Quality Protection Area.
White Rock State Marine Conservation Area	#80, Figure 6-1	California	Ecosystem; kelp forests, rocky intertidal, rocky reef, sandy seafloor, pinnacles	Activities will avoid harm to natural and cultural resources protected by the MPA.	Amphibious landing activities would be conducted on soft habitat areas within the vicinity of White Rock State Marine Conservation Area. Effects on hard bottom habitats (reefs) would be avoided; soft bottom in the nearshore environment where amphibious landing activities would occur is sand, which would return to normal after disturbance concludes. Further details can be found in Section 3.5.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
State Special Closures					
Anacapa Island Special Closure (A)	#82, Figure 6-1	California	Ecosystem	No net or trap may be used in waters less than 20 feet deep off Anacapa Island. A brown pelican fledging area is designated on the north side of West Anacapa Island. This area is restricted to everyone except California Department of Fish and Wildlife employees or National Park Service employees.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Anacapa Island Special Closure (B)	#83, Figure 6-1	California	Ecosystem	No net or trap may be used in waters less than 20 feet deep off Anacapa Island. A brown pelican fledging area is designated on the north side of West Anacapa Island. This area is restricted to everyone except California Department of Fish and Wildlife employees or National Park Service employees.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
San Miguel Island Special Closure (A-1)	#84, Figure 6-1	California	Ecosystem	Boating is allowed except west of a line drawn between Judith Rock and Castle Rock where boats are prohibited closer than 300 yards from shore. Boats operated by commercial sea urchin divers may enter the	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
				restricted waters with a minimum amount of noise and not exceeding speeds of five miles per hour. Landing is allowed on San Miguel Island only at the designated landing beach in Cuyler Harbor.	
Federal Marine Protected A					
Federal Conservation Area	and Marine Rese	rves		Activities will avoid harm to	
Anacapa Island Federal Marine Conservation Area	#4, Figure 6-1	California	Ecosystem; kelp forest, sandy and rocky seafloor	natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Anacapa Island Federal Marine Reserve	#6, Figure 6-1	California	Ecosystem; kelp forest, sandy and rocky seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Footprint (Anacapa Channel) Federal Marine Reserve	#23, Figure 6-1	California	Ecosystem; deep coldwater habitat	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Gull Island (Santa Cruz Island) Federal Marine Reserve	#25, Figure 6-1	California	Ecosystem; rocky reef, pinnacle, kelp forest, sandy seafloor, submarine canyon	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Harris Point (San Miguel Island) Federal Marine Reserve	#28, Figure 6-1	California	Ecosystem; rocky reef, rocky pinnacle, kelp forest, surf grass, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
He'eia National Estuarine Research Reserve	#81, Figure 6-3	Hawaii	Ecosystem; coral reef, sandy seafloor, estuary	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within the He'eia National Estuarine Research Reserve.
Richardson Rock (San Miguel Island) Federal Marine Reserve	#58, Figure 6-1	California	Ecosystem; pinnacles, rocky reef	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
Santa Barbara Island Federal Marine Reserve	#68, Figure 6-1	California	Ecosystem; sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
South Point (Santa Rosa Island) Federal Marine Reserve	#73, Figure 6-1	California	Ecosystem; kelp forest, rocky reef, surf grass, sandy seafloor	Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities are expected to occur in the area. Therefore, no effects are expected within this area.
National Monuments					
California Coastal National Monument	#1, Figure 6-2	California	Ecosystem	Presidential proclamations 7264 and 9089 (terrestrial extension) do not include any prohibitions or regulations concerning DoD activities. Both proclamations note that the establishment and subsequent boundary enlargement were subject to existing rights. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Navy and USMC conduct activities throughout the central and southern portions of Monument (which spans the entire coastline of California), including but not limited to amphibious landings at various locations. However, activities under the Proposed Action would not occur on the rocks the comprise the Monument. Additionally, the Navy and the Bureau of Land Management have agreed on the terms of a Memorandum of Understanding dated November 5, 2007, regarding Navy activities in the vicinity of monument resources. Implementation of the Proposed Action would be consistent with the Memorandum of Understanding and would not affect

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
					monument resources.
Pacific Remote Islands National Marine Monument	#2, Figure 6-4	U.S. Territory	Ecosystem	Presidential Proclamation 8336 includes exemptions for DoD activities, including the protected of training, readiness, and global mobility of the U.S. Armed Forces. It also stipulates that no regulation implementing this proclamation shall limit or otherwise affect the Armed Forces discretion to use, maintain, improve, or control properties under the administrative control of a Military Department or otherwise limit the availability of such property for military mission purposes, including, but not limited to, defensive areas and airspace reservations.	The Navy conducts no activities in or near the proposed Pacific Remote Islands National Marine Monument. Ships may transit in the vicinity of the sanctuary and within Pacific Remote Islands Marine National Monument. Ships transiting in the vicinity are not expected to affect monument resources. While there has been no incident to date, should there be a threatened or actual event that may cause destruction of, loss of, or injury to a Monument resource or quality (such as spill or grounding), the DoD and Navy would coordinate with the Secretaries of Commerce and Interior to respond to, and provide mitigation or restoration of the effects of any such harm. No significant adverse effect is likely.
Papahanaumokuakea Marine National Monument and World Heritage Site	#3, Figure 6-4	Hawaii	Ecosystem	The Monument's two Proclamations identify prohibitions on activities within the Monument. Proclamation 8031 provides that "all activities and exercises of the Armed Forces shall be carried out in a manner that avoids, to the extent practicable and consistent with operational	Vessels and aircraft used in the conduct of military training and testing would be operated in a manner consistent with the requirements of Presidential Proclamations 8031 and 9478, so far as is practicable. As analyzed in Section 3.10, no adverse effects on cultural resources would occur as a result of the Proposed Action; additionally, adverse effects on biological resources are not anticipated. While there has been no incident to date, should there be a threatened or

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
	Number	Study Area		requirements, adverse effects on Monument resources and qualities." Similarly, Proclamation 9478, which expanded the Monument, requires that the "U.S. Armed Forces ensure that its vessels and aircraft act in a manner consistent, so far as is practicable with the Proclamation by the adoption of appropriate measures not impairing operations or operation capabilities." Additionally, both Proclamations state that "in the event of threatened or actual destruction of, loss of, or injury to a Monument resource or quality resulting from an incident, including but not limited to spills and groundings, caused by a component of the DoD or the United States Coast Guard, the cognizant component shall promptly coordinate with the Secretaries for the purpose of taking appropriate actions to respond to and mitigate the harm and, if possible, restore or replace	Considerations actual event that may cause destruction of, loss of, or injury to a Monument resource or quality (such as spill or grounding), the DoD and Navy would coordinate with the Secretaries of Commerce and Interior to respond to, provide mitigation or restoration of the effects of any such harm. No significant adverse effect is likely.
				the Monument resource or	

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
National Wildlife Refuges				quality". Activities will avoid harm to natural and cultural resources protected by the MPA. This refuge is captured	
Johnston Island National Wildlife Refuge	#2, Figure 6-4	U.S. Territory	Ecosystem; fringing coral reef, pelagic ocean	within the Pacific Remote Islands Marine National Monument. The proclamation for that Monument indicates that prohibition of certain activities does not apply to activities and exercises of the Armed Forces. Any activities carried out within the area will be conducted in a manner consistent "so far as is reasonable and practical" with the prohibitions. If a DoD activity causes any destruction, loss, or injury to a resource within the refuge, then the DoD will coordinate with the Secretary of the Interior or Commerce, to take appropriate actions to respond, mitigate, restore, or replace the affected areas. Activities will avoid harm to natural and cultural	The Navy conducts no activities in or near the Johnston Island National Wildlife Refuge. Ships may transit in the vicinity of the refuge and within Pacific Remote Islands Marine National Monument. Ships transiting in the vicinity are not expected to significantly affect the area's protected natural resources. Therefore, no significant effects as a result of the Proposed Action are expected to the Johnston Island National Wildlife Refuge.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
				resources protected by the MPA. Prohibitions on activities	
Midway Atoll National Wildlife Refuge and	#86, Figure 6-4	Hawaii	Ecosystem; fringing coral reef, cultural resources, pelagic ocean	within the Midway Atoll National Wildlife Refuge and Kure Atoll Wildlife Sanctuary are the same as those that apply for the Papahanaumokuakea Marine National Monument and World Heritage Site (50 CFR part 404). Activities of the Armed Forces are not subject to those prohibited acts. The regulations state that "all activities and exercises of the Armed Forces shall be carried out in a manner that avoids, to the extent practicable and consistent with operational requirements, adverse effects on Monument resources and qualities." Additionally, these regulations require that "in the event of threatened or actual destruction of, loss of, or injury to a Monument resource or quality resulting from an incident, including but not limited to spills and groundings, caused by a component of the DoD or the	Limited activities under the Proposed Action would be conducted within or in the vicinity of Midway Atoll National Wildlife Refuge and Kure Atoll Wildlife Sanctuary. The Navy conducts activities in a manner that avoids, to the extent practicable and consistent with operational requirements, effects on Refuge resources and qualities. Therefore, no significant effects are expected within the Midway Atoll National Wildlife Refuge and Kure Atoll Wildlife Sanctuary.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
				United States Coast Guard, the cognizant component shall promptly coordinate with the Secretaries for the purpose of taking appropriate actions to respond to and mitigate the harm and, if possible, restore or replace the Monument resource or quality". Activities will avoid harm to natural and cultural resources protected by the MPA.	
San Diego Bay National Wildlife Refuge	#87, Figure 6-1	California	Endangered Species Management	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational or commercial purposes. Swimming, operating personal watercraft (e.g., jet ski), and water skiing are not allowed on the refuge (U.S. Fish and Wildlife Service, 2014). Activities will avoid harm to natural and cultural resources protected by the MPA.	No activities are proposed within the San Diego Bay National Wildlife Refuge. Activities in the San Diego Bay outside of the National Wildlife Refuge would not injure, damage, take, or possess any living, geological, or cultural marine resource in the Refuge. Therefore, no effects are expected within the San Diego Bay National Wildlife Refuge.
Seal Beach National Wildlife Refuge	#88, Figure 6-1	California	Endangered Species Management	The Seal Beach National Wildlife Refuge is an approximately 920-acre salt marsh and upland habitat located entirely within the	No activities are proposed within the Seal Beach National Wildlife Refuge. Therefore, no effects are expected within the Seal Beach National Wildlife Refuge.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
				boundaries of Naval Weapons Station Seal Beach. The refuge is jointly managed by the Department of the Navy and the Fish and Wildlife Service pursuant to plans which are mutually acceptable to the Secretary of the Interior and the Secretary of the Navy. The focus of the refuge is on the protection of endangered bird species, primarily the California least tern and the light-footed Ridgeway rail. Activities will avoid harm to natural and cultural resources protected by the MPA.	
National Marine Sanctuari	es				
Channel Islands National Marine Sanctuary	#4, Figure 6-2	California	Ecosystem	Military activities pre-existing the Sanctuary effective date of Sanctuary regulations (September 1980) and those specifically listed in the Channel Islands National Marine Sanctuary Final MP/Final EIS are exempt from the prohibitions identified in 15 CFR 922.72. Other activities that are modified, new, or not considered pre-existing may	Proposed military activities in the Channel Islands National Marine Sanctuary include training exercises, military testing, and evaluation projects for aircraft, ship, and missile programs, and air, surface, and subsurface Navy testing and training. They are consistent with those activities described in the Sanctuary's regulations and in Section 3.5.9 (Department of Defense Activities, preexisting activities) of the 2009 <i>Final</i> <i>Channel Islands National Marine Sanctuary</i> <i>Management Plan/Final EIS.</i> While Navy activities are carried out in a manner that

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
				be exempted by the Director after consultation between the Director and the DoD. Activities will avoid harm to natural and cultural resources protected by the MPA.	avoids any adverse effects on Sanctuary resources or qualities to the maximum extent practicable, military readiness activities proposed to occur in the vicinity of Channel Islands National Marine Sanctuary have the potential to affect or cause injury to sanctuary resources. As such, consultation under Section 304(d) will occur for Channel Islands National Marine Sanctuary.
Cordell Bank National Marine Sanctuary	#5, Figure 6-2	California	Ecosystem	Cordell Bank National Marine Sanctuary regulations (15 CFR part 922, subpart K) provide that identified prohibitions do not apply to military activities currently carried out for the purpose of national defense by the DoD as of September 1980 (effective date of the regulations). Specific military activities are not specified in the 2014 Cordell Banks National Marine Sanctuary MP. However, new activities may be exempt from the prohibitions by the Director after a consultation between the DoD and NOAA. Activities will avoid harm to natural and cultural resources protected by the MPA.	As an ecosystem-based sanctuary, a key habitat of Cordell Bank National Marine Sanctuary's main feature is the Cordell Bank, which is a 26-square-mile rocky feature rising abruptly out of the soft sediment of the continental shelf 22 miles off the coast of Point Reyes. The diverse marine habitat is supported by the California Current, which flows southward along the coast of the bank, and the annual upwelling of nutrient-dense waters off the continental shelf (National Oceanic and Atmospheric Administration, 2023c). As a result, the sanctuary boasts a biologically diverse marine community that includes upwards of 18 mammal species, 180 species of fish, 70 species of birds, and thousands of invertebrate species that compete for space on the upper-reef habitat of the bank. The sanctuary also includes the continental slope, which accounts for 190 square miles of the sanctuary, and submarine canyons that extend over 5,200 feet deep that provide essential habitat for deep-water corals, sponges, and various fish (National

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
					Marine Sanctuary Foundation, 2023). Activities proposed in the Cordell Bank National Marine Sanctuary include flight operations. Cordell Bank National Marine Sanctuary regulations (15 CFR part 922, subpart K), all activities being carried out by the DoD within the sanctuary on the effective date of designation or expansion of the Sanctuary necessary for national defense are allowed under military exemption. Proposed activities fall under this exemption as they have been previously conducted within the NOCAL Range Complex. While Navy activities are carried out in a manner that avoids any adverse effects on Sanctuary resources or qualities to the maximum extent practicable, military readiness activities proposed to occur in the vicinity of Cordell Bank National Marine Sanctuary have the potential to affect or cause injury to sanctuary resources. As such, consultation under Section 304(d) will occur
Greater Farallones National Marine Sanctuary	#6, Figure 6-2	California	Ecosystem	Greater Farallones National Marine Sanctuary regulations (15 CFR part 922, subpart H) provide that identified prohibitions do not apply to military activities currently carried out by the DoD as of September 1980 (effective date of the regulations). Specific military activities are not specified in the 2014	for Cordell Bank National Marine Sanctuary. As an ecosystem-based sanctuary, key habitats of the Greater Farallones include sandy beaches, surfgrass, rocky shore, kelp forests, rocky reef, shallow sandy and rocky seafloor, deep seafloor, and pelagic habitat. The diversity of habitats onshore and offshore contributes to the high species diversity in the sanctuary, which supports 36 marine mammal species, over 390 species of fish, 330 species of invertebrates (including mollusks, echinoderms, cnidarians, arthropods,

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
				Greater Farallones National Marine Sanctuary MP. However, new activities may be exempt from the prohibitions by the Director after a consultation between the DoD and NOAA. Activities will avoid harm to natural and cultural resources protected by the MPA.	poriferans and polychaetes), over 200 species of algae, more than 250,000 seabirds from 160 species, and one of the most robust white shark populations on the planet. Within the sanctuary, the Farallon Islands host the largest breeding colony of seabirds in the Continental United States and also serves as a stop along the Pacific Flyway for species migrating from southern wintering ground to northern breeding sites (Greater Farallones Association, 2023). It is estimated that 300 shipwrecks are within the sanctuary area. Activities proposed in the Greater Farallones National Marine Sanctuary include flight operations. Per 15 CFR part 922, subpart H, all activities currently carried out by the DoD within the sanctuary are allowed under military exemption. Proposed activities fall under this exemption as they have been previously conducted within the NOCAL Range. While Navy activities are carried out in a manner that avoids any adverse effects on sanctuary resources or qualities to the maximum extent practicable, military readiness activities proposed to occur in the vicinity of Greater Farallones National Marine Sanctuary have the potential to affect or cause injury to sanctuary resources. As such, Consultation under Section 304(d) will occur for Greater Farallones National Marine Sanctuary.
Monterey Bay National	#8, Figure 6-2	California	Ecosystem	Prohibited or otherwise	Military activities in Monterey Bay National

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Marine Sanctuary				regulated activities are identified in 15 CFR part 922.132. The following activities are prohibited: exploring for or developing oil, gas, or minerals; discharging hazardous material; moving, removing, or injuring any historical resources; drilling and dredging; and taking or disturbing any marine mammal, sea turtle, or bird. Military activities defined in the 1992 Monterey Bay National Marine Sanctuary Final MP/EIS are exempt from the sanctuary's regulations. New activities may be exempted by the Director after consultation between the Director and the DoD. Activities will avoid harm to natural and cultural resources protected by the	Marine Sanctuary are identified in the 1992 Monterey Bay National Marine Sanctuary Final MP/EIS. While Navy activities are carried out in a manner that avoids any adverse effects on Sanctuary resources or qualities to the maximum extent practicable, military readiness activities proposed to occur in the vicinity of Monterey Bay National Marine Sanctuary have the potential to affect or cause injury to sanctuary resources. As such, consultation under Section 304(d) will occur for Monterey Bay National Marine Sanctuary.
Hawaiian Islands Humpback Whale National Marine Sanctuary	#7, Figure 6-4	Hawaii	Species and habitat	MPA. Federal regulations prohibit approaching humpback whales within 100 yards (90 meters) when in the water except as authorized under the Marine Mammal Protection Act, as amended	Proposed military activities in the Hawaiian Islands Humpback Whale National Marine Sanctuary include air, surface, and subsurface activities; weapons activities; use of explosives; mine warfare activities; and unmanned underwater vehicles and unmanned aerial systems activities. All fall

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
				by the Endangered Species Act; and 1,000 feet (300 meters) when operating an aircraft except when in a designated flight corridor for takeoff or landing from an airport or runway or as authorized under the Marine Mammal Protection Act, as amended by the Endangered Species Act. Other prohibited activities are listed in 15 CFR 922.184. Activities will avoid harm to natural and cultural resources protected by the MPA.	into classes of activities covered in the 1997 Final EIS/MP for the Sanctuary. These activities are also the same classes of activities previously analyzed in the Navy's 2013 and 2018 HSTT EIS/OEIS and for which the ONMS found no consultation was required in a letter dated August 16, 2013. While Navy activities are carried out in a manner that avoids any adverse effects on sanctuary resources or qualities to the maximum extent practicable, military readiness activities proposed to occur in the vicinity of Hawaiian Islands Humpback Whale National Marine Sanctuary have the potential to affect or cause injury to sanctuary resources. As such, consultation under Section 304(d) will occur for Hawaiian Islands Humpback Whale National Marine Sanctuary.
Chumash Heritage National Marine Sanctuary (CHNMS)	#10, Figure 6-2	California	Ecosystem	The prohibitions in paragraphs (a)(2) through (a) (10) in Table 3-1 (found in Section 3.2.2 of the Final Chumash Heritage National Marine Sanctuary Final Environmental Impact Statement EIS [Volume 1]) do not apply to existing activities carried out or approved by the DoD, that were conducted prior to the effective date of this designation, as specifically identified in Section 4.9 or	The CHNMS provides a conservation and comprehensive ecosystem-based management to address threats to the nationally significant biological, cultural, and historical resources of the sanctuary. The purpose of the CHNMS is to conserve and manage its special ecological qualities, shaped by significant offshore geologic features (e.g., Santa Lucia Bank, Rodriguez Seamount, and Arguello Canyon). Seasonal upwelling supports the area's high biological productivity, promoting dense aggregations of marine life. The existing biogeographic transition zone, where temperate waters from the north meet the subtropics, creates

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
				Appendix I of the final EIS for CHNMS. New activities may be exempted from the prohibitions (referenced above) by the Director after consultation between the Director and the DoD. All DoD activities must be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.	an area of nationally significant biodiversity in sea birds, marine mammals, invertebrates, and fishes. The area is also composed of extensive kelp forests, seagrass beds, and wetlands that serve as nurseries for numerous commercial fish species and as important habitat for many threatened and endangered species, such as humpback whales, blue whales, the southern sea otter, black abalone, snowy plovers, and leatherback sea turtles. In coordination with ONMS, military activities in the Chumash Heritage National Marine Sanctuary have been identified in the designation documents, to include training and testing, warfare practice exercises, weapons testing including ballistic missile tests, and other operations. Military readiness activities proposed to occur in the vicinity of the CHNMS have the potential to cause injury to sanctuary resources. As such, consultation under Section 304(d) will occur.
PROPOSED National Marine Sanctuary in the Pacific Remote Islands	#14, Figure 6-4	Hawaii	Ecosystem	On March 24, 2023, President Biden issued a memorandum directing the Secretary of Commerce to consider initiating the designation process for a National Marine Sanctuary in the Pacific Remote Islands region. NOAA's ONMS issued a Notice of Intent on April	The Proposed National Marine Sanctuary in the Pacific Remote Islands would cover one of the most pristine tropical marine environments in the world and includes over 165 seamounts that are hotspots of marine biodiversity, including fish, corals, shellfish, seabirds, and vegetation not found anywhere else in the world. Many threatened or endangered species thrive in the protected

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
				17, 2023, to conduct scoping and prepare an EIS for the the Proposed National Marine Sanctuary in the Pacific Remote Islands, initiating the designation process. The proposed sanctuary will encompass the existing Pacific Remote Islands Marine National Monument and extend protection of the marine and seabed resources to the full extent of the U.S. EEZ, covering a total of about 770,000 square miles (Table 6-2 and Figure 6-4). This area includes Baker, Howland, and Jarvis Islands; and Johnston, Wake, and Palmyra Atoll; and Kingman Reef. The northeast portion of the Pacific Remote Islands National Marine Monument, specifically Johnston Atoll, is included in the Hawaii Study Area. Proposed sanctuary designation documents and proposed sanctuary regulations are currently being drafted.	waters of the proposed sanctuary. The designation of the proposed sanctuary would allow for the augmentation of current regulations associated with the Pacific Remote Islands Marine National Monument, providing additional regulatory and non- regulatory protective measures, and extending the conservation area past the Monument's current boundaries. Additionally, the Pacific Remote Island region is historically and culturally significant for many indigenous sea-faring people in the Pacific, including native Hawaiian, Samoan, CHamoru, Carolinian, and others. The proposed sanctuary would honor the ancestral and historical connection sea-faring peoples have to the Pacific Remote Islands and surrounding waters that were used for voyaging, settling new lands, and trading commerce and cultures. The Navy can conduct training and testing activities in or near the proposed National Marine Sanctuary in the Pacific Remote Islands. However, those activities are generally within transit corridors commonly associated with the Navy's Marianas Island Training and Testing study area between Hawaii and Guam. The Navy is working with ONMS in the development of the sanctuary, and should consultation under Section 304(d) become necessary will do so through future

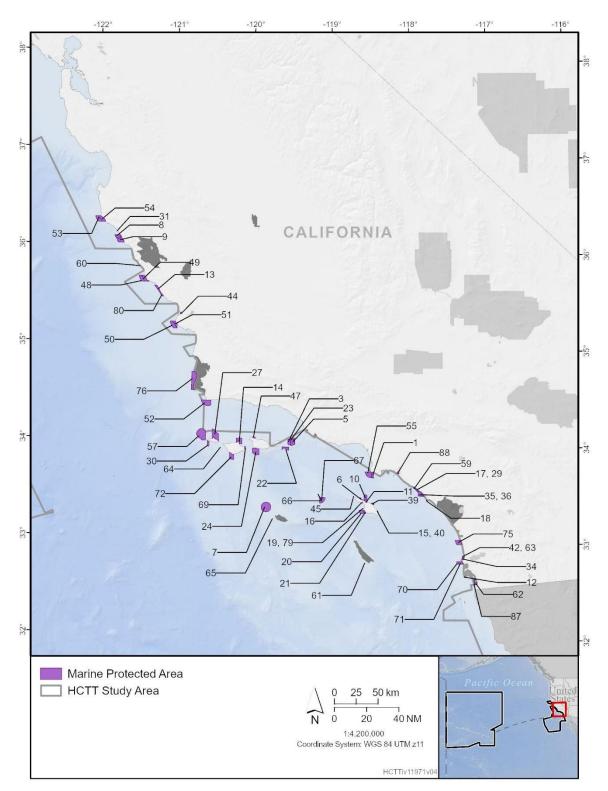
Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
					analysis related to the Mariana Islands Training and Testing study area.
PROPOSED Papahanaumokuakea National Marine Sanctuary	#9, Figure 6-4	Hawaii	Ecosystem	NOAA's ONMS initiated the process to designate the marine portions of the Papahānaumokuākea Marine National Monument as a national marine sanctuary in November 2021. The preferred alternative for the proposed Sanctuary has a similar footprint (with exclusion of the land areas) as the Papahānaumokuākea Marine National Monument, which, at 582,578 square miles, is the largest contiguous fully-protected conservation area in the United States (Figure 6-4) (National Oceanic and Atmospheric Administration, 2023a). Designation as a national marine sanctuary would add conservation benefits and further safeguard the marine resources in the area. Proposed sanctuary designation documents and proposed sanctuary regulations are currently	The Papahanaumokuakea National Marine Monument and proposed National Marine Sanctuary is home to many diverse species, 25 percent of which are endemic to Hawaii and occur nowhere else in the world. The sanctuary would include 3.5 million acres of coral reef (70 percent of the total coral reef area in the United States), which is the only apex-predator dominated reef ecosystem left in the world. Over 90 percent of the proposed sanctuary area is at depths greater than 3,000 feet, providing habitat to unique deep-water ecosystems. Additionally, the islands and shoals within the marine monument are home to nearly 14 million seabirds of 22 different species. The proposed sanctuary also contains significant post-Western contact cultural resources, encompassing approximately 60 shipwrecks and 61 aircraft sites associated with historic events, such as commercial whaling practices and the World War II Battle of Midway. The Navy's proposed action includes activities conducted east of Nihoa Island and inside the eastern edge of the proposed Papahanaumokuakea Marine National Sanctuary boundaries. The Navy conducts activities in a manner that avoids, to the extent practicable and consistent with operational requirements, effects on Refuge resources and qualities. Vessels and aircraft

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
				being drafted. Activities will avoid harm to natural and cultural resources protected by the MPA.	used in the conduct of military training and testing would be operated in a manner consistent with the requirements of Presidential Proclamations 8031 and 9478 and draft sanctuary management documents, as practicable. The Navy is coordinating with ONMS to ensure the proposed management documents for the proposed Papahanaumokuakea National Marine Sanctuary consider appropriate exemptions for military activities and that HCTT adequately evaluates the effects of military activities on sanctuary resources (natural and cultural) for the purpose of determining whether the Navy would consult under Section 304(d) at the appropriate time.
National Parks					· · · · · · ·
Channel Islands National Park	#11, Figure 6-2	California	Ecosystem	Vessel operations in excess of 5 mph or creating a wake in areas so designated or within 100 feet of a diver's marker, downed skier, or swimmer are prohibited; and operation of a vessel in excess of designated size, length, or width restrictions within restricted areas is prohibited. Activities will avoid harm to natural and cultural resources protected by the MPA.	The Channel Islands National Park contains the land area of the islands and extends to 1 NM offshore from each island. No activities would be conducted in this marine protected area. Therefore, no effects are expected on natural resources that are protected within the Channel Islands National Park.

Marine Protected Area	Figure Reference Number	Location within the Study Area	Protection Focus	Summary of Relevant Regulations	Navy Proposed Activities Under the Proposed Action and Marine Protected Area Considerations
Kalaupapa National Historical Park	#12, Figure 6-4	Hawaii	Ecosystem	Prohibitions in the park include restrictions on commercial and recreational fishing. Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities overlap with the park. Therefore, no effects are expected within the Kalaupapa National Historical Park.
Kaloko-Honokohau National Historical Park	#13, Figure 6-4	Hawaii	Ecosystem	Unpermitted uses of lay nets and aquarium collections are prohibited in the Park. Activities will avoid harm to natural and cultural resources protected by the MPA.	No proposed activities overlap with the park. Therefore, no effects are expected within the Kaloko-Honokohau National Historical Park.

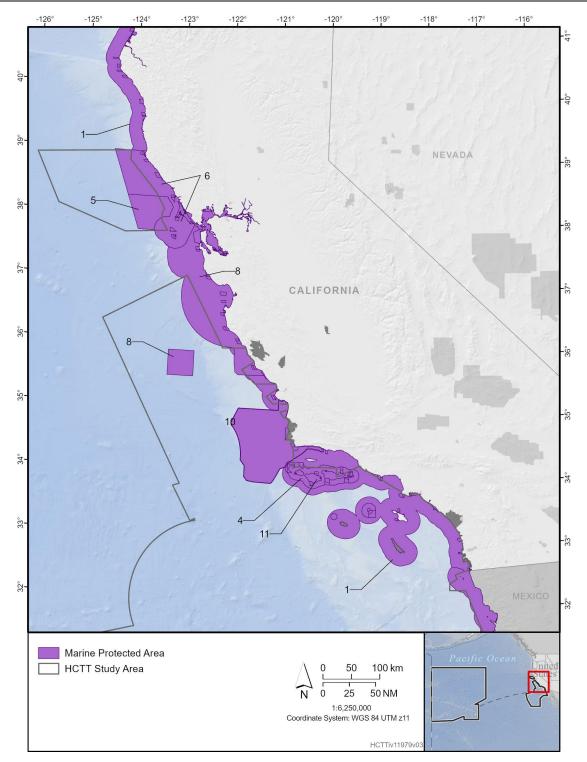
Notes: ASBS = Areas of Special Biological Significance, NM = nautical mile(s), MLCD = Marine Life Conservation District, USMC = United States Marine Corps, CFR = Code of Federal Regulations, MP = Management Plan, EIS = Environmental Impact Statement, NOAA = National Oceanic and Atmospheric Administration, DoD = Department of Defense, NOCAL = Northern California (Range Complex), HCTT = Hawaii-California Training and Testing, HSTT = Hawaii-Southern California Training and Testing, EIS/OEIS = Environmental Impact Statement/Overseas Environmental Impact Statement, MPA = Marine Protected Area, ONMS = Office of National Marine Sanctuaries

Hawaii-California Training and Testing Draft EIS/OEIS



Note: HCTT = Hawaii-California Training and Testing

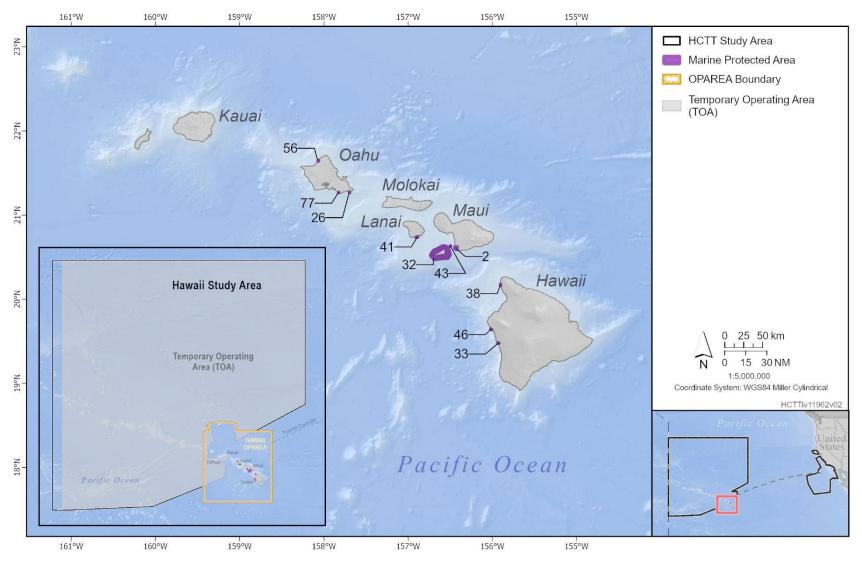
Figure 6-1: Location of State and Federal Marine Protected Areas Within the California Study Area



# Note: HCTT: Hawaii-California Training and Testing

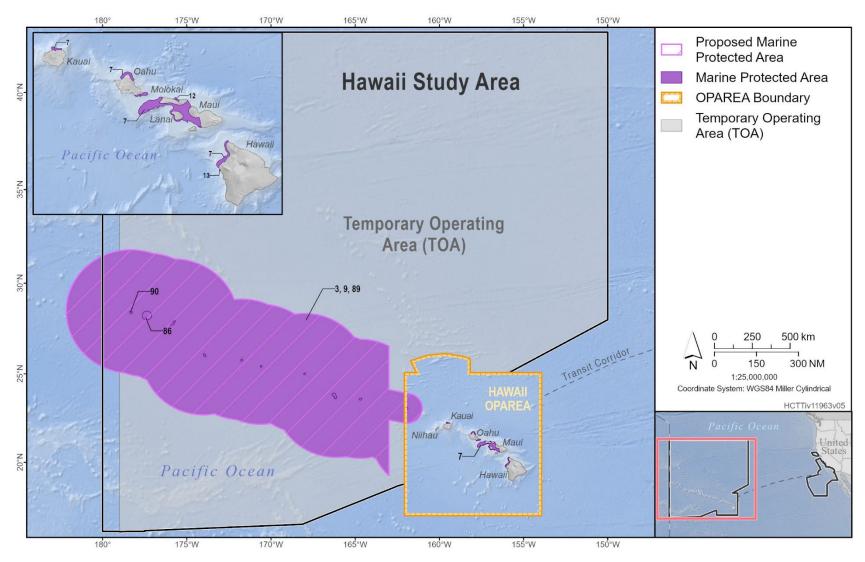
# Figure 6-2: Location of National Marine Sanctuaries, National Parks, and National Monuments Within the California Study Area

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Notes: HCTT: Hawaii-California Training and Testing, OPAREA = Operating Area

# Figure 6-3: Location of State and Federal Marine Protected Areas Within the Hawaii Study Area



Notes: HCTT: Hawaii-California Training and Testing, OPAREA = Operating Area

Figure 6-4: Location of National Marine Sanctuaries, National Parks, and National Monuments Within the Hawaii Study Area

#### 6.1.3 Magnuson-Stevens Fishery Conservation and Management Act

The Proposed Action has the potential to affect Essential Fish Habitat and managed species within the Study Area. Action Proponents would continue to implement agreed upon mitigation and conservation measures from previous consultations to avoid and minimize effects on these resources. For example, data from benthic habitat mapping surveys conducted as a result of previous consultations are being used by the Navy to avoid effects on sensitive habitats (e.g., seagrass, shallow coral reefs, precious coral beds, live hardbottom) to the extent practicable during activities that have the potential to affect sensitive habitat. The Navy will continue to include maps based on the best available georeferenced data for these sensitive areas in the Navy's Protective Measures Assessment Protocol to ensure these areas are considered in the planning of training and testing and avoided as necessary. The Navy will submit Essential Fish Habitat Assessments and consult with NMFS.

#### 6.1.4 Executive Order 13175, Consultation and Coordination with Indian Tribal Governments

EO 13175 (November 06, 2000), directs federal agencies to coordinate and consult with Native American tribal governments whose interests might be directly and substantially affected by activities on federally administered lands. Consistent with that EO, DoD Instruction 4710.02, and Department of the Navy Instruction 11010.14B, federally recognized tribes that are historically affiliated with the geographic region of the Study Area were invited to consult on all proposed undertakings with the potential to affect properties of cultural, historical, or religious significance to the tribes.

In October 1998 and as amended in 1999, the DoD promulgated its Native American and Alaska Native policy, emphasizing the importance of respecting and consulting with Tribal governments on a government-to-government basis (U.S. Department of Defense, 2018). The policy requires an assessment, through consultation, of the effects of proposed DoD actions that may have the potential to significantly affect traditional resources (including traditional subsistence resources such as shellfish), Tribal rights (such as fisheries), and American Indian lands before decisions are made by DoD personnel.

The tribal coordination process is distinct from NEPA consultation or the interagency coordination process and requires separate notification to all relevant tribes. The timelines for tribal consultation are also distinct from those of other consultations.

**Government to Government Consultation**: It is Navy policy to establish permanent government-togovernment working relationships with tribal governments built upon respect, trust, and openness. Under these policies, the Navy is required to consider tribal comments and concerns prior to making a final decision on a proposed action. However, reaching formal agreement with a tribe or obtaining tribal approval prior to a final decision is not required.

On December 12, 2023, the Navy provided the public, potential stakeholders, and tribes with a Notice of Intent to prepare an EIS/OEIS for HCTT at the beginning of the 60-day scoping period. The scoping period allows for the public, stakeholders, and tribes to provide comments on the scope of the analysis, including potential environmental issues and viable alternatives to be considered during the development of the Draft EIS/OEIS.

The Navy sent letters to federally recognized tribes in California as a formal invitation to consider initiating government-to-government consultation and consultations are ongoing.

# 6.2 Relationship Between Short-Term Use of the Environment and Maintenance and Enhancement of Long-Term Productivity

In accordance with Council on Environmental Quality regulations, this EIS/OEIS analyzes the relationship between the short-term effects on the environment and the effects those effects may have on the maintenance and enhancement of the long-term productivity of the affected environment (40 CFR section 1502.16(a)(3)). This analysis has not changed since the analysis conducted in the 2018 HSTT and 2022 PMSR EIS/OEISs. See Section 6.2 of the 2018 HSTT and 2022 PMSR EIS/OEISs for more information. Per 40 CFR 1502.16, applicable considerations for the analysis not addressed elsewhere are discussed in the following sections.

The Proposed Action could result in both short- and long-term environmental effects. However, these are not expected to result in any effects that would reduce environmental productivity, permanently narrow the range of beneficial uses of the environment, or pose long-term risks to health, safety, or general welfare of the public.

# 6.3 Irreversible or Irretrievable Commitment of Resources

NEPA requires that environmental analysis include identification of "any irreversible and irretrievable commitments of Federal resources which would be involved in the proposed agency action should it be implemented" (40 CFR 1502.16(4)). This analysis has not changed since it was conducted in the 2018 HSTT EIS/OEIS and activities have been ongoing and continuous since then. See Section 6.3 of the 2018 HSTT and 2022 PMSR EIS/OEISs for more information (U.S. Department of the Navy, 2018, 2022b).

For the Proposed Action, most resource commitments would be neither irreversible nor irretrievable. Most effects would be short term and temporary, or long lasting but within historical or desired conditions. Because there would be no building or facility construction, the consumption of material typically associated with such construction (e.g., concrete, metal, sand, fuel) would not occur. Energy typically associated with construction activities would not be expended and irretrievably lost.

# 6.4 Energy Requirements and Efficiency Initiatives

NEPA requires that environmental analysis include identification of "energy requirements and conservation potential of various alternatives and mitigation measures" (40 CFR 1502.16(7)). The federal government is the largest single energy consumer in the United States. In fiscal year 2017, the DoD consumed approximately 76 percent of the total energy used by the federal government (Congressional Research Service, 2019). In fiscal year 2020, the DoD used approximately 77.6 million barrels of liquid fuel for operational energy to power ships, aircraft, combat vehicles, and contingency bases. The Navy and Marine Corps consume approximately 36 percent of the total DoD share (28.3 million barrels in fiscal year 2020) (U.S. Department of Defense, 2021). In 2023, the DoD published a new Operational Energy Strategy to update the 2016 strategy and transform the way energy is consumed in military operations; the strategy sets the overall direction for operational energy security (U.S. Department of Defense, 2023). The 2023 strategy shifts focus toward four lines of effort and focus areas: (1) Energy Demand Reduction; (2) Energy Substitution and Diversification; (3)Supply Chain Resilience; and (4) Enterprise-Wide Energy Visibility (U.S. Department of Defense, 2023).

Military readiness activities within the Study Area would result in an increase in energy demand over the No Action Alternative. The increased energy demand would arise from an increase in fuel consumption, mainly from aircraft and vessels participating in training and testing. Aircraft fuel consumption is estimated to remain fairly consistent across both Action Alternatives, with an increase of 5.20 percent

from Alternative 1 to Alternative 2. Vessel fuel consumption is estimated to increase by approximately 19.43 percent per year under Alternative 2, compared to Alternative 1. Conservative assumptions were made in developing the estimates, and therefore the actual amount of fuel consumed during training and testing events may be less than estimated. The alternatives could result in a net cumulative reduction in the global energy (fuel) supply.

Energy requirements would be subject to any established energy efficiency practices. The use of energy sources has been minimized wherever possible without compromising safety, training, or testing activities. No additional efficiency measures related to direct energy consumption by the proposed activities are identified. In accordance with the Operational Energy Strategy, the DoD's energy vision is to prioritize energy demand reduction and seek to adopt more efficient and clean energy technologies that reduce logistics requirements in contested environments (U.S. Department of Defense, 2023).

The Navy is committed to improving energy security and environmental stewardship by reducing its reliance on fossil fuels. The Navy is actively developing and participating in energy, environmental, and climate change initiatives, such as the Incentivized Energy Conservation Program and the NAVSEA's Fleet Readiness, Research and Development Program, that will help conserve the world's resources for future generations. The U.S. Department of the Navy Climate Action 2030 report (U.S. Department of the Navy, 2022a) identifies actions the Navy and USMC are taking to implement Executive Order 13990 and Executive Order 14008. The two performance goals set in the report are (1) Build Climate Resilience – Ensure that our forces, systems, and facilities can continue to operate effectively and achieve the mission in the face of changing climate conditions, and worsening climate impacts; and (2) Reduce Climate Threat – The Department must reduce its greenhouse gas emissions and draw greenhouse gases out of the atmosphere, stabilize ecosystems, and achieve, as an enterprise, the nation's commitment to net-zero emissions by 2050 (U.S. Department of the Navy, 2022a).

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