

## RECORD OF DECISION

### ISSUANCE OF MARINE MAMMAL PROTECTION ACT REGULATIONS TO TAKE MARINE MAMMALS INCIDENTAL TO U.S. NAVY TRAINING AND TESTING ACTIVITIES IN THE MARIANA ISLANDS TRAINING AND TESTING STUDY AREA

Supported by: U.S. Navy Final Environmental Impact Statement/  
Overseas Environmental Impact Statement for Mariana Islands Training and Testing

National Oceanic and Atmospheric Administration  
National Marine Fisheries Service

Office of Protected Resources

Silver Spring, Maryland

In accordance with the National Environmental Policy Act (NEPA), its implementing regulations, and the National Oceanic and Atmospheric Administration's (NOAA's) Administrative Order (NAO) 216-6 "Environmental Review Procedures for Implementing the National Environmental Policy Act, this Record of Decision (ROD) addresses the National Marine Fisheries Service's (NMFS) determination to issue regulations and a Letter of Authorization (LOA) to the U.S. Navy (Navy), pursuant to section 101(a)(5)(A) of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1361 *et seq.*), for the taking of marine mammals incidental to the conduct of Navy's training and testing activities.

#### **I. INTRODUCTION**

In April 2013, NMFS received an application from the Navy requesting five-year regulations and authorization for the take of 26 species of marine mammals incidental to Navy training and testing activities to be conducted within the Navy's Mariana Islands Training and Testing (MITT) Study Area, for the period of August 2015 through August 2020. These training and testing activities may incidentally take marine mammals present within the MITT Study Area by exposing them to sound from active sonar and underwater detonations and removal at levels that NMFS associates with the take of marine mammals as defined by the MMPA. NMFS' issuance of MMPA regulations to the Navy governing the incidental take of marine mammals is a federal action for which NMFS is responsible for analyzing the effects on the human environment.

NMFS participated as a cooperating agency in the development of the Navy's Final Environmental Impact Statement/Overseas Environmental Impact Statement (hereinafter, FEIS), which contained an analysis of the effects of the Navy's activities on the human environment. NMFS worked closely with the Navy to provide information in NMFS' area of expertise to support the FEIS' effects analyses for endangered species, marine mammals, and other marine resources. In accordance with the NEPA regulations at 40 CFR 1506.3, NMFS analyzed the FEIS and concluded that NMFS' comments and suggestions have been addressed. NMFS adopted the Navy's FEIS in July 2015.

## A. NAVY PROPOSED ACTION

As described in Chapter 2 of the FEIS, the Navy's proposed action is to conduct training and testing activities, including the use of active sonar and explosives in the Mariana Islands Range Complex (MIRC) and in the transit corridor between MIRC and the Hawaii Range Complex (HRC). The Proposed Action also includes sonar maintenance and gunnery exercises that are conducted concurrently with ship transits and may occur outside the geographic boundaries of a Navy range complex, pier side sonar activity that is conducted as part of overhaul, modernization, maintenance and repair activities, and land-based training activities on Guam and the Commonwealth of the Northern Mariana Islands (CNMI).

The Navy's proposed training activities are categorized into eight functional warfare areas (anti-air warfare; amphibious warfare; strike warfare; anti-surface warfare; anti-submarine warfare; electronic warfare; mine warfare; and naval special warfare). Testing activities may occur independently of or in conjunction with training activities. Many testing activities are conducted similarly to Navy training activities and are also categorized under one of the primary mission areas. Other testing activities are unique and described within their specific testing categories.

## B. NMFS' MMPA DECISION AUTHORITIES

Sections 101(a)(5)(A) and (D) of the MMPA direct the Secretary of Commerce (Secretary) to allow, upon request, the incidental, but not intentional taking of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) during periods of not more than 5 consecutive years if certain findings are made and regulations are issued or, if the taking is limited to harassment and of no more than 1 year, the Secretary shall issue a notice of proposed authorization for public review.

As described in the Navy's application, the specified Navy activities to be conducted in the MITT Study Area are expected to take marine mammals as defined by the MMPA, and the Navy requested incidental take authorization in accordance with Section 101(a)(5)(A) of the MMPA. In order to issue the regulations and subsequent Letter of Authorization (LOA) under this section, NMFS must make the determination that the specified activities will result in a negligible impact on the affected species or stocks and not result in an unmitigable adverse impact on the availability of marine mammal species or stocks for taking for subsistence uses. In addition, NMFS, as part of its regulatory process, is required to prescribe the permissible methods of taking, the means of effecting the least practicable adverse impact on the species or stock and its habitat (i.e., mitigation) and to set forth requirements pertaining to monitoring and reporting of such taking.

NMFS has defined "negligible impact" as "an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival." (50 CFR § 216.103)

The National Defense Authorization Act (NDAA) (Public Law 108-136) amended the MMPA, by removing the "small numbers" and "specified geographical region" limitations and amending

the definition of “harassment” as it applies to a “military readiness activity” to read as follows (Section 3(18)(B) of the MMPA):

- (i) any act that injures or has the significant potential to injure a marine mammal or marine mammal stock in the wild [Level A Harassment]; or
- (ii) any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered [Level B Harassment].

The MMPA also contains a provision related to “military readiness activities” that requires NMFS, when making a determination of “least practicable adverse impact on such species or stock” to consider personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity. Before making the required determination, NMFS must consult with the Department of Defense regarding the mitigation measures and their effect on the aforementioned factors.

## **II. NMFS’ DECISION AND FACTORS CONSIDERED IN THE DECISION**

### **A. THE DECISION**

NMFS’ decision is to issue regulations and a five year LOA for the unintentional take of marine mammals incidental to specified activities included within the FEIS Alternative 1, which was the preferred alternative identified in the Navy’s Draft EIS and the action presented to NMFS in the Navy’s LOA application (as updated). The regulations will govern the unintentional taking of marine mammals incidental to training and testing activities conducted in the MITT Study Area for the period of August 2015 through August 2020. Alternative 1 of the FEIS includes an analysis of all of the activities for which the Navy has requested incidental take authorization pursuant to the MMPA. The regulations will prescribe the permissible methods of taking, the means of effecting the least practicable adverse impact on the species or stock and its habitat (i.e., mitigation), and will set forth requirements pertaining to monitoring and reporting of such taking for the specified activities, as described in Alternative 1.

The Navy will be authorized to take individuals of 26 species of marine mammals by Level B harassment and two species of marine mammals by Level A harassment. NMFS will issue a final rule that establishes a framework in which incidental take can be authorized through issuance of a LOA.

### **B. FACTORS CONSIDERED IN REACHING THE DECISION**

In the FEIS, the affected environment and environmental consequences are both discussed in Chapter 3, within subsections arranged by Resource type, including: Sediments and Water Quality; Air Quality; Marine Habitats; Marine Mammals; Sea Turtles; Seabirds; Marine Vegetation; Marine Invertebrates; Fish; Cultural Resources; Socioeconomic Resources; Public Health and Safety. Supporting technical documents contain additional information on marine

mammals and the modeling used by the Navy to quantitatively evaluate impacts to marine mammals. The Marine Mammals subchapter (3.4) and supporting technical documents contain the majority of the analysis that relates to NMFS' action of issuing incidental take regulations. Other sections of the FEIS contain analyses related to potential impacts on marine mammal habitat and further support NMFS' proposed issuance of regulations and the LOA. In addition, Chapter 4 provides an assessment of potential cumulative impacts, including analyzing the potential for cumulatively significant impacts to the marine environment and marine mammals.

Within the Marine Mammals section (and supporting technical documents), the FEIS addresses potential acoustic impacts resulting from active sonar and explosive detonations. These sections describe in detail the acoustic thresholds that NMFS uses to indicate at what received sound levels marine mammals will be considered taken pursuant to the MMPA. The FEIS also describes in detail the analytical framework and model that the Navy uses to estimate take, based on NMFS' acoustic thresholds. Last, the Navy presents estimates (for each alternative) of the number of each species of marine mammal that will be exposed to levels of sound that NMFS has determined will result in Level A or Level B harassment. The Navy uses these take estimates, combined with the other information included in this Chapter to conclude that none of the alternatives will result in any adverse population level effects on any of the affected species or stocks. The take estimates for the Navy's preferred alternative are the subject of the Navy's request to NMFS for MMPA Section 101(a)(5)(A) authorization.

The Navy had originally conservatively requested authorization for beaked whale mortality (no more than 10 mortalities over 5 years) that might potentially result from exposure to active sonar, based on the few instances where sonar has been associated with strandings in other areas. However, after decades of the Navy conducting similar activities in the MITT Study Area without incident, neither the Navy nor NMFS expect stranding, injury, or mortality of beaked whales to occur as a result of Navy activities, and therefore, following consultation with the Navy, NMFS will not authorize any Level A (injury or mortality) takes for beaked whales.

Similarly, in order to account for the accidental nature of vessel strikes to large whales in general, and the potential risk from any vessel movement within the MITT Study Area, the Navy had originally conservatively requested authorization for large whale mortalities (no more than 5 mortalities over 5 years) that might potentially result from vessel strike during MITT training and testing activities over the 5-year period of NMFS' final authorization. However, after further consideration of the Navy's ship strike analysis, the unlikelihood of a ship strike to occur, and the fact that there has never been a ship strike to marine mammals in the Study Area, and following consultation with the Navy, NMFS will not authorize takes (by injury or mortality) from vessel strikes during the 5-year period of the MITT regulations. The Navy has proposed measures (see Mitigation) to mitigate potential impacts to marine mammals from vessel strikes during training and testing activities in the Study Area.

As described above, the environmental consequences to the marine environment are of particular importance for NMFS' evaluation in reaching the decision to issue MMPA incidental take regulations. In particular, because NMFS' action is specific to authorizing unintentional take of marine mammals, the key factors considered in the decision are related to NMFS' statutory missions under the MMPA and the Endangered Species Act (ESA). The primary documents supporting this decision are the Navy's MITT FEIS and the MITT Biological Opinion.

As a cooperating agency, NMFS assisted the Navy by providing technical information and analyses to evaluate the effects of military readiness activities on marine mammals and their habitat. Via the MMPA process, NMFS reviewed the Navy's request to determine whether the total taking resulting from the activities would have a negligible impact on the affected species or stocks of marine mammals, would not have an unmitigable adverse impact on the availability of those species or stocks of marine mammals intended for subsistence uses, and that the permissible methods of taking and requirements pertaining to the mitigation, monitoring, and reporting of such takings are set forth. As supported by the FEIS, NMFS has made the requisite findings under the MMPA and will include these findings in a final rule.

Key relevant factors considered by NMFS in this decision include:

- Requiring mitigation. As noted above, for military readiness activities, NMFS is required to consider personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity when it makes its determination of "least practicable adverse impact." NMFS consulted with the Navy via the MMPA process and as a NEPA cooperating agency before making the required determination. NMFS and the Navy considered numerous mitigation measures and alternatives during the MMPA rulemaking process, including after the public comment period on the proposed rulemaking, with particular emphasis on whether these measures would be beneficial, effective, and practicable.
- Addressing uncertainty. The FEIS acknowledges a degree of uncertainty regarding the effects of underwater sound on marine mammals. NMFS provided extensive input in the FEIS process to address these uncertainties, and has included requirements for mitigation, monitoring, and reporting by the Navy in the final rule to manage uncertainty. The key issues and the manner in which they are addressed in the final rule include:
  1. Continuing management to reduce uncertainty will be implemented via the MMPA final rule by requiring extensive monitoring and reporting by the Navy, including the establishment and implementation of a monitoring plan specific to the MITT Study Area, an Integrated Comprehensive Monitoring Plan, and a Strategic Planning Process. The Navy will update the status of its monitoring program and funded projects through their new Navy Marine Species Monitoring web portal. The Navy's monitoring program is designed to support NMFS' use of adaptive management throughout rule implementation, as presented in the FEIS and further explained in the final rule. The monitoring framework was made available for comment on the NMFS website concurrent with availability of the MMPA proposed rule and NMFS will provide one public comment period on the Navy's monitoring program during the 5-year regulations.
  2. Finally, while not a required component of the final rule, the FEIS describes the Navy's continuing commitment to marine mammal research, in particular research related to the effects of underwater sound on marine mammals. NMFS will continue to encourage and support the Navy's research efforts. The

timeframe for completing the research and conducting an assessment of how that research factors into MMPA authorizations, however, does not allow NMFS to wait for the results of the research prior to authorizing the Navy's request for incidental take.

NMFS finds that the FEIS appropriately acknowledges uncertainty and provides detailed analyses as to how existing information is incorporated to assess effects where uncertainties exist, and to address and manage uncertainty via mitigation, monitoring, reporting and research.

- Acoustic Guidance: NOAA is currently in the process of developing Acoustic Guidance (the Guidance) on thresholds for onset of auditory impacts from exposure to sound, which will be used to support assessments of the effects of anthropogenic sound on marine mammals. To develop this Guidance, NOAA is compiling, interpreting, and synthesizing the best information currently available on the effects of anthropogenic sound on marine mammals, and is committed to finalizing the Guidance through a systematic, transparent process that involves internal review, external peer review, and public comment. In December 2013, NOAA released for public comment draft Acoustic Guidance that provides acoustic threshold levels for onset of permanent threshold shift (PTS) and temporary threshold shifts (TTS) in marine mammals for all sound sources. NOAA has since been working to incorporate the relevant information received during the public comment period and to make appropriate changes. In January 2015, while NOAA was still working to finalize the Guidance, the U.S. Navy provided NOAA with a technical paper by Finneran (2015) describing Navy's proposed methodology for updating auditory weighting functions and numeric thresholds for predicting onset of auditory effects (TTS/PTS thresholds) on marine animals exposed to active sonars and other active acoustic sources utilized during Navy training and testing activities. NOAA is working to evaluate and incorporate the information in Finneran (2015) into its Acoustic Guidance before it becomes final. Before doing so, NOAA plans to complete a second independent peer review of the Navy's technical paper and a second public comment period for the draft Guidance. After the peer review and public comment processes are complete, NOAA will determine how best to incorporate the Navy's methodology into its final Acoustic Guidance. The Guidance likely will not be finalized until later this year. Thereafter, any new Navy modeling based on final Acoustic Guidance would likely take a minimum of several months to complete. Consequently, the results of prior Navy modeling described in the FEIS represent the best available estimate of the number and type of take that may result from the Navy's use of acoustic sources in the MITT Study Area. NOAA's continued evaluation of all available science for the Acoustic Guidance could result in changes to the acoustic criteria used to model the Navy's activities in the MITT Study Area, and, consequently, the enumerations of "take" estimates. However, consideration of the draft Guidance and information contained in Finneran (2015) does not alter NMFS' assessment of the likely responses of affected marine mammal species to acoustic sources employed by Navy in the MITT Study Area, or the likely fitness consequences of those responses.

- Considering effects to ESA-listed marine mammals. The Navy consulted with NMFS pursuant to section 7 of the ESA, and NMFS also consulted internally on the issuance of regulations and a LOA under section 101(a)(5)(A) of the MMPA for training and testing activities in the MITT Study Area. NMFS issued a Biological Opinion on the Navy's proposal to conduct training and testing activities in the MITT Study Area from August 2015 through August 2020 and the Conservation and Permits Division's proposal to issue regulations and a LOA to authorize the Navy to "take" marine mammals incidental to the conduct of training and testing activities in the MITT Study Area during the same period of time. The Biological Opinion concludes that the proposed regulations and any take associated with activities authorized by those regulations are not likely to jeopardize the continued existence of threatened or endangered species (or species proposed for listing) in the action area during any single year or as a result of the cumulative impacts of a 5-year authorization. The Biological Opinion includes an explanation of how the results of NMFS' baseline and effects analyses in Biological Opinions relate to those contained in the cumulative impact section of NEPA documents. In particular, these analyses consider the effects resulting from interactions of potential stressors, thereby augmenting the FEIS' cumulative impacts analysis.

The Biological Opinion includes a discussion of the FEIS' marine mammal take estimates, but relies on exposure and response analyses. The exposure analysis identifies the listed resources that are likely to co-occur with effects in space and time and the nature of that co-occurrence, to identify the number, age (or life stage), and gender of the individuals that are likely to be exposed to an action's effects and the populations or sub-populations those individuals represent. The take estimate approach and the exposure/response approach are appropriate under the MMPA and ESA, respectively, and both were considered in reaching this decision regarding the issuance of a rule and 5-year LOA for the Navy activities in the MITT Study Area.

- Approach to assessments. NEPA, ESA, and MMPA involve differing approaches to assessing effects on those resources considered under each statute, and this combination of analyses provides a robust basis for the decision on this action. The FEIS, Biological Opinion, and final rule for MITT present the assessments in detail, but a few salient issues and difference are highlighted here. First, both the FEIS and the Biological Opinion include analysis of the significance of the Navy activities on marine mammals (listed marine mammals in the Biological Opinion). In the FEIS, the term "significance" is as commonly used in NEPA, without additional definition of significance related to marine mammals. The Biological Opinion describes how the use of the term is distinguished in the opinion among three different kinds of "significance," which includes an assessment of how any "significant" physical, chemical, or biotic responses are likely to have "significant" consequence for the fitness of the individual animal. As described earlier, the MMPA uses the term "negligible impact" (defined above). For this ROD, the FEIS evaluation of the significance of impacts to species was considered as input to NMFS' ESA and MMPA assessments; this decision is supported by the FEIS and also reached based on NMFS statutory responsibilities under the MMPA and ESA.

Coastal Zone Management Act Concerns. On June 4, 2014, the Navy transmitted to the Bureau of Statistics and Plans a Federal Consistency Determination (CD) addressing training and testing activities that may affect Guam's coastal zone. On August 29, 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 practical with the enforceable policies of the Guam Coastal Management Program.

The Navy submitted a CD to the Commonwealth of the Northern Mariana Islands (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, the Navy submitted a revised package on September 11, 2014. The Navy concluded that the Proposed Action was consistent to the maximum extent practicable with CNMI Coastal Management Policies. The CNMI replied on October 7, 2014, finding that the Proposed Action was inconsistent with the enforceable policies of the CNMI. The CNMI and the Navy continued discussions to resolve their differences, and in a letter dated January 20, 2015, the CNMI provided conditional concurrence of the Navy's consistency determination for military readiness activities within the CNMI coastal zone proposed in the Draft EIS.

Essential Fish Habitat. The Navy determined that their activities may adversely affect Essential Fish Habitat (EFH) within the MITT Study Area and requested initiation of the Magnuson-Stevens Fishery Conservation and Management Act's EFH consultation process with NMFS Pacific Islands Regional Office (PIRO) on May 15, 2014. NMFS PIRO considered that the proposed activities may have more than minimal adverse effects to EFH and made recommendations to avoid, minimize, and offset adverse effects on July 21, 2014. The Navy responded in writing to each of NMFS PIRO's recommendations on August 19, 2014.

### **III. OTHER ALTERNATIVES CONSIDERED**

The alternatives analyzed in the Navy's FEIS and their relationship to NMFS' alternatives is described here. NMFS' proposed action (issuance of regulations and LOA) would authorize take of marine mammals incidental to a subset of the activities analyzed in the FEIS that are anticipated to result in the take of marine mammals, i.e., those activities that involve the use of active sonar and underwater detonations. Thus, these components of the Navy's proposed action are the subject of NMFS' proposed MMPA regulatory action. (Note that, although NMFS fully (rather than partially) adopted the FEIS, the purely terrestrial activities described in the FEIS are not a component of NMFS' proposed action). The FEIS contains a thorough analysis of the environmental consequences of their proposed action (with specific sections for MFAS/HFAS and underwater detonations) on the human environment, including a specific section on marine mammals.

#### **A. SUMMARY OF THE ALTERNATIVES CONSIDERED BY THE NAVY**

Three alternatives were analyzed in the FEIS, including two action alternatives (Alternatives 1 and 2) and the No Action Alternative.

No Action Alternative: The No Action Alternative is required by CEQ regulations as a baseline against which the impacts of the Proposed Action are compared. In the FEIS, the No Action Alternative is represented by baseline training and testing activities, as defined by existing Navy environmental planning documents. The baseline testing activities also include those testing events that have historically occurred in the Study Area and have been subject to previous analyses. However, it would fail to meet the current purpose and need for the Navy's Proposed Action because it would not allow the Navy to conduct the training and testing activities necessary to achieve and maintain Fleet readiness.

Alternative 1 (Preferred Alternative): Alternative 1 would consist of the No Action Alternative, plus the expansion of Study Area boundaries, and adjustments to range capabilities and the location, type, and tempo of training and testing activities, which includes the addition of platforms and systems. Under this alternative, NMFS would incorporate mitigation and monitoring measures and reporting requirements into the MMPA rulemaking and LOA. This NEPA Alternative would satisfy the purpose and need of the NMFS' MMPA action (the issuance of regulations and subsequent LOA along with required mitigation measures and monitoring), and would enable the Navy to comply with the statutory and regulatory requirements of the MMPA and ESA.

- **Expansion of the Overall Study Area Boundaries**: The FEIS contains analysis of areas where training and testing would continue as in the past, but were not considered in previous environmental analyses. This Alternative would simply expand the area that is to be analyzed, as depicted in Figure 2.1-1 and described in Chapter 2.1 ("Description of the Mariana Islands Training and Testing Study Area") of the FEIS, including:
  - **Expansion of the Northern and Western Boundary of the Study Area**: The area to the north of MIRC that is within the Exclusive Economic Zone of the Northern Mariana Islands and the areas to the west of the MIRC.
  - **Transit Corridor**: An area not previously analyzed in the open ocean between the MIRC and the HRC. During transit within this area, U.S. Navy ships conduct limited training and testing. These activities would be included in the FEIS.
  - **Navy Piers and Shipyards**: The Navy tests sonar systems at Navy piers and shipyards. These maintenance testing activities would be included in the FEIS.
  - **Apra Harbor Channel**: Vessels berthed at Naval Base Guam transit Apra Harbor to and from the naval base. During these transits, some sonar maintenance testing would occur.
- **Adjustments to Range Capabilities, Locations, and Tempo of Training and Testing Activities**: This alternative also includes changes to training and testing requirements necessary to accommodate (a) the relocation of ships, aircraft, and personnel; (b) planned aircraft, vessels, and weapons systems; and (c) ongoing activities not addressed in previous documentation in the MITT Study Area.

- Force Structure Changes: Force structure changes involve the relocation of ships, aircraft, and personnel. As forces are moved within the existing Navy structure, training needs will necessarily change as the location of forces change.
- Planned Aircraft, Vessels, and Weapons Systems: The FEIS will examine the training and testing requirements of planned vessels, aircraft, and weapon systems.
- Ongoing Activities: Current training and testing activities not addressed in previous documentation will be analyzed in the FEIS.
- Danger Zones: The FEIS will examine establishment of Title 33 C.F.R. Part 334 Danger Zones for existing shore-based small arms and explosive ordnance disposal ranges and a nearshore small arms training area.
- Underwater Detonations: An increase in net explosive weight for underwater detonations from 10 lb. to 20 lb. at the Agat Bay Mine Neutralization Site.

Alternative 1 reflects adjustments to the baseline activities which are necessary to support all current and proposed training and testing activities in the MITT Study Area. Generally, the range complex is identified but, for some activities, smaller areas within the range are identified. Events could occur outside of the specifically identified areas if environmental conditions are not favorable on a range, the range is unavailable due to other units training or testing or it poses a risk to civilian or commercial users, or to meet fleet readiness requirements.

Alternative 2: Alternative 2 consists of all activities that would occur under Alternative 1 and proposed adjustments to type and tempo of training and testing, and new activities. This alternative allows for potential budget increases, strategic necessity, and future training and testing requirements. Under this alternative, NMFS would incorporate mitigation and monitoring measures and reporting requirements into the MMPA rulemaking and LOA.

- The proposed adjustments to Alternative 1 (Preferred Alternative) levels and types of training are as follows:
  - The addition of three major at-sea training activities (Fleet Strike Group Exercise, Integrated Anti-Submarine Warfare Exercise, and Ship Squadron Anti-Submarine Warfare Exercise) conducted in the Study Area.
  - Increases to events/ordnance for the following training activities: Air Combat Maneuver, Area Defense Exercise, Air Intercept Control, Gunnery Exercise (Air-to-Air, medium caliber), Missile Exercise (Air-to-Air), Bombing Exercise (Air-to-Ground), Missile Exercise (Air-to-Surface) – Rocket, Counter Targeting Flare Exercise – Aircraft, and Counter Targeting Chaff Exercise – Aircraft.
- The proposed adjustments to Alternative 1 (Preferred Alternative) levels and types of testing includes increases in activities and ordnance required for testing requirements for

Naval Air Systems Command and Naval Sea Systems Command. No adjustments are proposed for Office of Naval Research testing activities.

Alternatives Considered but Eliminated from further Consideration: The following alternatives were considered by the Navy, but not carried forward for analysis because, after careful consideration, the Navy determined that they did not meet the Navy's purpose and need for the Proposed Action:

- Alternative training and testing locations
- Reduced training and testing
- Mitigations including temporal or geographic constraints within the Study Area
- Simulated training and testing

## B. SUMMARY OF ALTERNATIVES CONSIDERED BY NMFS

Section 101(a)(5)(A) of the MMPA directs the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and regulations are issued. The "small numbers" and "specified geographical region" limitations do not apply to military readiness activities, such as the Navy's proposed action. Section 101(a)(5)(A) establishes that the authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stocks, will not have an unmitigable adverse impact on the availability of the species or stocks for subsistence uses (where relevant), and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring, and reporting of such takings are set forth. There are no subsistence uses of marine mammals in the MITT Study Area; thus, NMFS must grant an incidental take authorization to the Navy if it finds that the taking will have a negligible impact on the species or stocks and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring, and reporting of such takings are set forth. Based on this statutory framework, NMFS considered two alternatives, a no action alternative in which NMFS denies the Navy's application and an action alternative in which it grants the application and issues regulations and an LOA to the Navy. NMFS also considered an alternative in which it would grant the Navy's application with additional mitigation requirements, but eliminated this alternative from further consideration for the reasons discussed below. All NMFS' alternatives are supported by the alternatives analysis contained in the FEIS.

No Action Alternative: For the No Action Alternative (NAA), NMFS assumes that it would deny the Navy's application and would not promulgate regulations or issue an LOA authorizing take of marine mammals incidental to Navy training and testing activities described in Alternative 1 of the FEIS (Preferred Alternative). The Navy would not obtain authorization under section 101(a)(5)(A) of the MMPA for those activities expected to result in marine mammal takes (i.e., those including the use of active sonar and underwater explosives).<sup>1</sup> For NMFS, denial of the

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<sup>1</sup> In evaluating its No Action Alternative, NMFS reviewed *Conservation Council for Hawaii v. National Marine Fisheries Service*, No. 1:13-cv-00684 (D. Hawaii March 31, 2015), in which the Hawaii district court held that NMFS failed to consider a "true 'no action' alternative from NMFS' perspective" prior to authorizing incidental take regulations to the Navy for its training and testing activities in Hawaii and Southern California. The court

Navy's application constitutes the NAA that NMFS believes is consistent with its statutory obligation under the MMPA to grant or deny permit applications.

The FEIS does not articulate what action the Navy would take if NMFS was to deny its application. The Navy maintains that a cessation of training is not viable and is inconsistent with its obligations under Title 10 and its past practice of conducting military readiness activities in the study area for decades. For this reason, the Navy has explained that cessation of military readiness activities does not meet its purpose and need. The FEIS repeatedly asserts that the level of activity presented in Alternative 1 (Preferred Alternative) represents the level of activity necessary for the Navy to meet its obligations under Title 10. In Chapter 2.5.1, "Alternatives Eliminated from Further Consideration," the FEIS discusses an alternative involving a reduction or cessation of training and testing activities. The Navy explains that this alternative was eliminated from further consideration because "[r]eduction or cessation of training and testing would prevent the Navy from meeting its Title 10 requirements and adequately preparing naval forces for operations at sea ranging from disaster relief to armed conflict . . ." Similarly, in Chapter 5.3.4 of the FEIS, "Mitigation Measures Considered but Eliminated," the FEIS states that "[t]he Proposed Action does not include training beyond levels required for maintaining satisfactory levels of readiness," and again asserts that "any reduction of training would not allow Sailors to achieve satisfactory levels of readiness needed to accomplish their mission."

In the past, the Navy has taken steps to avoid lapses in training and testing activities. The Secretary of Defense has twice invoked a National Defense Exemption pursuant to section 101(f) of the MMPA, 16 U.S.C. § 1371(f), for certain Navy training and testing activities. That provision establishes an exemption for up to two years from compliance with requirements of the MMPA, including the Act's prohibition on take, for actions necessary for national defense. It provides: "The Secretary of Defense, after conferring with the Secretary of Commerce, the Secretary of the Interior, or both, as appropriate, may exempt any action or category of actions undertaken by the Department of Defense or its components from compliance with any requirement of this chapter, if the Secretary determines that it is necessary for national defense." Both National Defense Exemptions involved military readiness activities using mid-frequency active sonar substantially similar to those analyzed in the FEIS. In both cases, the Secretary of Defense required the Navy to implement mitigation measures that were developed in consultation with NMFS.

Based on past practice and the attendant circumstances, NMFS considered the possibility that the Navy would obtain a National Defense Exemption to continue with testing and training activities in order to meet its obligations under Title 10 in the event that NMFS was to deny Navy's application for incidental take regulations and an LOA. In view of the Navy's assertions that the activity described in Alternative 1 (Preferred Alternative) represents the level of activity necessary to meet its Title 10 obligations, NMFS assumes that the Navy would seek a National Defense Exemption to conduct training and testing activities at the level described and analyzed in Alternative 1, which is fully analyzed in the FEIS. However, it is also possible that if NMFS

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stated that NMFS' No Action Alternative "might well have been the scenario in which, under the MMPA, NMFS denied the Navy's request for an incidental take authorization." NMFS will continue to review its analysis of the No Action Alternative in future decisions regarding the Navy's requests for five-year regulations and LOAs under the MMPA.

was to deny the Navy's application the Navy would not increase its testing and training activity levels above current levels (as analyzed by the No Action Alternative in the FEIS). Each of these outcomes is fully analyzed by the FEIS.

NMFS also considered the possibility that the Navy would reduce or cease all training and testing activities requiring the use of sonar and explosives if NMFS did not issue the regulations and an LOA. Assuming that scenario, NMFS considered the following:

- The FEIS enumerates the amount of take (i.e., amount of Level A and Level B harassment), that is expected to result from each of the three alternatives. In a few instances take is expected to occur in the form of injury (permanent hearing threshold shift or minor tissue damage from explosives) or, in greater numbers, temporary hearing threshold shift or behavioral disturbance (avoidance of sound sources, vocal adjustments, temporary cessation of feeding, temporary abandonment of habitat). A reduction of the Navy's activities would result in lower numbers of marine mammal take. The reduction in estimated take numbers could range from the number identified in the baseline alternative to zero, if activities resulting in take ceased altogether.
- As detailed in the FEIS, the anticipated injury and behavioral harassment described in the analysis of the alternatives the Navy considered would not have adverse impacts on marine mammal populations (at the stock or species level), either through reduction in reproductive success or survivorship. It follows that any lower level of activity or no activity would similarly avoid population level effects. Thus, although a reduction or cessation in Navy training and testing activities would reduce the impacts on marine mammal individuals, the effects of a reduction or cessation of training and testing activities on marine mammal population trends would not be significantly distinguishable from the alternatives considered in the FEIS.
- The FEIS did not identify areas of particular importance for marine mammals that were associated with a greater amount or severity of effects. Therefore, the spatiotemporal distribution of activity reduction (or cessation) would not affect the severity or predicted outcomes of a given number of takes.
- Human activities are increasing in numbers and locations, meaning that coastal and ocean waters are getting noisier. Because the effects of the activities proposed for authorization (e.g., active sonar use and explosive events of relatively short duration) are more acute in nature, and because the Navy would not require authorization to continue the operation of its fleet of vessels even in the absence of conducting the specific activities anticipated to result in take, the change in overall background or ambient noise is not expected to be great if the Navy reduced or ceased activities likely to result in the take of marine mammals. However, the reduction in sound introduced into the local environment as a result of the Navy's proposed activities could have a benefit by reducing to some degree the aggregate noise levels during that time period in that location, and this reduction would be realized in the reduction of level B harassment takes.

- Beaked whales are known to be particularly sensitive to sonar. In the FEIS, the sensitivity of beaked whales is taken into consideration both in the application of Level B harassment thresholds and in how beaked whales are expected to avoid sonar sources at higher levels. Inasmuch as any takes of beaked whales have a potential to result in a more severe effect on an individual (e.g., ceasing feeding behaviors for longer than another species may), a reduction or cessation of Navy training and testing activities may result in a more notable lessening of potentially adverse impacts for individuals of these species.
- Any MMPA authorization that NMFS issues must include both mitigation and monitoring measures. In the absence of an MMPA authorization, NMFS is reasonably confident that the Navy would continue to implement the mitigation measures that are described in the FEIS if it continued some level of testing and training activities. However, fewer activities conducted would likely mean the Navy would conduct less monitoring, and in the case of no Navy testing and training activities resulting in take, the Navy could cease monitoring altogether. The Navy's comprehensive monitoring program as currently implemented (both in the Mariana Islands and elsewhere) is responsible for increasing our understanding not only of Navy activities, but of the marine mammal stocks themselves.

Alternative 1 (Preferred Alternative): NMFS promulgates regulations and issues an LOA authorizing take of marine mammals incidental to Navy training and testing activities expected to result in marine mammal takes (i.e., those including the use of active sonar and underwater explosives) described in Alternative 1 of the FEIS (Preferred Alternative), with the mitigation, monitoring and reporting measures presented in Chapter 5 of the FEIS (except those considered but eliminated). This alternative is fully analyzed in the FEIS as Alternative 1 (Preferred Alternative).

Alternatives Considered but Eliminated from Further Consideration: NMFS considered an alternative in which it would promulgate regulations and issue an LOA authorizing take of marine mammals incidental to Navy training and testing activities (i.e., those including the use of active sonar and underwater explosives) described in the Navy's preferred alternative (Alternative 1), but with additional mitigation requirements for marine mammals. NMFS worked closely with the Navy throughout the development of the FEIS to identify additional mitigation measures (for marine mammals) that the Navy should consider in their analysis. As a result of this cooperating agency role, the Navy discussed and considered additional mitigation measures in Chapter 5 of the FEIS. The Navy's analysis, completed in cooperation with NMFS, concludes that the additional measures considered either did not provide additional protective benefits to marine mammal populations or would result in an unacceptable increased risk to personnel safety, an unacceptable impact on the effectiveness of training and testing activities that would affect military readiness, or an impractical burden with regard to implementation. NMFS' independent analysis reached the same conclusion. Therefore, NMFS eliminated this alternative from further consideration.

Based on the purpose and need of NMFS' action, the analysis in the FEIS, and NMFS' evaluation of the Navy's application pursuant to the MMPA, NMFS has selected to promulgate

regulations and issue a LOA authorizing take of marine mammals incidental to a subset of the Navy training activities described in the FEIS preferred alternative, with the mitigation, monitoring, and reporting measures presented in Chapter 5 of the FEIS (except those considered but eliminated). Based on the FEIS and additionally supported by NMFS' evaluation of public comments received in response to the proposed rule, NMFS determined that the mitigation measures identified in the FEIS (Chapter 5, except those measures considered but eliminated) will effect the least practicable adverse impact on marine mammal species or stocks and their habitat. All of the measures included in the MMPA final rule are components of the FEIS Alternative 1.

### C. THE ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The environmentally preferable alternative is the alternative that results in the least amount of training and testing activity. As explained above, the FEIS does not articulate what action the Navy would take if NMFS was to deny its application, and NMFS has considered several possible outcomes. Under a scenario in which NMFS denied the Navy's application and the Navy obtained a NDE to conduct testing and training activities at a level above the baseline level of activity, the environmentally preferable alternative would be the No Action Alternative described in the FEIS because it describes the baseline level of training and testing being conducted in the MITT Study Area. Under a scenario in which NMFS denied the Navy's application and the Navy reduced training and testing activities to a level below the baseline level, NMFS' No Action Alternative would be the environmentally preferable alternative because there would be a reduction in activities.

## IV. PUBLIC INVOLVEMENT

Public opportunities for review and comment have occurred in support of the FEIS preparation and the consideration of MMPA rulemaking. Detailed information on the publications in which the Notice of Intent to prepare an EIS and the Draft EIS were noticed are provided in Appendix E of the FEIS, and the FEIS was similarly made available on May 22, 2015.

NMFS personnel attended the information meetings and hearings on the Draft EIS, when available, which were held September 22 to 29, 2011, at various locations in Guam, Saipan, Tinian, and Rota. The Navy received comments on the Draft EIS from individuals, agencies, and organizations. The comments expressed interest or concern for numerous issues including: marine mammals and effects from sonar and underwater detonations, fishing and tourism, airborne noise, NEPA process, alternatives selection, military expended materials, and mitigation measures. The FEIS addressed all oral and written comments received during the Draft EIS comment period. As a cooperating agency, NMFS assisted in the analysis and consideration of public comments in NMFS' areas of jurisdiction and expertise to support the development of the FEIS. The Navy ensured the FEIS was mailed to all individuals, agencies, and organizations that requested a copy of the final document, and that the FEIS remains available on the website at <http://www.mitt-eis.com>.

Substantial public involvement also occurred in association with NMFS' rulemaking. On October 4, 2012 (77 FR 60678) NMFS published a notice of receipt of the application for a LOA

for the Navy's training and testing activities conducted in the MITT Study Area, with a request for comments and information open through November 5, 2012. On March 19, 2014 (79 FR 15388), NMFS published a proposed rule in response to the Navy's request to take marine mammals incidental to training and testing activities in the MITT Study Area and requested comments, information, and suggestions concerning the request. During the 45-day public comment period, NMFS received comments from the Marine Mammal Commission, an elected official (Senator Vicente (ben) C. Pangelinan, 32<sup>nd</sup> Guam legislature), and interested members of the public. The Natural Resources Defense Council (NRDC) did not submit comments specific to the proposed MITT rulemaking; however, NRDC has indicated their full endorsement of the comments and management recommendations submitted on the Draft EIS by the Commonwealth of the Northern Mariana Islands (Governor Eloy S. Inos). The comments were considered in developing the final rule, and detailed responses to those comments are included in the preamble to the final rule. The categories of public comments addressed include marine mammal density estimates; mitigation, monitoring, and reporting; effects analysis; acoustic criteria and thresholds; vessel strikes; general opposition to the rulemaking; and other comments not specific to a category.

Public input was carefully considered by NMFS in developing a final rule and in reaching this decision to issue the regulations for the activities specified in FEIS Alternative 1.

## **V. MITIGATION, MONITORING AND REPORTING MEASURES**

The final rule includes detailed mitigation measures that must be implemented by the Navy when conducting specified activities in the MITT Study Area. Inclusion of these requirements ensures that NMFS' action of issuing incidental take regulations specifies and requires all practicable means to avoid or minimize impacts to marine mammals from the selection of FEIS Alternative 1. In addition, NMFS' final rule will specify the requirements for the Navy to implement a monitoring and reporting program. In addition to the requirements that will be established in the rule and required of Navy, NMFS will meet annually with the Navy to discuss the required Navy monitoring reports, Navy R&D developments, and current science and whether mitigation or monitoring modifications are appropriate. This use of adaptive management via the MMPA process will allow NMFS to consider new data from different sources to determine (in coordination with the Navy) on an annual basis if mitigation or monitoring measures should be modified or added (or deleted) if new data suggests that such modifications are appropriate (or are not appropriate).

## **VI. CONCLUSIONS**

Through the FEIS and as documented in this ROD, NMFS has considered the goals and objectives of the NMFS' proposed action and has analyzed a reasonable range of alternatives that adequately address the objective of the proposed action. Furthermore, NMFS has analyzed the associated environmental consequences of the identified alternatives and the mitigation measures and monitoring requirements needing to be analyzed and required under the final rule and LOA. NMFS has also considered the public comments addressed to the Navy in the FEIS and the comments addressed to NMFS during the proposed rule comment period. Consequently, NMFS has selected the alternative of issuing regulations authorizing the unintentional harassment of

marine mammals incidental to Navy activities in the MITT Study Area in accordance with Alternative 1 of the FEIS for the period August 2015 through August 2020, including in that regulation specified requirements for mitigation, monitoring and reporting.

Signed: 

Date: JUL 23 2015

*ES*  
Eileen Sobeck  
Assistant Administrator for Fisheries  
National Marine Fisheries Service