
6 Additional Regulatory Considerations

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6 ADDITIONAL REGULATORY CONSIDERATIONS

In accordance with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act (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, and regulations not considered in Chapter 3 (Affected Environment and Environmental Consequences); the relationship between short-term impacts; 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 OTHER APPLICABLE FEDERAL, STATE, AND LOCAL PLANS, POLICIES, AND REGULATIONS

Implementation of the Proposed Action for the Mariana Islands Training and Testing (MITT) Environmental Impact Statement (EIS)/Overseas EIS (OEIS) would comply with applicable federal, state, and local laws, regulations, and executive orders. The United States (U.S.) Department of the Navy (Navy) is consulting with and will continue to consult with regulatory agencies, as appropriate, during the NEPA process and prior to implementation of the Proposed Action to ensure that requirements are met. Table 6.1-1 summarizes environmental compliance requirements not considered in Chapter 3 (Affected Environment and Environmental Consequences) that were considered in preparing this EIS/OEIS (including those that may be secondary considerations in the resource evaluations). Section 3.0.1 (Regulatory Framework) provides brief excerpts of the primary federal statutes, executive orders, international standards, and guidance that form the regulatory framework for the resource evaluations. Documentation of consultation and coordination with regulatory agencies is provided in Appendix C (Agency Correspondence). Not all consultation documentation is included in Appendix C (Agency Correspondence) or on the website at this time, but all compliance will be completed prior to the signing of the Record of Decision for the Proposed Action.

Table 6.1-1: Summary of Environmental Compliance for the Proposed Action

Laws, Executive Orders, International Standards, and Guidance	Status of Compliance
Laws	
Abandoned Shipwreck Act (43 U.S.C. §§2101–2106)	The 1987 Abandoned Shipwreck Act establishes requirements for educational and recreational access to abandoned shipwrecks; the protection of such resources through the establishment of underwater parks and protected areas; the development of specific guidelines for management and protection in consultation with various stakeholders; defines the jurisdiction and responsibility of federal and state agencies; and explicitly states that the law of salvage and the law of finds do not apply. Under the Act, the Department of the Interior and National Park Service issued guidelines in 2007 to help states manage shipwrecks in their waters. The Act defines the federal government's title to any abandoned shipwreck that meets criteria for inclusion in the National Register of Historic Places within state submerged lands, with the stipulation that title to these shipwrecks will be transferred to the appropriate state. For abandoned shipwrecks in U.S. Territorial Waters, the federal government asserts title to the resource, the federal government then transfers title to the state, territory, or commonwealth whose submerged lands contain the shipwreck. See Section 3.11 (Cultural Resources) for assessment and conclusion that the Proposed Action is consistent with the Act.
Act to Prevent Pollution from Ships (33 U.S.C. §1901 et seq.)	Requirements associated with the Act to Prevent Pollution from Ships are implemented by 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 to the marine environment.
Antiquities Act (16 U.S.C. §431)	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.
Coastal Zone Management Act (16 C.F.R. §1451 et seq.)	The Navy will continue compliance with the Coastal Zone Management Act. See Section 6.1.1 (Coastal Zone Management Act Compliance) below for discussion of Navy activities and compliance with the Coastal Zone Management Act.
Historic Sites Act (16 U.S.C. §§461–467)	The Proposed Action is consistent with the national policy for the preservation of historic sites, buildings, and objects of national significance.
National Fishery Enhancement Act (33 U.S.C. §2101 et seq.)	The Proposed Action is consistent with regulations administered by National Marine Fisheries Service and U.S. Army Corps of Engineers concerning artificial reefs in the navigable waters of the United States. See Section 3.9 (Fish) for the assessment.
National Marine Sanctuaries Act (16 U.S.C. §1431 et seq.)	There are no National Marine Sanctuary System designated sanctuaries within the MITT Study Area.
Rivers and Harbors Act (33 U.S.C. §401 et seq.)	In accordance with U.S. Army Corps of Engineers regulations, no permit is required under the Rivers and Harbors Act because no construction in navigable waterways is proposed.

Table 6.1-1: Summary of Environmental Compliance for the Proposed Action (continued)

Laws, Executive Orders, International Standards, and Guidance	Status of Compliance
Laws (continued)	
The Sikes Act of 1960 (16 U.S.C. §§670a-670o, as amended by the Sikes Act Improvement Act of 1997, Public Law No. 105-85), requires military installations with significant natural resources to prepare and implement Integrated Natural Resource Management Plans (INRMPs).	The Proposed Action would be implemented in accordance with the management and conservation criteria developed in the INRMPs for the Mariana Islands Range Complex. The Proposed Action and Alternatives will not result in a requirement for an update of INRMPs outside of their normal update schedule of every 5 years.
Submerged Lands Act of 1953 (43 U.S.C. §§1301–1315)	The Proposed Action is consistent with regulations concerning the Submerged Lands Act.
Sunken Military Craft Act (Public Law 108-375, 10 U.S.C. §113 Note and 118 Stat. 2094–2098)	The Proposed Action would have no adverse effects on sunken U.S. military ships and aircraft within the Study Area. If a site is determined to be eligible for the National Register of Historic Places, the State Historic Preservation Officer would be consulted to address potential effects. See Section 3.11 (Cultural Resources) for the assessment.
Military Munitions Rule	The Military Munitions Rule identifies when conventional and chemical military munitions are considered solid waste under the Resource Conservation and Recovery Act (42 U.S.C. §6901 et seq.). Military munitions are not considered solid waste based on two conditions stated at 40 C.F.R. §266.202(a)(1)(i-iii). These two conditions are when munitions are used for their intended purpose and when unused munitions or a component of are subject to materials recovery activities. These two conditions cover the uses of munitions included in the Proposed Action; therefore, the Resource Conservation and Recovery Act does not apply.
Executive Orders	
Executive Order 11990, <i>Protection of Wetlands</i>	Implementation of the Proposed Action would have no effect on wetlands as defined in Executive Order 11990.
Executive Order 12898, <i>Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations</i>	The Proposed Action would not result in any disproportionately high and adverse human health or environmental effects on minority or low-income populations. See Section 3.0.5.1.1 (Resources and Issues Not Carried Forward for More Detailed Discussion) for the assessment.
Executive Order 12962, <i>Recreational Fisheries</i>	The Proposed Action would have no effect on federal agencies' ability to fulfill certain duties with regard to promoting the health and access of the public to recreational fishing areas. See Section 3.12 (Socioeconomics) for the assessment.
Executive Order 13045, <i>Protection of Children from Environmental Health Risks and Safety Risks</i>	The Proposed Action would not result in disproportionate environmental health or safety risks to children. See Section 3.0.5.1.1 (Resources and Issues Not Carried Forward for More Detailed Discussion) for the assessment.
Executive Order 13089, <i>Coral Reef Protection</i>	The Navy has prepared this EIS/OEIS in accordance with requirements for the protection of existing national system marine protected areas. See Section 3.8 (Marine Invertebrates) for the assessment.
Executive Order 13112, <i>Invasive Species</i>	The Navy has prepared this EIS/OEIS in accordance with requirements for the prevention of and eradication of invasive species. Naval vessels are exempt from 33 C.F.R. 151 Subpart D, <i>Ballast Water Management for Control of Non-indigenous Species in Waters of the United States</i> . See Section 3.10 (Terrestrial Species and Habitats) for the assessment.

Table 6.1-1: Summary of Environmental Compliance for the Proposed Action (continued)

Laws, Executive Orders, International Standards, and Guidance	Status of Compliance
Executive Orders (continued)	
Executive Order 13158, <i>Marine Protected Areas</i>	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 (Marine Protected Areas) for more information.
Executive Order 13514, <i>Federal Leadership in Environmental, Energy, and Economic Performance</i>	The Proposed Action is consistent with the integrated strategy toward sustainability in the federal government and to making reduction of greenhouse gas emissions a priority for federal agencies.
Executive Order 13547, <i>Stewardship of the Ocean, Our Coasts, and the Great Lakes</i>	The Proposed Action is consistent with the comprehensive national policy for the <i>Stewardship of the Ocean, Our Coasts, and the Great Lakes</i> .
International Standards	
International Convention for the Prevention of Pollution from Ships	This standard prohibits certain discharges of oil, garbage, and other substances from vessels. The convention and its annexes are implemented by national legislation, including the <i>Act to Prevent Pollution from Ships</i> (33 U.S.C. §§1901–1915) and the <i>Federal Water Pollution Control Act</i> (33 U.S.C. §§1321–1322). The Proposed Action does not include vessel operation and discharge from ships; however, the Navy vessels operating in the Study Area would comply with the discharge requirements established in this program, minimizing or eliminating potential impacts from discharges from ships.

Notes: C.F.R. = Code of Federal Regulations, EIS/OEIS = Environmental Impact Statement/Overseas Environmental Impact Statement, INRMP = Integrated Natural Resource Management Plan, Navy = United States Department of the Navy, NMFS = National Marine Fisheries Service, U.S. = United States, U.S.C. = United States Code

6.1.1 COASTAL ZONE MANAGEMENT ACT COMPLIANCE

The *Coastal Zone Management Act of 1972* (16 United States Code [U.S.C.] §1451, et seq.) encourages coastal states and territories to be proactive in managing coastal zone uses and resources. The act established a voluntary coastal planning program under which participating states submit a Coastal Management Plan to the National Oceanic and Atmospheric Administration for approval. Under the act, 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. See Section 4.3.5.3 (Development of Coastal Lands) in Chapter 4 (Cumulative Impacts) for additional information regarding management of the coastal areas within the MITT Study Area.

The *Coastal Zone Management Act* defines the coastal zone as extending “to the outer limit of State title and ownership under the Submerged Lands Act” (i.e., 3 nautical miles [nm] or 9 nm from the shoreline, depending on the location). The extent of the coastal zone inland varies from state to state and territory to territory, but the shoreward extent is not relevant to this Proposed Action.

A Consistency Determination (CD) or a Negative Determination may be submitted for review of federal agency activities. A federal agency submits a CD when it determines that its activity may have either a direct or an indirect effect on a state coastal use or resource. In accordance with 15 Code of Federal Regulations (C.F.R.) §930.39, the CD will include a brief statement indicating whether the proposed activity will be undertaken in a manner consistent to the maximum extent practicable with the enforceable policies of the management program. The CD should be based on evaluation of the relevant enforceable policies of the management program. In accordance with 15 C.F.R. §930.35, “if a Federal

agency determines that there will not be coastal effects, then the Federal agency shall provide the State agencies with a negative determination for a Federal agency activity: (1) Identified by a State agency on its list, as described in §930.34(b), or through case-by-case monitoring of unlisted activities; or (2) Which is the same as or is similar to activities for which CDs have been prepared in the past; or (3) For which the Federal agency undertook a thorough consistency assessment and developed initial findings on the coastal effects of the activity.” Thus, a negative determination must be submitted to a state if the agency determines no coastal effects and one or more of the criteria above is met.

6.1.1.1 Guam Coastal Management Program

The Guam Coastal Management Program was approved in 1979 and is overseen by the Bureau of Statistics and Plans. It has received 100 percent federal funding through the U.S. Department of Commerce, the National Oceanic and Atmospheric Administration, and annual formula grants since 1979. Guam’s Coastal Management Program guides the use, protection, and development of land and ocean resources within Guam’s coastal zone and entire land area, due to Guam’s small size.

Guam’s Coastal Management Program also helps to coordinate and direct a network of government agencies to ensure a balanced approach to coastal management. The greatest issues for the Coastal Management Program have been coral reef and watershed habitat degradation, water quality degradation, coastal hazards, and cultural and historic resource preservation.

On 4 June 2014, the Navy transmitted to the Bureau of Statistics and Plans a Federal CD addressing training and testing activities that may affect Guam’s coastal zone. On 29 August 2014, the Bureau of Statistics and Plans provided concurrence on the Navy’s determination that the training and testing activities are consistent to the maximum extent practicable with the enforceable policies of the Guam Coastal Management Program.

6.1.1.2 Commonwealth of the Northern Mariana Islands Coastal Zone Management Program

The Commonwealth of the Northern Mariana Islands (CNMI) Coastal Zone Management Act as established in 1983 and amended in 1990 and 1996, created a voluntary coastal zone enhancement grants program to encourage states and territories in the islands to improve program efforts.

Section 309 authorizes the U.S. Secretary of Commerce to make awards to the CNMI Coastal Resources Management Office for development and implementation of federally approved program changes in the coastal management programs that help support the one or more of the nine focal enhancement areas.

The Navy submitted a CD to the CNMI Division of Coastal Resources Management in July 2014 addressing training and testing activities that may affect the CNMI coastal zone. After consultations between the Navy and the CNMI Division of Coastal Resources Management, the Navy submitted a revised package on 11 September 2014. The Navy concluded that the Proposed Action is consistent to the maximum extent practicable with CNMI Coastal Management Policies.

6.1.2 MARINE PROTECTED AREAS

Many areas of the marine environment have some level of federal, state, or local management or protection. Marine protected areas have conservation or management purposes, defined boundaries, and some legal authority to protect resources. Marine protected areas vary widely in purpose, managing agency, management approaches, level of protection, and restrictions on human uses. They have been designated to achieve objectives ranging from conservation of biodiversity, to preservation of sunken historic vessels, to protection of spawning habitats important to commercial and recreational fisheries.

Executive Order (EO) 13158, *Marine Protected Areas*, was created to “strengthen the management, protection, and conservation of existing marine protected areas and establish new or expanded marine protected areas; develop a scientifically based, comprehensive national system of marine protected areas representing diverse U.S. marine ecosystems, and the nation’s natural and cultural resources; and avoid causing harm to marine protected areas through federally conducted, approved, or funded activities.”

Executive Order 13158 requires each federal agency whose actions affect the natural or cultural resources that are protected by a national system of marine protected areas to identify such actions, and in taking such actions, avoid harm to those natural and cultural resources. Pursuant to Section 5 of EO 13158, agency requirements apply only to the natural or cultural resources specifically afforded protection by the site as described by the List of National System Marine Protected Areas. For sites that have both a terrestrial and marine area, only the marine portion and its associated protected resources are included on the List of National System Marine Protected Areas and subject to Section 5 of EO 13158. A full list and map of areas accepted in the National System of Marine Protected Areas is available from the National Marine Protected Areas Center.

The National Marine Protected Areas Center, which is federally managed through the National Oceanic and Atmospheric Administration, is tasked with implementing EO 13158. In order to meet the qualifications for the various terms within EO 13158, the National Marine Protected Areas Center developed a Marine Protected Areas Classification system. This system uses six criteria to describe the key features of most marine protected areas, as follows:

1. Primary conservation focus, such as natural heritage, cultural heritage, or sustainable production
2. Level of protection (e.g., no access, no impact, no take, zoned with no-take areas, zoned multiple use, or uniform multiple use)
3. Permanence of protection
4. Constancy of protection
5. Ecological scale of protection
6. Restrictions on extraction

The National Marine Protected Areas Center utilizes these criteria to evaluate marine protected areas for inclusion in the National System of Marine Protected Areas. Implementation of the National System of Marine Protected Areas is managed by the Department of Commerce and the Department of the Interior. Executive Order 13158 requires the Department of Commerce and the Department of the Interior to consult with other federal agencies about the inclusion of sites into the National System of Marine Protected Areas, including the Department of Defense (DoD). The National System of Marine Protected Areas includes marine protected areas managed under the following six systems:

National Marine Sanctuary System. Under the National Marine Sanctuaries Act, the National Oceanic and Atmospheric Administration established national marine sanctuaries for marine areas with special conservation, recreational, ecological, historical, cultural, archaeological, scientific, educational, or aesthetic qualities. There are no National Marine Sanctuary System designated sanctuaries within the MITT Study Area.

Marine National Monuments. Marine national monuments are designated through Presidential Proclamation under the authority of the Antiquities Act of 1906 (16 U.S.C. 431). Marine national

monuments are often co-managed by state, federal, and local governments, in order to preserve diverse habitats and ecosystem functions. Within the MITT Study Area, there is one marine national monument, the Mariana Trench Marine National Monument (Proclamation No. 8335, 74 Federal Register 1557). In the proclamation designating the Monument, specific language was included that stated: “The prohibitions required by this proclamation shall not apply to activities and exercises of the Armed Forces (including those carried out by the United States Coast Guard).”

National Wildlife Refuge System. The U.S. Fish and Wildlife Service manage ocean and Great Lakes refuges for the conservation, management, and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats. There are three national wildlife refuge areas within the MITT Study Area, Guam National Wildlife Refuge, Mariana Arc of Fire National Wildlife Refuge, and Mariana Trench National Wildlife Refuge. The Guam National Wildlife Refuge is the only one included in the National System of Marine Protected Areas.

State and Local Marine Protected Areas. State and local governments have established marine protected areas for the management of fisheries, nursery grounds, shellfish beds, recreation, tourism, and other uses; these areas have a diverse array of conservation focuses, from protecting ecological functions, to preserving shipwrecks, to maintaining traditional or cultural interaction with the marine environment. There are 12 state or local marine protected areas (Table 6.1-2) within the MITT Study Area and they are not included in the National System of Marine Protected Areas.

National Parks System. The National Park System contains ocean and Great Lakes parks, including some national monuments, administered by the U.S. Department of the Interior National Park Service to conserve the scenery and the natural and historic objects and wildlife contained within. The War in the Pacific National Historical Park is within the MITT Study Area, but it is not included in the National System of Marine Protected Areas.

National Estuarine Research Reserve System. National Estuarine Research Reserve System sites protect estuarine land and water and provide essential habitat for wildlife, educational opportunities for students, teachers, the public, and living laboratories for scientists. There are no National Estuarine Research Reserve System sites within the MITT Study Area.

This EIS/OEIS has been prepared in accordance with requirements for natural or cultural resources protected under the National System of Marine Protected Areas. While several marine protected areas are located within the MITT Study Area (Figure 6.1-1 through Figure 6.1-3) and are included in the National System of Marine Protected Areas, it is important to note that the military rarely trains or tests in many of these areas. Training and testing activities within these marine protected areas abide by the regulations of the individual marine protected area; Table 6.1-2 provides information on the individual marine protected area regulations and the training and testing activities that occur in these areas. Figure 6.1-1 shows the Marine Protected Areas in Guam. Figure 6.1-2 shows the Marine Protected Areas in Saipan. Figure 6.1-3 shows the Mariana Trench Marine National Monument.

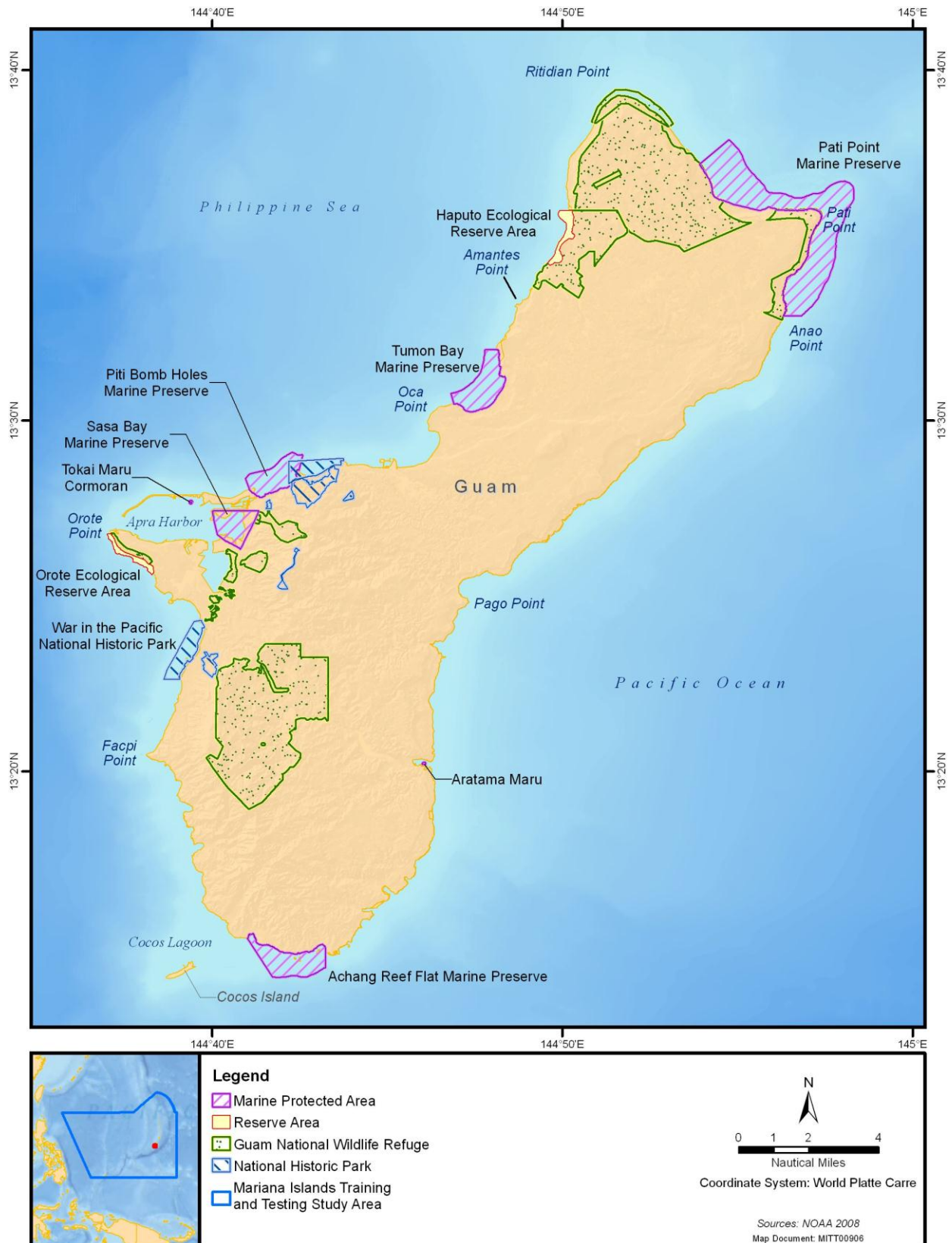


Figure 6.1-1: Marine Protected Areas in Guam

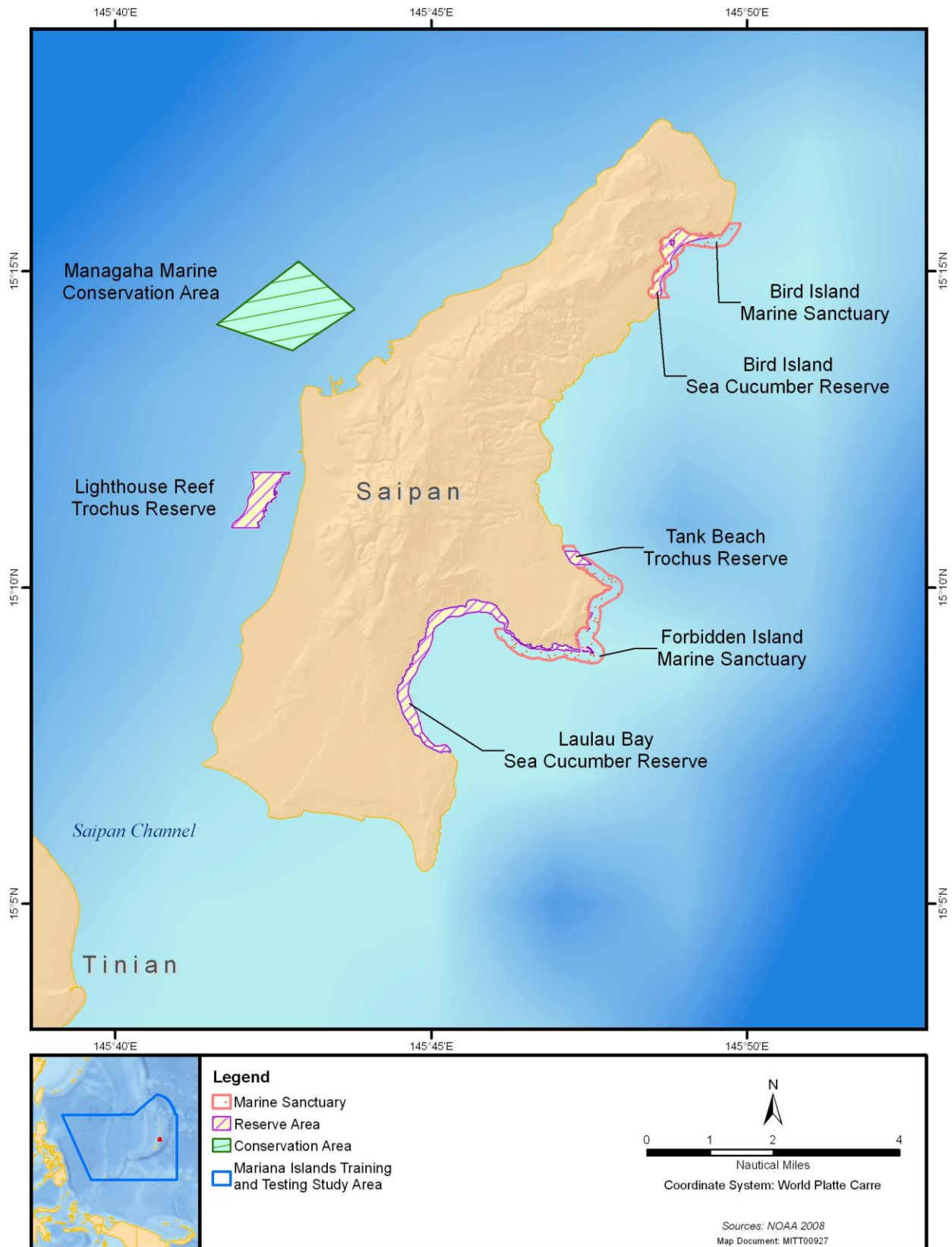


Figure 6.1-2: Marine Protected Areas in Saipan

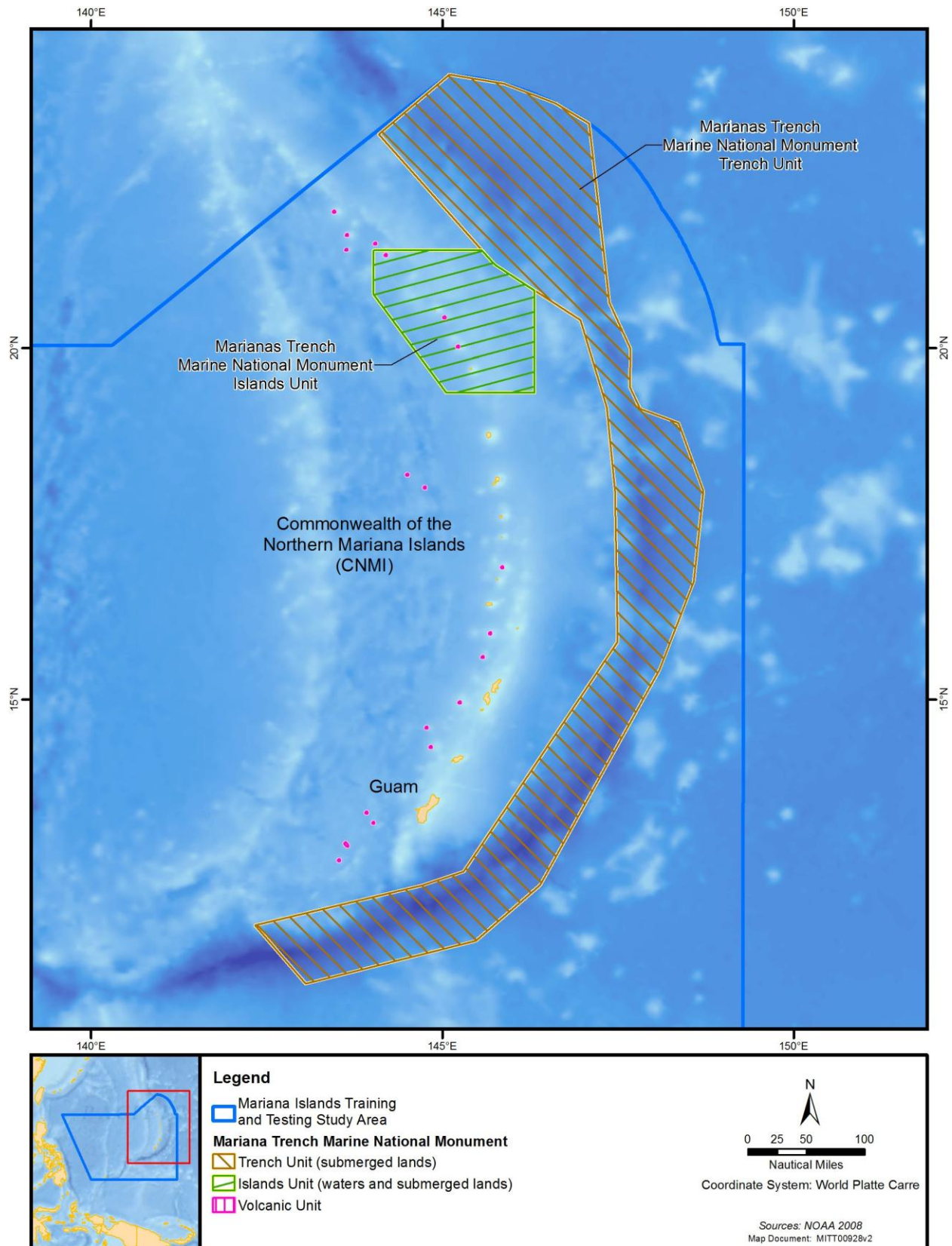


Figure 6.1-3: Mariana Trench Marine National Monument

Table 6.1-2: Marine Protected Areas within the Mariana Islands Training and Testing Study Area

Marine Protected Area	Location Within the Study Area	Protection Focus	Regulations Applicable to Navy Activities	Training and Testing Activities and Potential Impacts
Guam National Wildlife Refuge	Guam	Ecosystem	Anchoring marine vessels in Refuge waters is strictly prohibited to protect coral Communities.	The military does not conduct anchoring or discharge activities in Refuge waters. Amphibious activities and insertion/extraction of personnel via small craft and divers is conducted in or near portions of the Refuge near Orote Point and Haputo Bay, and north Polaris Point Military Welfare and Recreation Beach, and Reserve Craft Beach. The Orote Point Known Distance and Small Arms Ranges danger zone extends over water near the Guam National Wildlife Refuge.
Eligible Marine Protected Areas				
Bird Island Marine Sanctuary	Saipan	Ecosystem	Destruction, harassment and/or removal of plants, and/or wildlife are prohibited within the confines of the sanctuary.	None
Forbidden Island Marine Sanctuary	Saipan	Ecosystem	Destruction, harassment and/or removal of plants, and/or wildlife are prohibited within the confines of the sanctuary.	None
Managaha Marine Conservation Area	Saipan	Ecosystem	Killing, harming, or harassing animals, fish coral or their live or dead parts; dumping, discharging, depositing, and littering on land and in water is prohibited.	None
War in the Pacific National Historical Park	Guam	Ecosystem/ Cultural Resources	U.S. National Park Service regulations apply to this Park area on both land and sea.	None
Not Eligible Marine Protected Areas				
Achang Reef Flat	Guam	Ecosystem	Actions that would negatively impact the reef should not occur in this area.	The military is not prohibited from conducting training or testing activity in or near Achang Reef Flat; however, none are specifically proposed to occur there.

Table 6.1-2: Marine Protected Areas within the Mariana Islands Training and Testing Study Area (continued)

Marine Protected Area	Location Within the Study Area	Protection Focus	Regulations Applicable to Navy Activities	Training and Testing Activities and Potential Impacts
Aratama Maru	Guam	Ecosystem	The prohibitions that apply to this shipwreck do not apply to military activities.	The military is not prohibited from conducting training or testing activity in or near Aratama Maru; however, none are specifically proposed to occur there.
Bird Island Sea Cucumber Reserve	Saipan	Focal Resource	No sea cucumbers may be taken from this area except as permitted by the DFW Director.	None
Cormoran	Guam	Ecosystem	The prohibitions that apply to this shipwreck do not apply to military activities.	The military conducts Underwater Detonations in Apra Harbor near the Cormoran. This activity is conducted in accordance with JTREGMARIANAS Instruction 3500.4A (Marianas Training Manual) and without impact to the Cormoran.
Haputo Ecological Reserve Area	Guam	Ecosystem	Use of this area is restricted to persons with access to military bases. Ecological reserves are areas selected to preserve representative and special natural ecosystems, plant and animal species, features and phenomena. Scientific research and educational purposes are the principle uses of these reserves, and activities should reflect these goals in this area.	The Navy conducts Navy Special Warfare activities in the Reserve Area. This includes insertion/extraction of personnel by small craft and divers in and near Haputo Bay. Finegayan North Small Arms Range is located near the Reserve and has a surface danger zone that overlays part of the Reserve.
Laulau Bay Sea Cucumber Reserve	Saipan	Focal Resource	Fishing and other living resource extraction are prohibited. Therefore, activities should be restricted in this area based on preserving fish and other resources.	None
Lighthouse Reef Trochus Reserve	Saipan	Focal Resource	Fishing and all other living resource extraction are prohibited. Therefore, activities should be restricted in this area based on preserving fish and other resources.	None

Table 6.1-2: Marine Protected Areas within the Mariana Islands Training and Testing Study Area (continued)

Marine Protected Area	Location Within the Study Area	Protection Focus	Regulations Applicable to Navy Activities	Training and Testing Activities and Potential Impacts
Mariana Arc of Fire National Wildlife Refuge	Mariana Arc	Ecosystem	This area has been designated to preserve and protect the unique geologic structure and associated marine life at 21 submerged volcanic features within the refuge; maintain the greatest diversity of seamount and hydrothermal vent life yet discovered, provide for the conservation, protection, management, and restoration of fish, wildlife, plants, coral reef communities and other resources associated with the submerged lands; provide opportunities for scientific research and exploration. Any and all activities should be aligned with these goals in this area.	The military is not restricted in what training or testing it may conduct within the waters of the Refuge, including sonar-related activities in the vicinity of this area.
Mariana Trench National Wildlife Refuge	Mariana Archipelago/ Mariana Arc	Ecosystem	This area has been designated to preserve and protect the deepest known habitat on the globe; maintain the natural biological diversity there; provide for conservation, protection, management, and restoration of fish, wildlife, plants, and other objects of scientific interest; as well as provide opportunities for national and international refuge related scientific exploration and research. Any and all activities should be aligned with these goals in this area.	The military is not restricted in what training or testing it may conduct within the waters above the Refuge, including sonar-related activities in the vicinity of this area.
Mariana Trench Marine National Monument	Mariana Archipelago/ Mariana Arc	Ecosystem	This monument consists of the submerged lands encompassing the coral reef ecosystem of the three northernmost islands, the Mariana trench, and active undersea volcanoes and thermal vents in the Mariana Volcanic arc and back arc. The prohibitions required by this proclamation [creating the monument] shall not apply to activities and exercises of the Armed Forces (including those carried out by the U.S. Coast Guard).	The military is not restricted in what training or testing it may conduct within the waters above the monument that extends into the MITT Study Area, including sonar-related activities in the vicinity of the Islands unit of the Mariana Trench Marine National Monument. No specific activities are proposed in the Islands unit.

Table 6.1-2: Marine Protected Areas within the Mariana Islands Training and Testing Study Area (continued)

Marine Protected Area	Location Within the Study Area	Protection Focus	Regulations Applicable to Navy Activities	Training and Testing Activities and Potential Impacts
Orote Ecological Reserve Area	Guam	Ecosystem	Ecological reserves are areas selected to preserve representative and special natural ecosystems, plant and animal species, features and phenomena. Scientific research and educational purposes are the principle uses of these reserves, and activities should reflect these goals in this area.	The military does not conduct anchoring discharge activities in Reserve waters. Amphibious activities and insertion/extraction of personnel via small craft and divers are conducted in or near portions of the Refuge near Orote Point. The Orote Point. Known Distance and Small Arms Ranges surface danger zone extends overwater near the Reserve area.
Pati Point	Guam	Ecosystem	Any activities that would negatively impact coral reef habitats and aquatic animals should not occur in this area.	Small arms training is conducted at Air Force Pati Point Combat Arms and Training Maintenance Range. Ordnance is disposed of at the Air Force Pati Point. Explosive Ordnance Disposal range. Both ranges have danger zones which extend over the water into the Pati Point marine area. Navy vessels do not routinely conduct training in this area.
Piti Bomb Holes	Guam	Ecosystem	Any activities that would negatively impact coral reef habitats and aquatic animals should not occur in this area.	The military is not prohibited from conducting training and testing activity in or near Piti Bomb Holes; however, no specific activities are proposed to occur there.
Sasa Bay	Guam	Ecosystem	Any activities that would negatively impact coral reef habitats and aquatic animals should not occur in this area.	The military is not prohibited from conducting training and testing activity in or near Sasa Bay. The Navy conducts Navy Special Warfare, mine warfare, ordnance demolition training, and amphibious warfare activities in or near Sasa Bay. The Navy does not discharge into Sasa Bay or use explosive ordnance in Sasa Bay.
Sasanhaya Fish Reserve	Rota	Ecosystem	Any activities that would involve taking, fishing, and collecting, anchoring, feeding fish, walking on reef or damaging shipwrecks are prohibited in this area.	None
Tank Beach Trochus Reserve	Saipan	Focal Resource	Fishing and other living resource extraction are prohibited. Therefore, activities should be restricted in this area based on preserving fish and other resources.	None

Table 6.1-2: Marine Protected Areas within the Mariana Islands Training and Testing Study Area (continued)

Marine Protected Area	Location Within the Study Area	Protection Focus	Regulations Applicable to Navy Activities	Training and Testing Activities and Potential Impacts
Tokai Maru	Guam	Ecosystem	The prohibitions that apply to this shipwreck do not apply to military activities.	The military conducts Underwater Detonations in Apra Harbor near the Tokai Maru. This activity is conducted in accordance with JTREGMARIANAS Instruction 3500.4A (Marianas Training Manual) and without impact to the Tokai Maru.
Tumon Bay	Guam	Ecosystem	The prohibitions that apply to this preserve do not apply to military activities.	The military is not prohibited from conducting training and testing activity in or near Tumon Bay; however, no specific activities are proposed for this area.

Notes: DFW = Division of Fish and Wildlife, U.S. = United States

6.2 RELATIONSHIP BETWEEN SHORT-TERM USE OF THE ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

In accordance with the Council on Environmental Quality regulations (Part 1502), this EIS/OEIS analyzes the relationship between the short-term impacts on the environment and the effects those impacts may have on the maintenance and enhancement of the long-term productivity of the affected environment. Impacts that narrow the range of beneficial uses of the environment are of particular concern. This means that choosing one option may reduce future flexibility in pursuing other options, or that committing a resource to a certain use may often eliminate the possibility for other uses of that resource. The Navy, in partnership with National Marine Fisheries Service (NMFS), is committed to furthering the understanding of marine resources and developing ways to lessen or eliminate the impacts training and testing activities may have on these resources. For example, the Navy and NMFS collaborate on the Integrated Comprehensive Monitoring Program for marine species to assess the impacts of training and testing activities on marine species and investigate population-level trends in marine species distribution, abundance, and habitat use in various range complexes and geographic locations where Navy training and testing occurs.

The Proposed Action could result in both short- and long-term environmental impacts. However, these are not expected to result in any impacts 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. The Navy is committed to sustainable military range management, including co-use of the Study Area with the general public and commercial and recreational interests. This commitment to co-use of the Study Area will maintain long-term accessibility of the MITT EIS/OEIS training and testing areas. Sustainable range management practices are specified in range complex management plans under the Navy's Tactical Training Theater Assessment and Planning Program. Among other benefits, these practices protect and conserve natural and cultural resources and preserve access to training areas for current and future training requirements while addressing potential encroachments that threaten to impact range and training area capabilities.

6.3 IRREVERSIBLE OR IRRETRIEVABLE COMMITMENT OF RESOURCES

The NEPA requires that environmental analysis include identification of "any irreversible and irretrievable commitments of resources which would be involved in the Proposed Action should it be implemented" (42 U.S.C. §4332). Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that the uses of these resources have on future generations. Irreversible effects primarily result from the use or destruction of a specific resource (e.g., energy or minerals) that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., the disturbance of a cultural site).

For the Proposed Action, most resource commitments would be neither irreversible nor irretrievable. Most impacts 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.

Implementation of the Proposed Action would require fuels used by aircraft and vessels. Since fixed- and rotary-wing aircraft and ship activities could increase relative to the baseline, total fuel use would increase. Therefore, total fuel consumption would increase under the Proposed Action (Section 6.4,

Energy Requirements and Conservation Potential of Alternatives and Mitigation Measures), and this nonrenewable resource would be considered irretrievably lost (see Chapter 4, Cumulative Impacts, and the following discussion on the Navy's Climate Change Roadmap).

6.4 ENERGY REQUIREMENTS AND CONSERVATION POTENTIAL OF ALTERNATIVES AND MITIGATION MEASURES

The federal government consumes 2 percent of the total U.S. energy share (Jean 2010). Of that 2 percent, the DoD consumes 93 percent. The Navy consumes one quarter of the total DoD share. The Navy consumes 1.2 billion to 1.6 billion gallons of fuel each year. The Navy expects a 25 percent increase in fuel consumption in the future because of new ships coming into the fleet and the growth in mission areas (Jean 2010).

Increased training and testing 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. Details of fuel consumption by training and testing activities on an annual basis are set forth in the air quality emissions calculation spreadsheets available on the project website. Vessel fuel consumption is estimated to increase by 1.06 million gallons per year under Alternative 1 and 1.3 million gallons per year under Alternative 2, when compared to the No Action Alternative. Aircraft fuel consumption is estimated to increase by 14.8 million gallons per year under Alternative 1 and 17.2 million gallons per year under Alternative 2, respectively, when compared to the No Action Alternative. Vehicle fuel consumption is estimated to increase by 70,647 gallons per year under either Alternative 1 or Alternative 2 when compared to the No Action Alternative. Conservative assumptions were made in developing the estimates, and therefore the actual amount of fuel consumed during training and testing activities may be less than estimated. Nevertheless, the demand for fuel consumption would increase from baseline levels, given the proposed increases in training and testing activities.

Energy requirements would be subject to any established energy conservation practices. The use of energy sources has been minimized wherever possible without compromising safety, training, or testing activities. No additional conservation measures related to direct energy consumption by the proposed activities are identified.

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 that will increase use of alternative energy and help conserve the world's resources for future generations. The Navy Climate Change Roadmap identifies actions the Environmental Readiness Division is taking to implement EO 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*. The Navy's Task Force Energy is responding to the Secretary of the Navy's Energy Goals through energy security initiatives that reduce the Navy's carbon footprint.

Two Navy programs—the Incentivized Energy Conservation Program and the Naval Sea Systems Command's Fleet Readiness, Research and Development Program—are helping the fleet conserve fuel via improved operating procedures and long-term initiatives. The Incentivized Energy Conservation Program encourages the operation of ships in the most efficient manner while conducting their mission and supporting the Secretary of the Navy's efforts to reduce total energy consumption on naval ships. The Naval Sea Systems Command's Fleet Readiness, Research, and Development Program includes the High-Efficiency Heating, Ventilating, and Air Conditioning and the Hybrid Electric Drive for DDG-51 class

ships, which are improvements to existing shipboard technologies that will both help with fleet readiness and decrease the ships' energy consumption and greenhouse gas emissions. These initiatives are expected to greatly reduce the consumption of fossil fuels (see Section 3.2, Air Quality).

Furthermore, to offset the impact of its expected near-term increased fuel demands and achieve its goals to reduce fossil fuel consumption and greenhouse gas emissions, the Navy plans to deploy by 2016 a green strike group (a "great green fleet") composed of nuclear vessels and ships powered by biofuel in local operations and with aircraft flying only with biofuels (Jean 2010).

REFERENCES

Jean, G. V. (2010). Navy's Energy Reform Initiatives Raise Concerns Among Shipbuilders. *National Defense*, 4. Retrieved from <http://www.nationaldefensemagazine.org/archive/2010/April/Pages/NavyEnergyReformRaiseConcerns.aspx>

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