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 NORTHWEST TRAINING AND TESTING STUDY AREA

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

National Oceanic and Atmospheric Administration
National Marine Fisheries Service

Office of Protected Resources

Silver Spring, Maryland

I. INTRODUCTION AND BACKGROUND

The National Marine Fisheries Service (NMFS), a division of the National Oceanic and Atmospheric Administration (NOAA), is proposing to issue regulations and Letters of Authorization (LOAs) to the U.S. Navy (Navy) pursuant to Section 101(a)(5)(D) of the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. §§ 1631 *et seq.*), and the regulations governing the taking and importing of marine mammals (50 Code of Federal Regulations (CFR) Part 216).

NMFS proposed action is a direct outcome of Navy's final application received in April 2015, requesting authorization for the take of 25 species of marine mammals incidental to Navy training and testing activities to be conducted within the Navy's Northwest Training and Testing (NWTT) Study Area, for the period of November 2015 through November 2020. These training and testing activities may incidentally take marine mammals present within the NWTT 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 regulations and LOAs 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. Therefore, NMFS participated as a cooperating agency in the development of the Navy's Final Environmental Impact Statement/Overseas Environmental Impact Statement (hereinafter, FEIS) and identified mitigation measures (for marine mammals) that should be considered in the Navy's analysis and to ensure any additional information necessary to support NMFS' proposed action were included to allow for consideration to adopt the FEIS. In particular, the FEIS contains an adequate evaluation of the direct, indirect and cumulative impacts on marine mammals and Endangered Species Act-listed species, including addressing the effects of underwater sound on marine mammals.

This Record of Decision (ROD) was prepared in accordance with the National Environmental Policy Act (NEPA), its implementing regulations, and NOAA's Administrative Order (NAO) 216-6 "Environmental Review Procedures for Implementing the National Environmental Policy

Act, and addresses NOAAs determination to issue regulations and LOAs to the Navy pursuant to the MMPA and to adopt the Navy's FEIS pursuant to 40 CFR 1506.3.

II. ANALYSIS

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 NWTT Study Area, which includes the existing Northwest Training Range Complex, the Keyport Range Complex, Carr Inlet Operations Area, Southeast Alaska Acoustic Measurement Facility, and pierside locations at Naval Base (NAVBASE) Kitsap Bremerton, NAVBASE Kitsap Bangor, and Naval Station Everett.

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 NWTT 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 LOAs 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.

III. NMFS' DECISION AND FACTORS CONSIDERED IN THE DECISION

A. THE DECISION

NMFS' decision is to issue regulations and two separate five year LOAs (one for training and one for testing) 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 NWTT Study Area for the period of November 2015 through November 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 25 species of marine mammals by Level B harassment and five 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 LOAs.

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 LOAs. 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.

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 NWTT 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 NWTT 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 NWTT regulations. The Navy has proposed measures to mitigate potential impacts to marine mammals from vessel strikes during training and testing activities in the Study Area.

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.

During the development of the Navy's NWTT Draft, Supplemental and Final EIS/OEIS, 8 proposed life cycle pierside sonar testing events involving surface ships at Naval Station (NS) Everett were incorrectly modeled as 8 life cycle pierside sonar testing events involving submarines at Naval Base Kitsap (NBK) – Bremerton. The Navy identified this error while considering, at the request of NMFS, the overlap of NWTT activities within biologically important areas. Although documents released to the public for comment, including the NWTT Draft, Supplemental and Final EIS/OEIS, the Navy's LOA application, and NMFS' proposed rule qualitatively describe life cycle pierside sonar testing events as occurring at both NBK – Bremerton and Naval Station Everett, the quantitative analysis of impacts on marine mammals that could result from these activities is based on modeling data for more events occurring at

NBK – Bremerton and fewer events than required occurring at Naval Station Everett. Both the FEIS/OEIS and the proposed rule already included and considered quantitative analysis for Naval Station Everett pierside surface ship sonar maintenance training events, events which are similar in both conduct and effects to life cycle pierside sonar testing events.

The Navy corrected the error by eliminating 8 life cycle pierside sonar testing events involving submarines and their associated hours at NBK – Bremerton and adding 8 life cycle pierside sonar testing events involving surface ships and their associated hours to Naval Station Everett. This correction results in a reduction of hours in the MF3 bin (submarine sonar) and an addition of hours to the MF1 bin (surface ship sonar). Life cycle pierside sonar testing events involving submarines require use of up to 2 hours of MF3 sonar per event. Life cycle pierside sonar testing events involving surface ships require use of up to 4 hours of MF1 sonar per event. Given this difference between submarine and surface ship life cycle pierside sonar testing, elimination of the 8 submarine events at NBK– Bremerton will result in an overall reduction of 16 MF3 hours and addition of the 8 surface ship events at Naval Station Everett will result in an overall increase of 32 MF1 hours.

Correcting the number of life cycle pierside sonar testing event hours will result in an insignificant increase in overall Level B and Level A takes of a few species within the NWTT Study Area. All populations are healthy and exposures to sound from these events would be short term (no more than 4 hours) and infrequent (a maximum of 8 times per year). These testing events are qualitatively described in documents released to the public as potentially occurring at both NBK – Bremerton and Naval Station Everett. Furthermore, the testing events are similar to pierside surface ship sonar system maintenance training events using MF1 sonar systems also proposed to occur at Naval Station Everett that were quantitatively analyzed in public documents and pose similar potential effects on marine mammals. Therefore, the addition of life cycle pierside sonar testing events to Naval Station Everett and their associated predicted exposures does not reflect a significant departure from or a substantial change in the nature of activities or environmental effects already analyzed as FEIS Alternative 1.

As described previously, 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 NWTT FEIS and the NWTT 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 NWTT 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 NWTT 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 NWTT 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 NWTT 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 LOAs under section 101(a)(5)(A) of the MMPA for training and testing activities in the NWTT Study Area. NMFS issued a Biological Opinion on the Navy's proposal to conduct training and testing activities in the NWTT Study Area from November 2015 through November 2020 and the Conservation and Permits Division's proposal to issue regulations and LOAs to authorize the Navy to "take" marine mammals incidental to the conduct of training and testing activities in the NWTT 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 LOAs for the Navy activities in the MNWTT 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 NWTT 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 (CZMA) Concerns. On March 17, 2015, the Navy submitted a CZMA Consistency Determination (CD) to the Washington State Department of Ecology, concluding that the Proposed Action was consistent to the maximum extent practicable with the enforceable policies of the Washington CZM Program. The Washington State Department of Ecology concurred with this determination.

On February 27, 2015, the Navy submitted a CZMA negative determination to the Oregon Coastal Management Program, concluding that the Proposed Action would have no reasonably

foreseeable effects to Oregon's coastal uses or resources. The Oregon Coastal Management Program concurred with this determination.

On May 18, 2015, the Navy submitted a revised CZMA negative determination to the California Coastal Commission, concluding that the Proposed Action would have no reasonably foreseeable effects to California's coastal uses or resources. The California Coastal Commission concurred with this determination.

Alaska currently does not have an approved Coastal Management Program; therefore, there are no requirements to prepare and submit a Consistency Determination

Essential Fish Habitat. The Navy determined that their activities may adversely affect Essential Fish Habitat (EFH) within the NWTT Study Area and requested initiation of the Magnuson-Stevens Fishery Conservation and Management Act's EFH consultation process with NMFS' Oregon Washington Coastal Area and California Coastal Area offices on March 12, 2014. NMFS considered that the proposed activities may have more than minimal adverse effects to EFH and made recommendations to avoid, minimize, and offset adverse effects. The Navy responded in writing to each of NMFS' recommendations.

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 LOAs) 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 training and 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 adjustments to location, type, and tempo of training and testing activities, which includes the addition of platforms and systems. Alternative 1 reflects adjustments to the baseline activities which are necessary to support all current and proposed training and testing activities in the NWTT Study Area. Under this alternative, NMFS would incorporate mitigation and monitoring measures and reporting requirements into the MMPA rulemaking and LOAs. This NEPA Alternative would satisfy the purpose and need of the NMFS' MMPA action (the issuance of regulations and subsequent LOAs 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. This alternative considers:

- modified or updated mission requirements associated with force structure changes, including those resulting from the development, testing, and ultimate introduction of new platforms (vessels and aircraft), and weapons systems into the fleet.
- new biennial training exercises conducted in the Offshore Area
- biennial mine warfare exercises in Puget Sound in support of homeland defense
- testing with and testing of undersea systems, subsystems, and components in Puget Sound
- proof-of-concept testing of unique undersea hardware and fixtures
- resumption of testing activities at the Carr Inlet Operations Area
- pierside sonar maintenance and life cycle testing
- sea trials in support of overhaul
- elimination of sinking exercises in the Study Area

Alternative 2: Alternative 2 consists of all activities that would occur under Alternative 1 plus proposed adjustments to tempo of training and testing activities. All training activities would remain the same except for an increase in Maritime Homeland Defense training events from one every other year to one every year. The tempo of testing activities over those proposed for Alternative 1 would increase in a range between 6 percent for maintenance and miscellaneous testing events and 38 percent for all testing activities in the Western Behm Canal, Alaska. On average, most testing activities in Alternative 2 would increase about 12 percent over those in Alternative 1. Under this alternative, NMFS would incorporate mitigation and monitoring measures and reporting requirements into the MMPA rulemaking and LOAs.

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 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 NWTT 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 (Alternative 1) in which it grants the application and issues regulations and LOAs 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 LOAs 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).[1] For NMFS, denial of the 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. However, the Navy has maintained consistently that a reduction or cessation of training is not viable. 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 it eliminated this alternative from further consideration because "[r]eduction or cessation of training and testing would prevent the Navy

[1] 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 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.

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. § 137l(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, statements of Navy personnel, and the information set forth in the FEIS, NMFS considered the possibility that the Navy would obtain a National Defense Exemption to continue with testing and training activities if NMFS was to deny its application for incidental take regulations and LOAs. 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 to conduct training and testing operations at the level described and analyzed in Alternative 1, which is fully analyzed in the EIS. However, it is also possible that if NMFS 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 LOAs. 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.

- 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 Study Area 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 LOAs 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 LOAs 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 LOAs 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 National Defense Exemption 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 NWTT 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 (DEIS) were noticed are provided in Appendix E of the FEIS, and the FEIS was similarly made available on October 2, 2015.

A Notice of Availability (NOA) was published in the Federal Register and notices were placed in local and regional newspapers announcing the availability of the DEIS. The DEIS was made available for public review on January 24, 2014, and public comments were accepted from January 24, 2014 to March 25, 2014. The Navy provided a 21-day public comment extension, bringing the comment deadline to April 15, 2014. Eight public meetings were held in Washington, Oregon, California, and Alaska from February 26, 2014 to March 11, 2014. NMFS personnel attended the information meetings and hearings on the DEIS, when available. The Navy received comments on the DEIS 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. On December 19, 2014, the Navy released a Supplement to the DEIS (SDEIS). A NOA was published in the Federal Register and notices were placed in local and regional newspapers announcing the availability of the SDEIS. Public comments on the SDEIS were accepted from December 19, 2014 to February 2, 2015. The FEIS addresses all public comments received on the Draft EIS and the SDEIS. 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.nwtteis.com*. The NOA of the FEIS published on October 2, 2015 (78 FR 53754), during which time the Navy allowed public comments on the FEIS. The Navy reviewed and considered all comments received during the 30-day wait period following the issuance of the NOA for the FEIS. The Navy will summarize and respond to all comments in its ROD. NMFS also considered the comments related to marine mammals on the NOA for the FEIS prior to issuing its own ROD, and these comments are addressed below.

> *Comment 1*: The U.S. Environmental Protection Agency (EPA) recommended that the Navy pursue a well-designed mitigation and monitoring program in coordination with NMFS.
>
> *Response*: As described below in Section V (Mitigation, Monitoring and Reporting Measures) of this ROD, NMFS' issuance of regulations and LOAs is conditioned upon the Navy's implementation of mitigation and monitoring, developed in coordination with NMFS and designed to reduce impacts to marine mammals to the level of least practicable impact. The proposed and final rules, LOAs and Navy's FEIS include details about these mitigation and monitoring requirements. Mitigation measures include visual detection by trained lookouts; power-down and shut-down procedures when marine mammals are detected within ranges where the received sound level is likely to result in temporary threshold shift or injury; the use of mitigation zones to avoid or reduce the

potential for onset of the lowest level of injury; the use of passive sensors to detect marine mammals; and vessel avoidance of marine mammals. These mitigation measures are informed by years of experience and monitoring, which has shown them to be effective. NMFS has determined that the mitigation measures are adequate means of effecting the least practicable adverse impacts on marine mammals species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, while also considering personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity. Inclusion of these requirements ensures that NMFS' action of issuing incidental take regulations specifies and requires all practicable means to avoid or minimize environmental harm 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. NMFS and the Navy have worked to develop a robust monitoring plan to improve our understanding of the environmental effects resulting from the use of active sonar and underwater explosives. In addition to the requirements that will be established in the rule and required of Navy, NMFS will meet annually or biennially 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.

Comment 2: The EPA requested clarification of the process for modifying mitigation or monitoring through the adaptive management process. Specifically, the commenter requested that the following points be addressed:

- The Final EIS/OEIS section 5.2.1 Regulatory Requirements for Mitigation explains a process for modifying mitigation measures that ends with the ROD. However, adaptive management continues beyond the ROD.

Response: It was not the intent to convey the message that a process for modifying mitigation measures ends with the ROD. Adaptive management is intended as a continuous process on all of the Navy's training and testing ranges. Once the ROD is signed and Navy is issued a final rule and LOAs with mitigation requirements included within it, the Navy is subject to potential modification of mitigation through the requirements of final rule. Specifically, regulations allow for NMFS to modify existing mitigation, monitoring or reporting measures after consulting with Navy if doing so "creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring" required for the action. In evaluating need for alteration of mitigation or monitoring the regulations set forth sources of data to consider. These include: previous year Navy monitoring reports, results from other marine mammal or sound research/studies, or any information revealing take of marine mammals in a manner, extent, or number not authorized by regulations or MMPA LOA permit.

As an example from Chapter 5 of the NWTT EIS/OEIS, in Section 5.5.3.1 (Exercise and Monitoring Reporting), the Navy will continue to monitor active sonar use in the NWTT Study Area, report that use to NMFS, and use that data to inform future adaptive management activities, which include adapting mitigation or monitoring.

The Navy and NMFS have an existing, robust, and flexible adaptive management process in place for reviewing mitigation and monitoring applicable to NWTT as well as all Navy training and testing at-sea ranges. The Navy, NMFS, and Marine Mammal Commission meet annually to review past regional monitoring results and scientific returns on investments, review Navy exercise reports for the amount of Navy activity in a given area as compared to authorized, and discuss new science, either published or in progress over the preceding interval, that may have bearing on future mitigation or monitoring. The Navy and NMFS then agree to the most appropriate regional monitoring studies for the next year based on the ICMP monitoring framework and associated Intermediate Scientific Objectives, past results from previous monitoring, and existing or new scientific or mitigation data needs. The Navy programs and executes those agreed upon monitoring projects over the next year. This implementation can include any combination of continuing projects or new starts.

- The Final EIS/OEIS section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas) could be improved with, for example, a definition or threshold for "biologically meaningful effects" that would inform future adaptive management of activities.

Response: Defining the exact extent and severity of biologically meaningful effects remains a challenge for both NMFS and the Navy. It is relatively uncomplicated to define the worst case examples of biologically meaningful, such as individual mortality, bodily injury, abandonment of a calf, etc. Correspondingly, it is also relatively easy to define the truly insignificant effects, such as no observable effects, slight change in respiration, etc. However, deciding where in the middle to break from insignificant to significant biologically meaningful effects along the lines of something like a severity scale as proposed in Southall et al. (2007) (Marine mammal noise exposure criteria: initial scientific recommendations) is subject to scientific uncertainty and has not yet been codified in NMFS' incidental take authorizations or regulations. Complicating this assessment is the wide range of responses and variations among individuals within a given species population, differences in responses across different species, and the behavioral context of a response (i.e., an individual doing one thing may not respond to a stressor, but the same individual doing something else might respond to the same stressor). In addition, there is documented variability in behavioral reactions seen in captive and wild marine mammal experiments; therefore it is unlikely any generalized quantitative threshold would be accurate or representative.

To help inform this ongoing discussion, the Navy continues to fund several million dollars in species-specific behavioral response studies every year.

- To the extent that NMFS's proposed rule is included by reference in the Final EIS/OEIS as a means of addressing adaptive management details, the commenter notes that the proposed rule - like the Final EIS/OEIS - focuses on monitoring and reporting but does not explain how the evaluation of monitoring information would influence mitigation commitments other than stating that new information would be considered by NMFS and the Navy "... on an annual or biennial basis..."

Response: Once the ROD is signed and the Navy is issued a final rule and LOAs with mitigation requirements included within it, the Navy is subject to potential modification of mitigation through the requirements of final rule regulations. Specifically, regulations allow for NMFS to modify existing mitigation, monitoring or reporting measures after consulting with Navy if doing so "creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring" required for the proposed action. In evaluating need for alteration of mitigation or monitoring the regulations set forth sources of data to consider. These include: previous year Navy monitoring reports, results from other marine mammal or sound research/studies, or any information revealing take of marine mammals in a manner, extent, or number not authorized by regulations or LOA.

As an example from Chapter 5 of the NWTT EIS/OEIS, in Section 5.5.3.1 (Exercise and Monitoring Reporting), the Navy will continue to monitor active sonar use in the NWTT Study Area, report that use to NMFS, and use that data to inform future adaptive management activities, which include adapting mitigation or monitoring.

The Navy and NMFS have an existing, robust, and flexible adaptive management process in place for reviewing mitigation and monitoring applicable to NWTT as well as all Navy training and testing at-sea ranges. The Navy, NMFS, and Marine Mammal Commission meet annually to review past regional monitoring results and scientific returns on investments, review Navy exercise reports for the amount of Navy activity in a given area as compared to authorized, and discuss new science, either published or in progress over the preceding interval, that may have bearing on future mitigation or monitoring. The Navy and NMFS then agree to the most appropriate regional monitoring studies for the next year based on the ICMP monitoring framework and associated Intermediate Scientific Objectives, past results from previous monitoring, and existing or new scientific or mitigation data needs. The Navy programs and executes those agreed upon monitoring projects over the next year. This implementation can include any combination of continuing projects or new starts.

Comment 3: The EPA also generally requested additional information on adaptive management, including additional details regarding adaptive management meetings.

Response: As the commenter notes, NMFS has included an adaptive management component in the 5-year final rule for NWTT training and testing activities. The monitoring and reporting requirements associated with the rule provide NMFS with monitoring data from the previous year to allow consideration of whether any changes to mitigation are appropriate. As discussed in the final rule, NMFS, the Navy, and the

Marine Mammal Commission will meet to discuss the monitoring reports, Navy R&D developments, current science, and whether mitigation or monitoring modifications are appropriate. The use of adaptive management allows for consideration of new information from different sources to determine (with input from the Navy regarding practicability) on an annual or biennial basis if mitigation or monitoring measures should be modified (including additions or deletions). Further, the Navy hosts an annual meeting to discuss the status and results of current monitoring and research efforts associated with its Marine Species Monitoring Program, and the information from that meeting can be used to further inform our consideration of changes or modifications to existing mitigation and monitoring measures. It is worth noting, that adaptive management does not end upon the adjourning of the annual or biennial meeting; rather, the process continues through agreed-upon post-meeting action items, follow-up conversations, and continued communication between the Navy, NMFS, and the Marine Mammal Commission. As an example, during the 2014 Adaptive Management Meeting held in Washington, D.C., discussions were initiated between the Navy and NMFS on consideration of newly-designated biologically important areas (representing the best available science), with the potential to overlap portions of the NWTT Study Area. A direct outcome of that adaptive management meeting, after additional follow-up discussions between the Navy and NMFS was the eventual development of additional monitoring and reporting measures, and incorporation of those measures into the final rule. This is just one example of how the adaptive management process was utilized for influencing mitigation and monitoring commitments. Mitigation measures can be modified if new data suggests that such modifications would have a reasonable likelihood of reducing adverse effects to marine mammal species and their habitat and if the measures are practicable. The following are some of the possible sources of applicable data to be considered through the adaptive management process: (1) results from monitoring, exercise and testing reports, as required by MMPA authorizations; (2) compiled results of Navy funded R&D studies; (3) results from specific stranding investigations; (4) results from general marine mammal and sound research; and (5) any information which reveals that marine mammals may have been taken in a manner, extent, or number not authorized by the regulations or LOAs. Adaptive management provides NMFS with the flexibility to modify an active LOA to reflect changes to the mitigation, monitoring, or reporting components of an active authorization (after consulting with the Navy regarding the practicability of the modification), if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble of the rule.

Substantial public involvement also occurred in association with NMFS' rulemaking. On January 9, 2014 (79 FR 4673), NMFS published a notice of receipt of the application for LOAs for the Navy's training and testing activities conducted in the NWTT Study Area, with a request for comments and information open through February 28, 2014. On June 3, 2015 (80 FR 31738), NMFS published a proposed rule in response to the Navy's request to take marine mammals incidental to training and testing activities in the NWTT 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, non-governmental organizations, Tribes, and private citizens. 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 NWTT 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.

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 LOAs. 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 NWTT Study Area in accordance with Alternative 1 of the FEIS for the period November 2015 through November 2020, including in that regulation specified requirements for mitigation, monitoring and reporting.

Signed: _____ Date: 11/9/15

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