Executive Summary

Supplemental Environmental Impact Statement/ Overseas Environmental Impact Statement Mariana Islands Training and Testing

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ES Executive Summary

ES.1 Introduction

The United States (U.S.) Department of the Navy (Navy) has prepared this supplement to the May 2015 Mariana Islands Training and Testing (MITT) Environmental Impact Statement/Overseas EIS (EIS/OEIS) (U.S. Department of the Navy, 2015) pursuant to Council on Environmental Quality Regulations. This Supplemental EIS (SEIS)/OEIS considers ongoing and future activities conducted at sea and on Farallon de Medinilla (FDM), updated training and testing requirements, incorporates new information from an updated acoustic effects model, updates marine mammal density data, and incorporates evolving and emergent best available science. Also, it supports the issuance of federal regulatory permits and authorizations under the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA) using the most current and best available science and analytical methods to reassess potential environmental impacts on the species applicable to those regulations. The Navy will consult with the National Marine Fisheries Service (NMFS) to renew these authorizations. While the Study Area remains unchanged from the 2015 MITT Final EIS/OEIS, this SEIS/OEIS focuses on the at-sea and FDM portion of that area.

The 2015 MITT Final EIS/OEIS also analyzed training and testing activities conducted at existing Mariana Islands Range Complex (MIRC) land-based training areas located on Guam, Saipan, Tinian, and Rota. As the Navy is not proposing any changes to those land based activities on Guam, Saipan, Tinian, and Rota, the Navy will continue to rely on the analysis in the 2015 MITT Final EIS/OEIS and the 2015 U.S. Fish and Wildlife Service (USFWS) consultation.

ES.2 Purpose of and Need for Proposed Training and Testing Activities

The Navy and NMFS (as a cooperating agency) have coordinated from the outset and developed this document to meet each agency's distinct National Environmental Policy Act (NEPA) obligations and support the decision making of both agencies. The Navy's purpose of the Proposed Action is to conduct training and testing activities to ensure that the Navy and other Services meet their respective missions, which, for the Navy under Title 10 United States Code (U.S.C.) Section 5062, is to maintain, train, and equip combat-ready military forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. The respective missions are achieved in part by conducting training and testing within the Study Area in accordance with established Navy military readiness requirements. NMFS's purpose is to evaluate the Navy's Proposed Action pursuant to NMFS's authority under the MMPA, and to make a determination whether to issue incidental take regulations and Letters of Authorization, including any conditions needed to meet the statutory mandates of the MMPA.

ES.3 Scope and Content of the Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement

In this SEIS/OEIS, the Navy reanalyzed at-sea and FDM training and testing activities that could potentially impact the human environment and natural resources, especially marine mammals, sea turtles, and other marine resources. Since the completion of the 2015 MITT Final EIS/OEIS, new information has become available and is incorporated in this analysis, in addition to proposed changes in training and testing requirements. The range of alternatives in this SEIS/OEIS includes the No Action Alternative and two action alternatives. In this SEIS/OEIS, the Navy analyzes direct, indirect, cumulative, short-term, and long-term impacts, and the irreversible and irretrievable commitment of resources that may result from the Proposed Action. The Navy is the lead agency for the Proposed Action and is

responsible for the scope and content of this SEIS/OEIS. The document is being prepared in coordination with the U.S. Air Force and U.S. Coast Guard, as their at-sea and FDM training activities in the Study Area are included in the Proposed Action.

The National Oceanic Atmospheric Administration's NMFS is serving as a cooperating agency because the scope of the Proposed Action and alternatives involve activities that have the potential to impact protected resources under their jurisdiction by law and special expertise, including marine mammals, threatened and endangered species, and Essential Fish Habitat. The National Oceanic Atmospheric Administration's authorities and special expertise is based on their statutory responsibilities under the MMPA of 1972, as amended (16 U.S.C. 1361 et seq.), the ESA of 1973 (16 U.S.C. 1531 et seq.), and the Magnuson-Stevens Fishery Conservation and Management Act (MSA). In addition, NMFS, in accordance with 40 Code of Federal Regulations (CFR) 1506.3 and 1505.2, may adopt this SEIS/OEIS and issue a separate Record of Decision associated with its decision to grant or deny the Navy's request for an incidental take authorization pursuant to Section 101(a)(5)(A) of the MMPA.

In accordance with the Council on Environmental Quality Regulations, 40 CFR 1505.2, the Navy will issue a Record of Decision that provides the rationale for choosing one of the alternatives.

ES.4 Public Involvement

In accordance with the Council on Environmental Quality regulations for implementing the requirements of NEPA, scoping is not required for a supplement to a draft or final EIS (40 CFR 1502.9(c)(4)); however, in an effort to maximize public participation and ensure the public's input is considered, the Navy chose to conduct scoping for this SEIS/OEIS.

Public scoping comments were accepted during the 45-day scoping period from August 1, 2017 to September 15, 2017. In total, the Navy received 36 comment submissions from individuals, groups, agencies, and elected officials. The Navy considered all scoping comments in preparing this SEIS/OEIS.

ES.4.1 Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement

This Draft SEIS/OEIS was prepared to update the Navy's assessment of potential impacts of the Proposed Action on the environment. The Proposed Action in this SEIS/OEIS reflects an adjustment to the Proposed Action presented in the 2015 MITT Final EIS/OEIS, for which a Record of Decision was issued to support training and testing activities. The proposed training and testing activities are generally consistent with those at-sea and FDM activities analyzed in the 2015 MITT Final EIS/OEIS and are representative of activities the military has been conducting in the MITT Study Area for decades. This SEIS/OEIS assessed potential impacts of all the alternatives (Alternative 1, Alternative 2, and the No Action Alternative). On February 1, 2019, a Notice of Availability was published in the *Federal Register*, and notices were placed in local and regional newspapers announcing the availability of the Draft SEIS/OEIS. The Draft SEIS/OEIS is available for review and comment, and two public meetings are scheduled (February 26, 2019 in Guam and February 27, 2019 in Saipan, Commonwealth of the Northern Mariana Islands [CNMI]).

ES.5 Proposed Action and Alternatives

The Navy proposes to continue conducting military readiness training and testing activities throughout the Study Area (Figure ES.5-1), primarily in the existing Mariana Islands Range Complex. The proposed training and testing activities associated with the Proposed Action are to be conducted at sea (including the transit corridor between the Mariana Islands Range Complex and the Hawaii Range Complex, and

select Navy pierside and harbor locations) and on FDM. These proposed activities are generally consistent with those at-sea and FDM activities analyzed in the 2015 MITT Final EIS/OEIS. In order to achieve and maintain Fleet readiness through this SEIS/OEIS, the Navy:

- analyzes at-sea and FDM activities necessary to meet readiness requirements beyond 2020 and into the reasonably foreseeable future, including any changes to those activities previously analyzed, and reflects the most up-to-date compilation of training and testing activities deemed necessary to accomplish military readiness requirements;
- adjusts types and tempo (increases or decreases) of training and testing events from the 2015 MITT Final EIS/OEIS to the level needed to meet readiness requirements beyond 2020 and into the reasonably foreseeable future;
- presents the results of the evaluation of relevant new information, which has been incorporated into revised analyses where appropriate (each resource area analyzed within the 2015 MITT Final EIS/OEIS has been evaluated to determine the need for reanalysis within this SEIS/OEIS);
- updates the environmental impact analyses in the previous documents to account for changes to tempo of activity, renaming or combining related types of activities, acknowledging discontinuation of some activities assessed in 2015, and assessing new activities, such as those involving high energy lasers, to enable the Navy to adopt new technology and new capabilities;
- updates environmental analyses with the best available science and most current acoustic analysis methods to evaluate the potential effects of training and testing on the marine environment; and
- supports reauthorization of incidental takes of marine mammals under the MMPA and incidental takes of threatened and endangered marine species under the ESA.

ES.5.1 No Action Alternative

Under the No Action Alternative, the Navy would not conduct the proposed training and testing activities in the MITT Study Area. Other military activities not associated with this Proposed Action would continue to occur. For FDM, the lease agreement between the U.S. government and the CNMI would remain in place, and the island would continue to be maintained as a Navy range, although strike warfare would no longer continue on the island. For NMFS, denial of an application for an incidental take authorization constitutes the NMFS No Action Alternative, which is consistent with NMFS' statutory obligation under the MMPA to grant or deny requests for take incidental to specified activities. The resulting environmental effects from taking no action will be compared with the effects of the Proposed Action.

Cessation of proposed Navy at-sea training and testing activities would mean that the Navy would not meet its statutory requirements and would be unable to properly defend itself and the United States from enemy forces, unable to successfully detect enemy submarines, and unable to safely and effectively use its weapons systems or defensive countermeasures due to a lack of training of forces and testing of systems that replicate the conditions to which Naval forces must operate while executing the range of military operations required to further national security objectives. Navy personnel would essentially not obtain the unique skills or be prepared to safely and effectively use sensors, weapons, and technologies in realistic scenarios required to accomplish the overall mission. Consequently, the No Action Alternative of not conducting the proposed live, at-sea training and testing activities in the Study Area is inherently unreasonable because it does not meet the purpose and need of the Proposed Action.

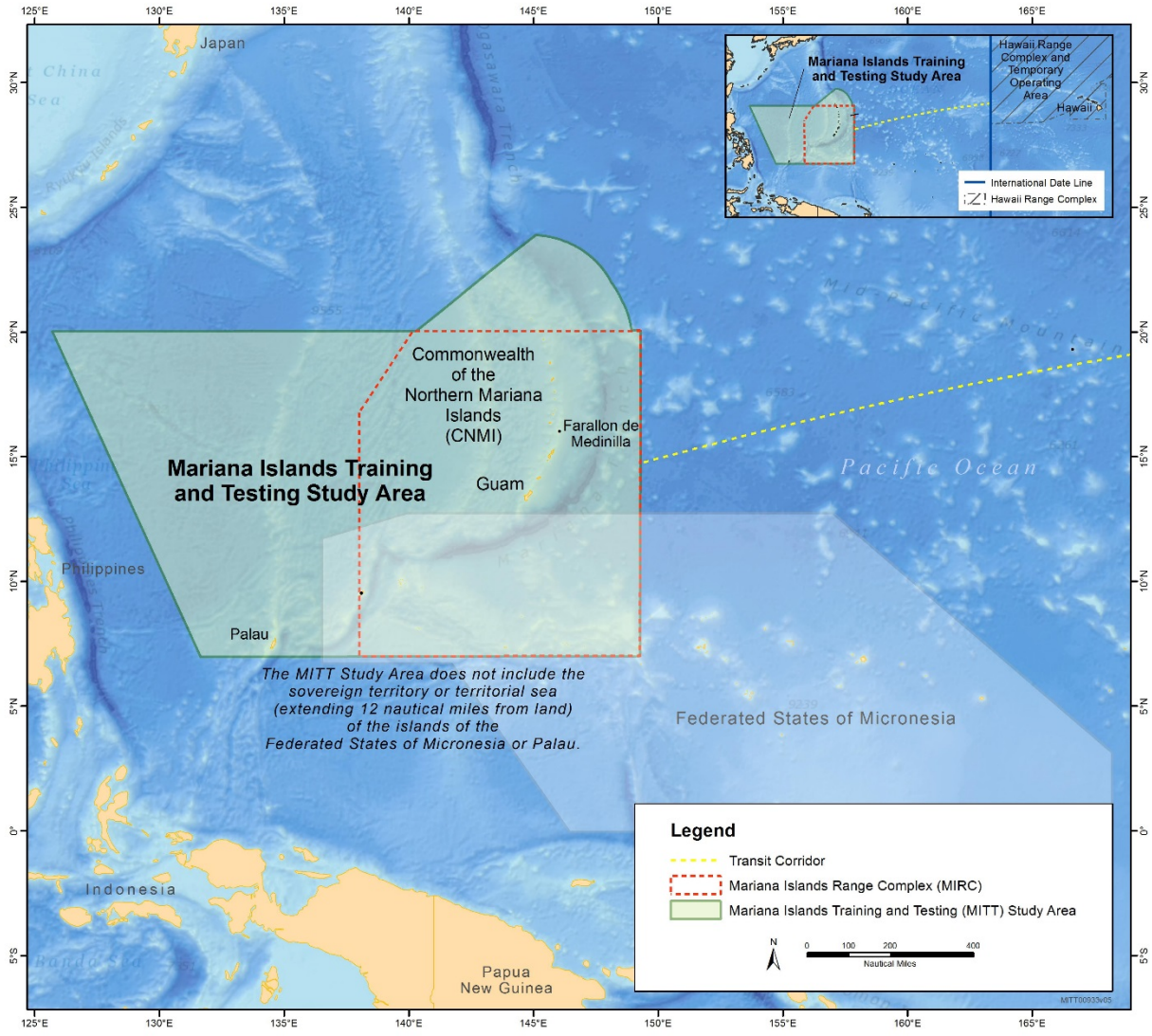

Figure ES.5-1: Mariana Islands Training and Testing Study Area

ES.5.2 Alternative 1

This Alternative consists of an adjustment from the level of training and testing activities analyzed in the 2015 MITT Final EIS/OEIS, accounting for changes in the types and tempo (increases or decreases) of activities necessary to meet current and future military readiness requirements beyond 2020.

- **Adjustments to Tempo of Training and Testing Activities.** This alternative includes changes to training and testing requirements necessary to accommodate current and future training and testing requirements at sea and on FDM, including new at-sea activities as well as activities subject to previous analysis that are currently ongoing and have historically occurred in the Study Area.

Alternative 1 reflects a level of training and testing activities to be conducted at sea and on FDM, with adjustments from the 2015 MITT Final EIS/OEIS that account for changes in the types and tempo of activities necessary to meet current and future military readiness requirements beyond 2020.

ES.5.3 Alternative 2

Alternative 2 includes the same type of training and testing activities that would occur under Alternative 1. Alternative 2 also considers an increase in tempo of some training and testing activities, including additional Fleet exercises and associated unit-level activities, should unanticipated emergent world events require increased readiness levels. Alternative 2 includes additional electronic warfare activities for Naval Air Systems Command and additional electronic warfare, anti-submarine warfare, and surface warfare activities for Naval Sea Systems Command.

ES.6 Summary of Environmental Effects

Environmental effects which might result from implementing the Navy's Proposed Action have been analyzed in this SEIS/OEIS. Physical resources that were considered for re-evaluation in this SEIS/OEIS are the same as those that were analyzed in the 2015 MITT Final EIS/OEIS and include sediments and water quality and air quality. Biological resources considered include marine habitats, marine mammals, sea turtles, marine birds, marine vegetation, marine invertebrates, fishes, and terrestrial species and habitats. Human resources considered in this SEIS/OEIS include cultural resources, socioeconomic resources and environmental justice, public health and safety, and cumulative impacts.

As stated previously, this SEIS/OEIS is an update to the 2015 MITT Final EIS/OEIS. New information specifically addressed in this SEIS/OEIS includes updates to military readiness requirements, an updated acoustic effects model, updated marine mammal density data, and evolving and emergent best available science[1]. As the science regarding the potential impacts of acoustics (sonar and explosives) on marine species has evolved since the 2015 MITT Final EIS/OEIS (new research available, updated criteria and thresholds), the acoustic analysis contained in this supplement is a complete update and does not rely

[1] The 2015 MITT Final EIS/OEIS used a new modeling system known as the Navy Acoustics Effects Model and marine mammal density information, developed by the Navy in cooperation with the National Marine Fisheries Service, that was the best available information at the time. The Navy Acoustics Effects Model has been refined, marine mammal density estimates have been updated, NMFS has published new criteria and criteria used in the acoustic model have been revised.

on the 2015 MITT Final EIS/OEIS analysis. Analysis associated with activities that result in non-acoustic impacts is updated as necessary in this SEIS/OEIS to reflect new science and refers back to the 2015 MITT Final EIS/OEIS analysis when appropriate.

Table ES.6-1 provides a listing of the potential environmental impacts of the Proposed Action. All sections of the 2015 MITT Final EIS/OEIS were reviewed to determine if there was relevant best available science that needed to be updated/incorporated into this SEIS/OEIS. To the extent there was, it is reflected in each of the sections in Chapter 3.0 (Affected Environment and Environmental Consequences). There was also a re-assessment of effects determinations for marine species. Predicted acoustic exposures are reduced 8 percent under Alternative 1 and would decrease 3 percent under Alternative 2, when compared to the impacts predicted in the 2015 MITT Final EIS/OEIS.

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2

Resource Category	Summary of Impacts
Section 3.1 Sediments and Water Quality	The Navy considered all stressors that could potentially impact sediments and water quality as a result of the Proposed Action. The following conclusions have been reached for the project alternatives: **No Action Alternative:** • Under the No Action Alternative, the proposed training and testing activities would not occur in the MITT Study Area. Discontinuing training and testing under the No Action Alternative would result in fewer explosives and explosives byproducts, metals, chemicals, and other materials within the marine environment where training and testing activities have historically been conducted. Discontinuing training and testing activities under the No Action Alternative would lessen the potential for impacts on sediments and water quality from training and testing activities. **Alternative 1:** • Explosives and explosives byproducts, metals, chemicals, and other materials expended during training and testing described in this SEIS/OEIS would not exceed regulatory thresholds and guidelines established for measuring impacts on sediment and water quality. Qualitative observations of nearshore waters of FDM during multi-year dive surveys included observations of generally good water quality. There was little evidence of military impacts on benthic sediments and substrates observed during the dive surveys, and, where noted, impacts were localized and shown to recover during subsequent dive surveys. **Alternative 2:** • The number of training and testing activities under Alternative 2 would increase over what is proposed for Alternative 1. However, this increase would be a slight change and would not appreciably change the potential for impacts over what is analyzed for Alternative 1.
Section 3.2 Air Quality	The Navy considered all stressors that could potentially impact air quality as a result of the Proposed Action. The following conclusions have been reached for the project alternatives: **No Action Alternative:** • Under the No Action Alternative, the proposed training and testing activities would not occur in the MITT Study Area. Discontinuing military readiness activities under the No Action Alternative would improve the ambient air quality as the amount of pollutants being emitted would decrease.

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
	Alternative 1: • Pollutant emissions expended during training and testing as described in the SEIS/OEIS would not result in an increase in emissions that would exceed the Prevention of Significant Deterioration threshold of 250 tons per year for any of the criteria pollutants.. Therefore, Alternative 1 would not have a significant impact on ambient air quality, and no applicable thresholds would be exceeded. **Alternative 2:** • The number of training and testing activities under Alternative 2 would increase over what is proposed for Alternative 1. However, this increase would be a slight change and would not appreciably change the potential for impacts over what is analyzed for Alternative 1.
Section 3.3 Marine Habitats	The Navy considered all stressors that could potentially impact marine habitats as a result of the Proposed Action. The following conclusions have been reached for the project alternatives: **No Action Alternative:** • Under the No Action Alternative, the proposed training and testing activities would not occur in the MITT Study Area. Under the No Action Alternative, discontinuing the training and testing activities would result in fewer explosive and physical disturbance and strike stressors within the marine environment where training and testing activities have historically been conducted. Therefore, discontinuing training and testing activities under the No Action Alternative would lessen the potential for explosive or physical disturbance and strike stressor impacts on marine habitat, but would not measurably improve the overall distribution or abundance of marine habitat. **Alternative 1:** • Most of the explosive military expended materials would detonate at or near the water surface. Training activities that include bottom-laid in-water explosions under Alternative 1 would affect marine habitat structure in the Study Area, but these activities would occur in areas that have been previously disturbed, and impacts would be localized. Mitigation measures will help the Navy avoid or reduce impacts on seafloor resources (including shallow-water coral reefs, live hard bottom, artificial reefs, and submerged cultural resources) from explosives during applicable activities. • Bottom substrates could be disturbed by vessel and in-water device strikes, military expended materials, seafloor devices used for military readiness activities, and from walking, standing, or swimming in the nearshore waters

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
	during amphibious activities such as raids and assaults. The impact of vessels and in-water devices on marine habitats would remain inconsequential because (1) vessel and in-water activities that could come into contact with marine substrates would be located in previously disturbed areas (i.e., nearshore shallow waters), (2) military expended materials could be colonized by benthic organisms, and (3) seafloor devices would be used in previously disturbed areas and therefore would not be expected to affect marine substrates. **Alternative 2:** • The number of training and testing activities under Alternative 2 would increase over what is proposed for Alternative 1. However, this increase would be a slight change and would not appreciably change the potential for impacts over what is analyzed for Alternative 1.
Section 3.4 Marine Mammals	The Navy considered all stressors that could potentially impact marine mammals as a result of the Proposed Action. The following conclusions have been reached for the project alternatives: **No Action Alternative:** • Under the No Action Alternative, the proposed training and testing activities would not occur in the MITT Study Area. Discontinuing training and testing activities under the No Action Alternative would result in fewer stressors that potentially affect marine mammals within the marine environment. Therefore, discontinuing training and testing activities under the No Action Alternative would lessen the potential for stressor impacts on marine mammals, but would not measurably improve the overall habitat, distribution or abundance of marine mammals. **Alternative 1:** • The use of sonar and other transducers would have the potential to expose marine mammals to sound-producing activities which would present risks to marine mammals that could range from a temporary or permanent threshold shift, auditory masking, physiological stress, or behavioral responses (only Kogia whales are predicted to have permanent threshold shift exposures). Individual animals would typically only experience a small number of behavioral responses or temporary threshold shifts per year due to exposure to acoustic stressors and are unlikely to incur substantive costs to that individual. Population-level effects are unlikely. • The use of munitions in the water or near the water's surface present a risk to marine mammals located in close proximity to the explosion, because the resulting shock waves can cause injury or result in the death of an animal; however, there are no instances of non-auditory injury or death predicted by the acoustic modeling. If a marine mammal is farther from an explosion, the impulsive, broadband sounds introduced into the marine environment

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
	may cause a temporary or permanent threshold shift, auditory masking, physiological stress, or behavioral responses. Because most estimated impacts from explosions are behavioral responses or temporary threshold shifts and because the numbers of marine mammals potentially impacted by explosives are small as compared to each species respective abundance, population-level effects are unlikely. • The use of in-water electromagnetic devices and high-energy lasers would have the potential to result in impacts to marine mammals. The likelihood and magnitude of energy impacts depends on the proximity of marine mammals to the activity. Based on the relatively weak strength of the electromagnetic field created by some Navy activities, a marine mammal would have to be in close proximity for there to be any effect and impacts on marine mammal migrating behaviors and navigational patterns are not anticipated. Statistical probability analyses with conservative assumptions tending to overestimation of exposures demonstrate with a high level of certainty that a marine mammal would not be struck by a high energy laser. These activities are temporary and localized in nature, and may result in short-term and minor impacts on individual marine mammals, but would not result in long-term impacts on marine mammal populations. • The use of vessels, in-water devices, military expended materials, and seafloor devices would have the potential to result in impacts to marine mammals. The potential for impacts relies heavily on the probability that marine mammals would be in close proximity to an activity (e.g., a vessel or an expended non-explosive munition). Historical data indicates no occurrence of vessel strikes with marine mammals in the MITT over the last ten years during any training and testing activities. Since the Navy does not anticipate a substantive change in the level of vessel use compared to the last decade and there have been no strikes in that timeframe, the potential for striking a marine mammal is therefore discountable. Physical disturbance due to vessel movement and in-water devices of individual marine mammals may also occur, but any stress response of avoidance behavior would not be severe enough to have long-term fitness consequences for individual marine mammals. The use of in-water devices during Navy activities involves multiple types of vehicles or towed devices traveling on the water surface, through the water column, or along the seafloor, all of which have the potential to physically disturb or strike marine mammals. No recorded or reported instances of marine mammal strikes have resulted from in-water devices; therefore, impacts on individuals or long-term consequences to marine mammal populations are not anticipated. Potential impacts from military expended materials and seafloor devices are determined through statistical probability analyses. Analyses suggest a very low potential for marine mammals to be struck by any of these items. Long-term consequences to marine mammal populations from vessels, in-water devices, military expended materials, and seafloor devices associated with training and testing activities are not anticipated.

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
	• The use of cables, wires, and decelerators/parachutes would have the potential to result in impacts to marine mammals. The potential for impacts is dependent on the probability that a marine mammal would encounter an expended material, as well as the physical properties of the expended materials and the likelihood that a marine mammal could become entangled in the item. Physical characteristics of cables, wires, and decelerators/parachutes suggest that it is not likely a marine mammal would become entangled in these items. While it may be possible for a marine mammal to become entangled in cables or wires, the sparse distribution of these items throughout the Study Area indicates a very low potential for encounter. Furthermore, fiber optic cables used during mine warfare activities are easily abraded and have a low breaking strength, which reduces the risk of entanglement should a cable be encountered. Short-term impacts on individual marine mammals and long-term impacts on marine mammal populations from entanglement associated with training and testing activities are not anticipated. • Use of military expended materials would have the potential to result in impacts to marine mammals. The potential for impacts relies heavily on feeding behaviors of marine mammals that occur in the Study Area, the physical properties of the expended items, the feasibility that a marine mammal could ingest the items, and the likelihood that a marine mammal would encounter an item. Marine mammals that forage along the water surface or within the water column are less likely to encounter ingestion stressors as they sink through the water column to the seafloor. Most expended materials that would remain floating or suspended within the water column are typically too small to pose a risk of intestinal blockage to any marine mammal that encounters it. Bottom-feeding marine mammals would be more likely to encounter expended materials that have already sunk to the floor. In the unlikely event that a marine mammal encounters and ingests expended material, the individual might be negatively affected if the material becomes lodged in the digestive tract. The likelihood that a marine mammal would ingest a military expended item associated with training and testing activities is considered low. Long-term consequences to marine mammal populations from expended materials associated with training and testing activities are not anticipated. • Marine mammals would be exposed to multiple secondary causes of impact associated with training and testing activities in the Study Area. In-water explosions have the potential to injure or kill prey species that marine mammals feed on; however, impacts would not substantially impact prey availability for marine mammals. Explosion byproducts are not considered as indirect stressors to marine mammals while mixed in marine sediments or water. Marine mammals may encounter unexploded ordnance underwater or within sediments, but ingestion is very unlikely. Explosion byproducts and unexploded munitions would have no lasting or meaningful effect on water quality and would therefore not constitute a secondary indirect stressor for marine mammals. Metals are introduced into the water and sediments from targets, munitions, and other expended materials. Evidence from a

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
	number of studies indicate metal contamination is localized and ephemeral and that bioaccumulation resulting from munitions was not observed in the studies specifically designed to look for bioaccumulation. Therefore, it is unlikely that impacts on marine mammal prey availability would occur. Several training and testing activities introduce explosive byproducts into the marine environment that are potentially harmful in concentration; however, rapid dilution would occur and toxic concentrations are unlikely to be encountered. Furthermore, there is no evidence of acute toxicity or chronic accumulation in tissues of chemicals introduced by Navy activities that would alter water quality to an extent that would result in overall habitat degradation for marine mammals. Transmission of marine mammal diseases and parasites are not considered likely from the Navy's trained marine mammals because strict protocols are in place to prevent such impacts on wild populations. Secondary stressors from training and testing activities in the Study Area are not expected to have short-term impacts on individual marine mammals or long-term impacts on marine mammal populations. **Alternative 2:** • The number of training and testing activities under Alternative 2 would increase over what is proposed for Alternative 1. However, this increase would be a slight change and would not appreciably change the potential for impacts over what is analyzed for Alternative 1.
Section 3.5 Sea Turtles	The Navy considered all stressors that could potentially impact sea turtles as a result of the Proposed Action. The following conclusions have been reached for the project alternatives: **No Action Alternative:** • Under the No Action Alternative, the proposed training and testing activities would not occur in the MITT Study Area. Discontinuing the training and testing activities would result in fewer stressors that potentially affect sea turtles within the marine environment where training and testing have historically been conducted. Therefore, discontinuing training and testing activities under the No Action Alternative would lessen the potential for stressor impacts on sea turtles, but would not measurably improve the status of sea turtle populations. **Alternative 1:** • The 2015 MITT Final EIS/OEIS analyzed potential impacts of at-sea training and testing activities, as well as amphibious landings on beaches on Guam, Rota, and Tinian, which may support sea turtle nesting. Activities on Guam, Rota, and Tinian do not change; therefore, this SEIS only addresses potential stressors on sea turtles for training and testing activities at sea.

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
	• The use of sonar and other transducers, explosives, in-water electromagnetic devices, vessels and in-water devices, weapons, military expended materials, seafloor devices, and military expended materials of ingestible size associated with training and testing activities may affect sea turtles present within the Study Area; however, they would not result in significant adverse impacts or jeopardize the continued existence of any sea turtle species. These findings are consistent with the analysis in the 2015 MITT Final EIS/OEIS and biological opinions provided to the Navy by NMFS and the USFWS. • The use of sonar and other transducers, explosives, aircraft, vessels and weapons have the potential for limited impacts to sea turtles because sea turtles have limited hearing abilities. If a sea turtle is close enough to a source using a frequency within a sea turtle's hearing range, the sea turtle may exhibit short-term behavioral reactions or may exhibit no reaction at all. No long-term consequences to sea turtle populations would be expected. • In-water electromagnetic devices are not expected to result in population-level impacts for sea turtles due to the low intensity, localized potential impact area, and short duration of use. The use of high-energy lasers associated with testing activities is not expected to impact sea turtles as a result of the very low probability of a direct strike by a high-energy laser. • Use of vessels and in-water devices, military expended materials, and seafloor devices may cause short-term disturbance to an individual turtle within the Study Area. However, due to the low numbers of sea turtles potentially impacted by these activities that may cause physical disturbance and strike, population-level effects are unlikely. • The use of cables and wires, and decelerators/parachutes may cause short-term or long-term disturbance to an individual sea turtle. However, due to the physical characteristics and low number of cables, wires, and decelerators/parachutes, combined with the behavior of the species, population-level impacts are not expected. • The use of military expended materials and munitions may cause short-term or long-term disturbance to an individual sea turtle due to ingestion of munitions used in training activities. However, the potential impacts of exposure to munitions are not expected to result in population-level impacts. **Alternative 2:** • The number of training and testing activities under Alternative 2 would increase over what is proposed for Alternative 1. However, this increase would be a slight change and would not appreciably change the potential for impacts over what is analyzed for Alternative 1.

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
Section 3.6 Marine Birds	The Navy considered all stressors that could potentially impact marine birds as a result of the Proposed Action. The following conclusions have been reached for the project alternatives: **No Action Alternative:** • Under the No Action Alternative, the proposed training and testing activities would not occur in the MITT Study Area. Discontinuing training and testing activities under the No Action Alternative would result in fewer stressors that potentially affect marine birds within the marine environment. Therefore, discontinuing training and testing activities under the No Action Alternative would lessen the potential for stressor impacts on marine birds, but would not measurably improve the status of marine bird populations. **Alternative 1:** • The use of sonar and other transducers, explosives, in-air electromagnetic devices, aircraft, aerial targets, vessels and in-water devices, military expended materials, and military expended materials of ingestible size associated with training and testing activities would have no effect on ESA-listed marine birds within the Study Area. In addition, the use of high-energy lasers associated with testing activities would have no effect on ESA-listed marine birds within the Study Area. This conclusion is based on the consideration that ESA-listed marine birds generally occur outside of the Study Area, with little to no overlap with at-sea training and testing activities. • Periodic helicopter-based surveys of FDM have occurred since 1998 (monthly up to 2009, and quarterly thereafter through September 2016) for marine birds nesting on the island. Because of a lack of commercial helicopter transit services, surveys have not been conducted since 2016. Under Alternative 1, training activities on FDM would not significantly impact populations of marine birds on the island. This conclusion is based on statistical analysis of periodic population counts of masked, brown, and red-footed boobies undertaken by the Navy from 1998 through 2016, and the relatively small increases in the number of events, munitions, and Net Explosive Weight expended on FDM proposed under Alternative 1 compared to what was analyzed in the 2015 MITT Final EIS/OEIS. **Alternative 2:** • The number of training and testing activities under Alternative 2 would increase over what is proposed for Alternative 1. However, this increase would be a slight change and would not appreciably change the potential for impacts over what is analyzed for Alternative 1.

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
Section 3.7 Marine Vegetation	The Navy considered all stressors that could potentially impact marine vegetation as a result of the Proposed Action. The following conclusions have been reached for the project alternatives: **No Action Alternative:** • Under the No Action Alternative, the proposed training and testing activities would not occur in the MITT Study Area. Discontinuing training and testing activities under the No Action Alternative would result in fewer stressors that potentially affect marine vegetation within the marine environment. Therefore, discontinuing training and testing activities under the No Action Alternative would lessen the potential for stressor impacts on marine vegetation, but would not measurably improve the status of marine vegetation populations or subpopulations. **Alternative 1:** • Physical disturbance and strike and the use of in-water explosives could affect marine vegetation by destroying individual plants or damaging parts of plants, but are not expected to result in detectable changes in survival or propagation, and are not expected to result in population-level impacts on marine plant species. Changes in sediment and water quality are not likely to be measureable, thus no detectable changes are expected in marine vegetation growth, survival, propagation, or population-level impacts. • The use of explosives, military expended materials, and seafloor devices during military readiness activities under Alternative 1 could affect marine vegetation by destroying individual plants or damaging parts of plants, but are not expected to result in detectable changes in survival or propagation, and are not expected to result in population-level impacts on marine plant species. **Alternative 2:** • The number of training and testing activities under Alternative 2 would increase over what is proposed for Alternative 1. However, this increase would be a slight change and would not appreciably change the potential for impacts over what is analyzed for Alternative 1.
Section 3.8 Marine Invertebrates	The Navy considered all stressors that could potentially impact marine invertebrates as a result of the Proposed Action. The following conclusions have been reached for the project alternatives: **No Action Alternative:** • Under the No Action Alternative, the proposed training and testing activities would not occur in the MITT Study Area. Discontinuing training and testing activities under the No Action Alternative would result in fewer stressors

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
	that potentially affect marine invertebrates within the marine environment. Therefore, discontinuing training and testing activities under the No Action Alternative would lessen the potential for stressor impacts on marine invertebrates, but would not measurably improve the status of invertebrate populations or subpopulations. **Alternative 1:** • The use of sonar and other transducers, in-water electromagnetic devices, cables, wires, decelerators/parachutes, and military expended materials of ingestible size associated with training and testing activities would have a negligible impact on marine invertebrate species. In addition, the use of high-energy lasers associated with testing activities would have a negligible impact on marine invertebrate species. • Use of explosives, vessels and in-water devices, military expended materials and seafloor devices, associated with training and testing activities may impact individual marine invertebrates and groups of marine invertebrates. However, these activities are unlikely to impact populations or subpopulations of marine invertebrates. • The use of sonar and other transducers; in-water electromagnetic devices; cables, wires, and decelerators/parachutes; metal, chemical, and other material byproducts; and secondary physical disturbances would have no adverse effect on sedentary invertebrate beds or reefs. The use of in-water explosives, vessels and in-water devices, military expended materials, and seafloor devices, explosive byproducts, and unexploded ordnance during military readiness activities may have an adverse effect on sedentary invertebrate beds or reefs. **Alternative 2:** • The number of training and testing activities under Alternative 2 would increase over what is proposed for Alternative 1. However, this increase would be a slight change and would not appreciably change the potential for impacts over what is analyzed for Alternative 1.
Section 3.9 Fishes	The Navy considered all stressors that could potentially impacts fishes could potentially as a result of the Proposed Action. The following conclusions have been reached for the project alternatives: **No Action Alternative:** • Under the No Action Alternative, the proposed training and testing activities would not occur in the MITT Study Area. Discontinuing training and testing activities under the No Action Alternative would result in fewer stressors that potentially affect fishes within the marine environment. Therefore, discontinuing training and testing activities

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
	under the No Action Alternative would lessen the potential for stressor impacts on fishes,, but would not measurably improve the status of fish populations or subpopulations. **Alternative 1:** • The use of sonar and other transducers, explosives, and in-water electromagnetic devices, may affect fishes. Impacts however are expected to be temporary and infrequent as most activities would be temporary, localized, and infrequent. More severe impacts such as mortality or injury could lead to permanent or long-term consequences for individuals, but, overall, long-term consequences for fish populations are not expected. • The use of vessels and in-water devices, aircraft, weapons, military expended materials, seafloor devices, cables, wires, decelerators/parachutes, and military expended materials of ingestible size associated with training and testing activities may affect fishes. However, because the number of fishes potentially impacted by these activities is low, population-level impacts are unlikely. • The use of sonar and other transducers, in-water explosives, in-water electromagnetic devices, vessels and in-water devices, cables, wires, decelerators/parachutes, and military expended materials associated with training and testing activities may affect fishes within the Study Area. In addition, the use of high-energy lasers associated with testing activities may affect fishes within the Study Area. **Alternative 2:** • The number of training and testing activities under Alternative 2 would increase over what is proposed for Alternative 1. However, this increase would be a slight change and would not appreciably change the potential for impacts over what is analyzed for Alternative 1.
Section 3.10 Terrestrial Species and Habitats	The Navy considered all stressors that could potentially impact terrestrial species and habitats as a result of the Proposed Action. This SEIS/OEIS addresses potential impacts on terrestrial species and habitats on FDM. The following conclusions have been reached for the project alternatives: **No Action Alternative:** • Under the No Action Alternative, the proposed training and testing activities would not occur in the MITT Study Area. For FDM, the lease agreement between the U.S. government and the Commonwealth of the Northern Mariana Islands would remain in place, and the island would continue to be maintained as a Navy range. **Alternative 1:**

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
	• Under Alternative 1, more aircraft would fly over and land on FDM and more ordnance would be used on FDM. The total increase, in terms of net explosive weight (NEW) under Alternative 1 would be less than 1 percent compared to ordnance use on FDM described in the 2015 MITT Final EIS/OEIS. All of the ordnance would be used within existing impact zones, with the same avoidance and minimization measures in place as described in the 2015 MITT Final EIS/OEIS and in the 2015 USFWS Biological Opinion and 2016 USFWS concurrence letter. In accordance with 50 CFR 402.16, the 2015 and 2016 consultations remain valid as none of the factors necessary to trigger reinitiating consultation have been met. The 2015 USFWS Biological Opinion and 2016 USFWS concurrence letter would still apply to ESA-listed species occurring on FDM (the Mariana fruit bat and Micronesian megapode). The continued use of FDM as described in this SEIS/OEIS would not significantly impact populations of birds protected under the MBTA. **Alternative 2:** • The number of training and testing activities under Alternative 2 would increase over what is proposed for Alternative 1. However, this increase would be a slight change and would not appreciably change the potential for impacts over what is analyzed for Alternative 1.
Section 3.11 Cultural Resources	The Navy considered all stressors that could potentially impact cultural resources as a result of the Proposed Action. The following conclusions have been reached for the project alternatives: **No Action Alternative:** • Under the No Action Alternative, the proposed training and testing activities would not occur in the MITT Study Area. Discontinuing training and testing activities under the No Action Alternative would result in fewer stressors that potentially affect submerged cultural resources. Therefore, discontinuing training and testing activities under the No Action Alternative would lessen the potential for stressor impacts on submerged cultural resources. **Alternative 1:** • Under Alternative 1, measures previously implemented to avoid and protect submerged historic properties would continue to be implemented according to the conservation measures and procedures identified and described in the 2009 MIRC Programmatic Agreement. Given the Navy avoids areas with known submerged obstructions, including submerged objects listed or eligible for listing on the National Register of Historic Places, submerged historic properties within U.S. territorial waters and National Register of Historic Places-eligible resources on Guam and the Commonwealth of the Northern Mariana Islands would not be affected by training and testing activities. In

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
	accordance with Section 402 of National Historic Preservation Act, no known World Heritage Sites would be affected. **Alternative 2:** • The number of training and testing activities under Alternative 2 would increase over what is proposed for Alternative 1. However, this increase would be a slight change and would not appreciably change the potential for impacts over what is analyzed for Alternative 1.
Section 3.12 Socioeconomic Resources and Environmental Justice	The Navy considered all stressors that could potentially impact socioeconomic resources and environmental justice as a result of the Proposed Action. The following conclusions have been reached for the project alternatives: **No Action Alternative:** • Under the No Action Alternative, the proposed training and testing activities would not occur in the MITT Study Area. Limits on accessibility to the ocean and airspace associated with the proposed training and testing activities would not be introduced into the marine environment. Therefore, existing environmental conditions would either remain unchanged or would improve slightly after cessation of ongoing training and testing activities. • Discontinuing training and testing activities would result in fewer stressors on socioeconomic resources within the marine environment where training and testing activities have historically been conducted. Therefore, discontinuing training and testing activities under the No Action Alternative would lessen the potential for impacts on socioeconomic resources, such as commercial and recreational fishing, commercial transportation and shipping, tourism, and traditional fishing practices in the Study Area. • The Navy and Navy personnel are an important and often stabilizing contributor to the local and regional economies. Therefore, not conducting the proposed at-sea training and testing activities may have negative impacts on the socioeconomic resources of Guam and the CNMI. The number of jobs and types of jobs available on Guam and to a lesser extent on the CNMI may decline. For example, vessels and associated equipment used specifically for military readiness activities would no longer be needed if training and testing activities ceased. Consequently, the civilian and Navy personnel supporting those activities may be relocated, reassigned, or have to find other employment. The secondary effects from reducing the number of personnel who support at-sea military training and testing activities could include a decline in revenue for local businesses frequented by Navy personnel and their families, such as businesses in the food services, retail, and housing sectors.

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
	Alternative 1: • Alternative 1 may result in impacts on commercial and recreational fishing, traditional fishing practices, or tourism when areas of co-use are temporarily inaccessible to ensure public safety during training and testing activities. No impacts on commercial transportation and shipping are anticipated, because training and testing activities are scheduled and located to avoid potential conflicts with commercial vessels and air traffic. The military will continue to collaborate with local communities to enhance existing means of communication with the public that are intended to reduce the potential effects of limiting accessibility to areas designated for use by the military. • Alternative 1 is not expected to result in impacts from physical disturbance and strike or airborne acoustic disturbances on commercial and recreational fishing, traditional fishing practices, other recreational activities or tourism, because the vast majority of military training and testing activities would occur in areas of the Study Area far from the locations typically used by the public for fishing and recreation activities. Furthermore, the large size of the Study Area over which the proposed military training and testing activities would be distributed, and adherence to the Navy's standard operating procedures, would further reduce any potential for impacts. • Traditional fishers in Guam and the CNMI would not be disproportionately impacted by limits on accessibility, airborne acoustic disturbances, or the possibility of physical disturbance and strike, because traditional fishers typically use the same general areas as recreational fishers, specifically areas closer to shore and far from the majority of training and testing activities. **Alternative 2:** • The number of training and testing activities under Alternative 2 would increase over what is proposed for Alternative 1. However, this increase would be a slight change and would not appreciably change the potential for impacts over what is analyzed for Alternative 1.
Section 3.13 Public Health and Safety	The Navy considered all stressors that could potentially impact public health and safety as a result of the Proposed Action. The following conclusions have been reached for the project alternatives: **No Action Alternative:** • Under the No Action Alternative, the proposed training and testing activities would not occur in the MITT Study Area. Not conducting the proposed at-sea training and testing activities may lessen the potential for interactions between the Navy and civilians and improve public health and safety.

Table ES.6-1: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2 (continued)

Resource Category	Summary of Impacts
	Alternative 1: • The use of sonar, in-water explosives, radar, lasers, aircraft, vessels, in-water devices/targets, munitions, and seafloor devices would not adversely affect public health and safety because standard operating procedures are in place to ensure that there is no overlap between military and non-military activities. In addition, training and testing activities would not appreciably change the water quality in the region. **Alternative 2:** • The number of training and testing activities under Alternative 2 would increase over what is proposed for Alternative 1. However, this increase would be a slight change and would not appreciably change the potential for impacts over what is analyzed for Alternative 1.

Notes: SEIS/OEIS = Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement, ESA = Endangered Species Act, FDM = Farallon de Medinilla, MBTA = Migratory Bird Treaty Act, MITT = Mariana Islands Training and Testing, MMPA = Marine Mammal Protection Act, Navy = United States Department of the Navy, U.S. = United States, USFWS = U.S. Fish and Wildlife Service, NMFS = National Marine Fisheries Service, MIRC = Mariana Islands Range Complex, CNMI = Commonwealth of the Northern Mariana Islands

ES.6.1 Cumulative Impacts

Marine mammals, marine invertebrates, sea turtles, and socioeconomics are the primary resources of concern for cumulative impacts analysis:

- Past human activities have impacted these resources to the extent that several marine mammals, sea turtles, marine invertebrates species, and some terrestrial species occurring in the Study Area are ESA-listed. Several marine mammal species have stocks that are classified as strategic stocks under the MMPA.
- The use of sonar and other non-impulsive sound sources under Alternative 1 and Alternative 2 has the potential to disturb or injure marine mammals and sea turtles.
- Explosive detonations, and vessel strikes under Alternative 1 and Alternative 2 have the potential to disturb, injure, or kill marine mammals and sea turtles.
- Under Alternative 1 and Alternative 2, danger zones could potentially restrict access to fishing and recreational areas when ranges are in use.

The aggregate impacts of past, present, and other reasonably foreseeable future actions would continue to have significant impacts on some individual marine mammal and all sea turtle species in the Study Area. Alternative 1 or Alternative 2 would contribute to cumulative impacts; however, marine mammal and sea turtle mortality and injury from non-Navy actions associated with commercial fisheries, commercial vessel strikes, and entanglement in marine debris are leading causes of direct mortality to marine mammals and sea turtles (Carretta et al., 2017; Helker et al., 2017; Lent & Squires, 2017; National Marine Fisheries Service, 2016; National Oceanic and Atmospheric Administration Marine Debris Program, 2014; Read et al., 2006). In summary, based on the analysis presented in Sections 3.4 (Marine Mammals), 3.5 (Sea Turtles), 3.8 (Marine Invertebrates), and 3.12 (Socioeconomic Resources), the current aggregate impacts of past, present, and other reasonably foreseeable future actions are not significantly different than the assessment in the 2015 MITT Final EIS/OEIS. For marine mammals, sea turtles, and marine invertebrates Alternatives 1 or 2 would contribute to and increase cumulative impacts, but the relative contribution would be negligible compared to other non-Navy actions. Cumulative effects on socioeconomic resources may have short-term impacts on accessibility to public services, fishing sites, and tourism resources, but they are not expected to have long-term negative impacts on these resources or the economy of Guam and the Commonwealth of the Northern Mariana Islands. No new information or circumstances are significant enough to warrant further cumulative impact review.

The analysis presented in Chapter 3 (Affected Environment and Environmental Consequences) and Chapter 4 (Cumulative Impacts) indicate that the incremental contribution of Alternative 1 or Alternative 2 to cumulative impacts on sediments and water quality, air quality, marine habitats, marine birds, marine vegetation, fishes, cultural resources, and public health and safety would be negligible.

ES.7 Standard Operating Procedures, Mitigation, and Monitoring

Within the Study Area, the Navy implements standard operating procedures, mitigation measures, and marine species monitoring and reporting. There are benefits to environmental and cultural resources resulting from the standard operating procedures discussed in this SEIS/OEIS. Mitigation measures are designed to help reduce or avoid potential impacts on marine and terrestrial resources. Marine species monitoring efforts are designed to track compliance with take authorizations, evaluate the effectiveness

of mitigation measures, and improve understanding of the effects training and testing activities on marine resources.

ES.7.1 Standard Operating Procedures

For training and testing to be effective, units must be able to safely use their sensors and weapon systems as they are intended to be used in military missions and combat operations and to their optimum capabilities. Standard operating procedures applicable to training and testing have been developed through years of experience and their primary purpose is to provide for safety (including public health and safety) and mission success. Because they are essential to safety and mission success, standard operating procedures are part of the Proposed Action and are considered in the Chapter 3 (Affected Environment and Environmental Consequences) environmental analysis for applicable resources.

ES.7.2 Mitigation

The Navy recognizes that the Proposed Action has the potential to impact the environment. Standard operating procedures differ from mitigation measures because mitigation is designed specifically for the purpose of avoiding or reducing environmental impacts, whereas standard operating procedures are designed to provide for safety and mission success. The Navy is coordinating with NMFS on these measures through the consultation and permitting processes. The Navy and NMFS Records of Decision, MMPA Regulations and Letter of Authorization, and ESA Biological Opinion will document all mitigation that the military will implement under the Proposed Action.

Mitigation measures that the military will implement under the Proposed Action are organized into three categories: procedural mitigation measures for at-sea activities, at-sea mitigation areas, and terrestrial mitigation measures for activities on FDM. Procedural mitigation is mitigation that will be implemented whenever and wherever an applicable military readiness activity takes place within the Study Area. Mitigation areas are geographic locations within the Study Area where the military will implement additional mitigation during all or part of the year. Terrestrial mitigation measures are measures that the Navy will implement during applicable military readiness activities that take place on land at FDM.

ES.7.3 Mitigation Measures Considered but Eliminated

A number of possible additional mitigation measures have been suggested during the public scoping period of this SEIS/OEIS and comment periods of previous Navy environmental documents. Through the evaluation process, some measures were deemed to either be ineffective, have an unacceptable impact on the proposed training and testing activities, or both, and will not be carried forward for further consideration (refer to Section 5.6, Measures Considered But Eliminated).

ES.7.4 Monitoring

The Navy is committed to demonstrating environmental stewardship while executing its national security mission, complying with the suite of federal environmental laws and regulations, and providing required and relevant reports to appropriate regulatory agencies. Since 2006 across all Navy range complexes (in the Marianas, Pacific, Atlantic, Gulf of Mexico, and Gulf of Alaska), the Navy has produced various reports (Major Exercise Reports, Annual Exercise Reports, and Monitoring Reports) submitted to National Marine Fisheries Service to further research goals aimed at understanding the Navy's impact on the environment as it carries out testing and training to accomplish its mission. As a complement to the Navy's commitment to avoiding and reducing impacts of the Proposed Action through mitigation, the

Navy will undertake monitoring efforts to track compliance with take authorizations, help investigate the effectiveness of implemented mitigation measures, and better understand the impacts of the Proposed Action on marine resources. Taken together, mitigation and monitoring comprise the Navy's integrated approach for reducing environmental impacts from the Proposed Action. The Navy's overall monitoring approach will seek to leverage and build on existing research efforts whenever possible.

Consistent with the cooperating agency agreement with NMFS, mitigation and monitoring measures presented in this SEIS/OEIS focus on the requirements for protection and management of marine resources. Since monitoring will be required for compliance with the Final Rule issued for the Proposed Action under the MMPA, details of the monitoring program are being developed in coordination with NMFS through the regulatory process.

The Navy developed the Integrated Comprehensive Monitoring Program to serve as the overarching framework for coordinating its marine species monitoring efforts and as a planning tool to focus its monitoring priorities pursuant to ESA and MMPA requirements (U.S. Department of the Navy, 2010). The purpose of the Integrated Comprehensive Monitoring Program is to coordinate monitoring efforts across all regions and to allocate the most appropriate level and type of monitoring effort for each range complex based on a set of standardized objectives, regional expertise, and resource availability. Additional information about the U.S. Navy Marine Species Monitoring Program, including an introduction to adaptive management and strategic planning, is provided in Section 5.1.2.2.1 (Marine Species Research and Monitoring Programs).

ES.7.5 Reporting

The Navy is committed to documenting and reporting relevant aspects of training and testing activities in order reduce environmental impact, and improve future environmental assessments. Initiatives include training and testing activity reporting, and incident reporting.

ES.7.6 Other Considerations

ES.7.6.1 Consistency with Other Federal, State, and Local Plans, Policies and Regulations

Based on an evaluation of consistency with statutory obligations, the Navy and other Service's proposed training and testing activities would not conflict with the objectives or requirements of federal, state, regional, or local plans, policies, or legal requirements. The Navy and other Services are consulting and will continue to consult with regulatory agencies as appropriate during the NEPA process and prior to implementation of the Proposed Action to ensure all legal requirements are met.

ES.7.6.2 Relationship Between Short-Term Use of the Human Environment and Maintenance and Enhancement of Long-Term Productivity

In accordance with NEPA, this SEIS/OEIS provides an analysis of the relationship between a project's short-term impacts on the environment and the effects that these impacts may have on the maintenance and enhancement of the long-term productivity of the affected environment. The Proposed Action may result in both short- and long-term environmental effects. However, the Proposed Action would not be 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 the general welfare of the public.

ES.7.6.3 Irreversible or Irretrievable Commitment of Resources

For the alternatives including the Proposed Action, most resource commitments are neither irreversible nor irretrievable. Most impacts are short-term and temporary or, if long lasting, are negligible. No habitat associated with threatened or endangered species would be lost as result of implementation of the Proposed Action. Since there would be no building or facility construction, the consumption of materials 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 irreversibly lost.

Implementation of the Proposed Action would require fuels used by aircraft, ships, and ground-based vehicles. Since fixed- and rotary-wing flight and ship activities could increase, relative total fuel use could increase. Therefore, if total fuel consumption increased, this nonrenewable resource would be considered irretrievably lost.

ES.7.6.4 Energy Requirements and Conservation Potential of Alternatives

Resources that will be permanently and be continually consumed by project implementation include water, electricity, natural gas, and fossil fuels; however, the amount and rate of consumption of these resources would not result in significant environmental impacts or the unnecessary, inefficient, or wasteful use of resources.

Sustainable range management practices are in place that 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.

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