RECORD OF DECISION

ISSUANCE OF MARINE MAMMAL PROTECTION ACT (MMPA) REGULATIONS TO TAKE MARINE MAMMALS INCIDENTAL TO U.S. NAVY RESEARCH, DEVELOPEMENT, TEST AND EVALUATION ACTIVITIES IN THE NAVAL SEA SYSTEMS COMMAND NAVAL UNDERSEA WARFARE CENTER KEYPORT RANGE COMPLEX EXTENSION

Supported by: U.S. Navy Final Environmental Impact Statement/
Overseas Environmental Impact Statement for the NAVSEA NUWC
Keyport Range Complex Extension
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) and its implementing regulations and NOAA's Administrative Order 216-6 Environmental Review Procedures for Implementing the National Environmental Policy Act, this document comprises the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service's (NMFS) Record of Decision (ROD) for issuance of regulations pursuant to section 101(a)(5)(A) of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1361 *et seq.*) to the U.S. Navy (Navy) for the taking of marine mammals incidental to the conduct of specified activities in the Naval Sea Systems Command (NAVSEA) Naval Undersea Warfare Center (NUWC) Keyport Range Complex.

I. INTRODUCTION

On May 15, 2008, NMFS received an application, which was subsequently amended on April 29, 2009 with additional information, from the Navy requesting authorization for the take of 5 species of marine mammals incidental to the NAVSEA NUWC Keyport Range Complex research, development, test and evaluation (RDT&E) activities over the course of 5 years and range extension. These RDT&E activities and range extension are classified as military readiness activities. The Navy states that these RDT&E activities may cause various impacts to marine mammal species in the proposed action area (e.g., mortality, Level A and B harassment). The Navy requests an authorization to take individuals of these cetacean species by Level B harassment. NMFS does not expect any animals to be killed or injured, and NMFS is not proposing to authorize any mortality or injury incidental to the Navy's NAVSEA NUWC Keyport Range Complex RDT&E activities. 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 pursuant to NMFS' NEPA procedures. NMFS participated as a cooperating agency in the development of the Navy's Environmental Impact Statement/Overseas Environmental Impact Statement (hereinafter, EIS), 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 EIS' 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 Final EIS and concluded that NMFS' comments and suggestions on the EIS have been addressed. NMFS adopted the Navy's EIS in July 2010.

A. NAVY PROPOSED ACTION

The proposed RDT&E activities involving active acoustic sources would occur in the NAVSEA NUWC Keyport Range Complex, which is composed of Keyport Range Site, Dabob Bay Range Complex (DBRC) Site, and Quinault Underwater Tracking Range (QUTR) Site. These RDT&E activities include testing that involves active acoustic devices such as general range tracking, unmanned undersea vehicle (UUV) tracking systems, torpedo sonars, range targets and special tests, special sonars, sonobuoys and helicopter dipping sonar, side scan sonar, and other acoustic sources (acoustic modem, target simulators, navigation aids, sub-bottom profilers, and vessel engines, etc.); and testing that involves non-acoustic activities such as magnetic, oceanographic sensor, laser imaging detection and ranging, and inert mine hunting and inert mine clearing exercises.

The Navy proposes to support and conduct RDT&E operations in the NUWC Keyport Range Complex Study Area. As described in the EIS, the purpose of the Navy's proposed action is to continue fulfilling its mission of providing test and evaluation services and expertise to support the Navy's evolving manned and unmanned vehicle program activities. The Navy states that the proposed action to extend the existing operational boundaries of the NAVSEA NUWC Keyport Range Complex is needed because the existing Range Complex is becoming increasingly incapable of satisfying the existing and evolving operational capabilities and test requirements of next-generation manned and unmanned vehicles. The operational endurance and sensor capabilities of such vehicles are expected to continue to expand, and the Navy needs an expanded test range capability to match the projected operational and test requirements. To effectively respond to these changes, the Navy requires a range complex with assets that provide a broader diversity of sea state conditions, bottom type, deeper water, and increased room to maneuver and combine activities. Extending the Range Complex operating areas beyond the current boundaries would enable the Navy to support future vehicle test requirements, including evolving manned and unmanned vehicle program requirements in multiple marine environments.

Typical activities conducted in the NAVSEA NUWC Keyport Range Complex Extension on the three existing range sites primarily support undersea warfare RDT&E program requirements, but they also support general equipment test and military personnel training needs, including Fleet activities. Current and proposed activities within the Keyport Range Complex Extension are listed below:

Range Activities: Testing that Involves Active Acoustic Devices

(1) General Range Tracking: General range tracking on the instrumented ranges and portable range sites have active output in relatively wide frequency bands. Operating frequencies are 10 to 100 kHz. At the Keyport Range Site the sound pressure level (SPL) of the source (source level) is a maximum of 195 dB re 1 μPa-m. At the DBRC and QUTR sites, the source level for general range tracking is a maximum of 203 dB re 1 μPa-m.

(2) UUV Tracking Systems: UUV tracking systems operate at frequencies of 10 to 100 kHz with maximum source levels of 195 dB re 1 μPa-m at all range sites.

(3) Torpedo Sonars: Torpedo sonars are used for several purposes including detection, classification, and location and vary in frequency from 10 to 100 kHz. The maximum source level of a torpedo sonar is 233 dB re 1 μPa-m.

(4) Range Targets and Special Tests: Range targets and special test systems are within the 5 to 100 kHz frequency range at the Keyport Range Site with a maximum source level of 195 dB re 1 μPa-m. At the DBRC and QUTR sites, the maximum source level is 238 dB re 1 μPa-m.

(5) Special Sonars: Special sonars can be carried as a payload on a UUV, suspended from a range craft, or set on or above the sea floor. These can vary widely from 100 kHz to a very high frequency of 2,500 kHz for very short range detection and classification. The maximum source level of these acoustic sources is 235 dB re 1 μPa-m.

(6) Sonobuoys and Helicopter Dipping Sonar: Sonobuoys and helicopter dipping sonars are deployed from Fleet aircraft and operate at frequencies of 2 to 20 kHz with maximum source levels of 225 dB re 1 μPa-m. Dipping sonars are active or passive devices that are lowered on cable by helicopters or surface vessels to detect or maintain contact with underwater targets.

(7) Side Scan Sonar: Side-scan sonar is used for mapping, detection, classification, and localization of items on the sea floor such as cabling, shipwrecks, and mine shapes. It is high frequency typically 100 to 700 kHz using multiple frequencies at one time with a very directional focus. The maximum source level is 235 dB re 1 μPa-m. Side-scan and multi-beam sonar systems are towed or mounted on a test vehicle or ship.

(8) Other Acoustic Sources: Other acoustic sources may include acoustic modems, targets, aids to navigation, subbottom profilers, and engine noise.

- An acoustic modem is a communication device that transmits an acoustically encoded signal from a source to a receiver. Acoustic modems emit pulses from 10 to 300 kHz at source levels less than 210 dB re 1 μPa-m.

- Target simulators operate at frequencies of 100 Hertz (Hz) (0.1 kHz) to 10 kHz at source levels of less than 170 dB re 1 μPa-m.

• Aids to navigation transmit location data from ship to shore and back to ship so the crew can have real-time detailed location information. This is typical of the range equipment used in support of testing. New aids to navigation can also be deployed and tested using 70 to 80 kHz at source levels less than 210 dB re 1 μPa-m.

• Subbottom profilers are often commercial off-the-shelf sonars used to determine characteristics of the sea bottom and subbottom such as mud above bedrock or other rocky substrate. These operate at 2 to 7 kHz at source levels less than 210 dB re 1 μPa-m, and 35 to 45 kHz at less than 220 dB re 1 μPa-m.

• There are many sources of engine noise including but not limited to surface vessels, submarines, torpedoes, and other UUVs. The acoustic energy generally ranges from 50 Hz to 10 kHz at source levels less than 170 dB re 1 μPa-m. Targets, both mobile and stationary, may simulate engine noise at these same frequencies.

Range Activities: Testing that Involves Non-Acoustic Activities

(1) Magnetic: There are two types: (a) magnetic sensors, and (b) magnetic sources. Magnetic sensors are passive and do not have a magnetic field associated with them. The sensors are bottom mounted, over the side or can be integrated into a UUV. They are used to sense the magnetic field of an object such as a surface vessel, a submarine, or a buried target. Magnetic sources are used to represent magnetic targets or are energized items such as power cables for energy generators. Magnetic sources generate electromagnetic fields (EMF). Evaluation of EMF has shown that sources used are typically below 23 gauss and are considered relatively minute strength.

(2) Oceanographic Sensor: These sensors have been used historically to determine marine characteristics such as conductivity, temperature, and pressure of water to determine sound velocity in water. This provides information about how sound will travel through the water. These sensors can be deployed over the side from a surface craft, suspended in water, or carried on a UUV.

(3) Laser Imaging Detection and Ranging (LIDAR): Also known as light detection and ranging, LIDAR is used to measure distance, speed, rotation, and chemical composition and concentration of remote solid objects such as a ship or submerged object.

(4) Inert Mine Hunting and Inert Mine Clearing Exercises: Associated with testing, a series of inert mine shapes are set out in a uniform or random pattern to test the detection, classification and localization capability of the system under test. They are made from plastic, metal, and concrete and vary in shape. All major components of all inert mine systems used as 'targets' for inert mine hunting systems are removed within 2 years.

NMFS does not believe that those range activities that involve non-acoustic testing will have adverse impacts to marine mammals, therefore, they were not analyzed further and are not covered under NMFS rule.

Increased Activities due to Range Extension

The proposed range extension would expand the geographic area for all three range sites and increase the tempo of activities in the Keyport and QUTR ranges sites.

(1) Keyport Range Site: Range boundaries of the Keyport Range Site would be extend to the north, east and south, increasing the size of the range from 1.5 nm^2 to 3.2 nm^2 (5.1 km^2 to 11.0 km^2). The average annual days of use of the Keyport Range Site would increase from the current 55 days to 60 days.

(2) DBRC Site: The southern boundary of DBRC Site would be extended to the Hamma Hamma River and its northern boundary would be extended to 1 nm (2 km) south of the Hood Canal Bridge (Highway 104). This extension would increase the size of the current operating area from approximately 32.7 nm^2 (112.1 km^2) to approximately 45.7 nm^2 (150.8 km^2) and would afford a straight run of approximately 27.5 nm (50.9 km). There would be no change in the number and types of activities from the existing range activities at DBRC Site, and no increase in average annual days of use due to the range extension at this site.

(3) QUTR Site: Range boundaries of QUTR Site would be extended to coincide with the overlying special use airspace of W-237A plus a 7.8 nm^2 (26.6 km^2) surf zone at Pacific Beach. The total range area would increase from approximately 48.3 nm^2 (165.5 km^2) to approximately 1,839.8 nm^2 (6,310.2 km^2). The average annual number of days of use for offshore activities would increase from 14 days/year to 16 days/year in the offshore area. The average annual days of use for surf-zone activities would increase from 0 days/year to 30 days/year.

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 five consecutive years if certain findings are made and regulations are issued or, if the taking is limited to harassment and of no more than one year, the Secretary shall issue a notice of proposed authorization for public review.

As described in the Navy's May 15, 2008 application and associated April 29, 2009 update to that request, the specified Navy activities to be conducted in the NAVSEA NUWC Keyport Range Complex 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 Letters of Authorization (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 (note that no subsistence use issues have been identified in the NAVSEA NUWC Keyport Range Complex Study Area). In addition, NMFS, as part of its regulatory process, is required to prescribe the permissible methods of taking, and other 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 C.F.R § 216.103).

The National Defense Authorization Act (NDAA) (Public Law 108-136) amended the MMPA, 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) an y 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

Since the three range sites within the NAVSEA NUWC Keyport Range Complex are geographically distinct, multiple alternatives were considered independently for each range site by the Navy. Among these alternatives, the Preferred Alternatives of the Navy's EIS fully meet the purpose and need of the Proposed Action as these Alternatives provide NAVSEA NUWC Keyport Range Complex the ability to maximize operational capability for known activities over the next five years, as well as enhance their RDT&E capacity by anticipating an increase in the overall tempo of RDT&E activities over the next five years. Therefore, NMFS selected the Navy's Preferred Alternatives as its Preferred Alternatives.

A. THE DECISION

NMFS' decision is to issue regulations and the 2010 LOA (and subsequent LOAs, as appropriate) for the unintentional take of marine mammals incidental to specified activities described in the Preferred Alternatives of the Final EIS, and the action presented to NMFS in the Navy's May 2008 application and April 2009 addendum. The regulations establish a framework

to allow, through issuance of LOAs, the take of individuals of five species marine mammals by Level B harassment incidental to RDT&E activities conducted in the NAVSEA NUWC Keyport Range Complex for the period of January 2010 through January 2015. These Preferred Alternatives of the Final EIS 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, and other 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 the Preferred Alternatives.

B. FACTORS CONSIDERED IN REACHING THE DECISION

The EIS/OEIS discusses the affected environment and environmental consequences in Chapter 3, within subsections arranged by Resource type, including: terrestrial wildlife, marine flora and invertebrates, sea turtles, fish, marine mammals, sediments and water quality, cultural resources, recreation, land and shoreline use, public health and safety and environmental hazards to children, socioeconomics and environmental justice, and air quality.

For purposes of NMFS' action, the most relevant sections are 3.5, Marine Mammals; Appendix C, Acoustic Modeling Technical Report; Appendix D, Marine Mammal Densities and Depth Distribution; and Appendix E, Cetacean Strandings and Threats. Section 3.5 addresses potential impacts to marine mammals as a result of the Navy's proposed RDT&E activities using active acoustic sources in each of the three range sites. Section 3.5 describes 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, with additional detail provided in Appendixes C and D. The EIS 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 may 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 section to conclude that none of the alternatives will result in any adverse population level effects on any of the affected species or stocks.

The activities that the Navy has determined will result in take for the Navy's preferred alternatives are the subject of the Navy's request to NMFS for MMPA Section 101(a)(5)(A) authorization. As described in Section 3.5 of the Final EIS, based on the Navy's acoustic analysis for the preferred alternative, the Navy predicted that 5 species of marine mammals would be taken by Level B harassment (TTS and sub-TTS). NMFS concurs with the Navy's analysis. As a result, NMFS will consider authorizing, on an annual basis, the incidental take by Level B harassment of: 11,282 harbor porpoises, 44 northern fur seals, 114 California sea lions, 14 northern elephant seals, and 5,569 harbor seals (note that the determination of the authorized take numbers is addressed in the MMPA final rule; the numbers presented here are intended to provide a relative sense of the potential impacts). These numbers very likely do not represent the number of individuals that would be taken, since it's most likely that many individual marine mammals would be taken multiple times. NMFS' assessment indicates that individuals of these species could be affected by Level B harassment as a result of the Navy's proposed NAVSEA

NUWC Keyport Range Complex RDT&E activities. 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.

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 NAVSEA NUWC Keyport Range Complex Extension Final EIS/OEIS and NMFS' Programmatic Biological Opinion for the NAVSEA NUWC Keyport Range Complex RDT&E Activities.

As a cooperating agency, NMFS assisted the Navy by providing technical information to evaluate the effects of the RDT&E 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 Final EIS/OEIS, 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:

- Mitigation and Monitoring. Chapter 3 of the EIS discusses the Navy's approach to mitigation and monitoring and describes specific mitigation measures that would be implemented to protect marine mammals, sea turtles, and other resources during RDT&E activities. 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".

- Considering effects to ESA-listed marine mammals - On June 15, 2010, NMFS issued a "Programmatic biological opinion on Keyport and Northwest Training Range Complexes" (Opinion) in promulgation of regulations to authorize the U.S. Navy to take marine mammals incidental to research, development, test, and evaluation (RDT&E) activities at the NAVSEA NUWC Keyport Range Complex from June 2010 to June 15, 2015. The Opinion concludes that the Navy's RDT&E activities proposed to be conducted in the NAVSEA NUWC Keyport Range Complex and NMFS' issuance of incidental take regulations are not likely to jeopardize the continued existence of threatened or endangered species in the action area or result in the destruction or adverse modification of designated critical habitat over the course of the five-year regulations. 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 EIS' cumulative impacts analysis.

- 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 Final EIS, Biological Opinion, and final rule for the NAVSEA NUWC Keyport Range Complex RDT&E activities present the assessments in detail, but a few salient issues and difference are highlighted here. First, both the EIS 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 EIS, 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 different three kinds of "significance", which include an assessment of whether any "significant" physical, chemical, or biotic response 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 EIS evaluation of the significance of impacts to species was considered as input to NMFS' ESA and MMPA assessments; this decision is supported by the EIS and also reached based on NMFS statutory responsibilities under the MMPA and ESA.

- MMPA-authorized Take. NMFS does not expect any animals to be killed or injured, and NMFS is not proposing to authorize any mortality (severe lung injury) or injury incidental to the Navy's NAVSEA NUWC Keyport Range Complex RDT&E activities. The Navy concurs with NMFS' determination. The Navy's FEIS included a discussion of this concept.

- Coastal Zone Management Act (CZMA) Concerns. The Navy has conducted consultation with the State of Washington to determine whether its proposed action will be conducted in a manner consistent with the state's coastal management programs. The Navy received the Coastal Consistency Determination under the CZMA from the Washington Department of Ecology on September 30, 2008.

- Essential Fish Habitat – The Navy has determined that the proposed activity will not have adverse impacts to EFH and did not consult with NMFS.

III. OTHER ALTERNATIVES CONSIDERED

The alternatives analyzed in the Navy's EIS and their relationship to the NMFS' alternatives are 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 Navy's NAVSEA NUWC Keyport Range Complex Extension EIS that are anticipated to result in the take of marine mammals, i.e., those activities that involve the use of high and mid-frequency active acoustic sources. Thus, these components of the Navy's proposed action are the subject of NMFS' proposed MMPA regulatory action. The Navy's EIS contains a thorough analysis of the

environmental consequences of their proposed action (with specific sections for acoustic modeling analysis) on the human environment, including a specific section on marine mammals.

A. Summary of the Alternatives Considered by the Navy

For this EIS, the Navy analyzed multiple action alternatives and the No-action Alternative.

RDT&E activities in the NAVSEA NUWC Keyport Range Complex occur year-round based on program requirements as relevant to all of the alternatives discussed. Since the purpose and need of the Proposed Action are to extend the NAVSEA NUWC Keyport Range Complex for NUWC Keyport test and evaluation activities, alternative Navy ranges in other states do not provide reasonable alternatives and are thus beyond the scope of this EIS/OEIS. Testing alternatives that could be better supported at another location were considered unreasonable as they would not satisfy the criterion for proximity to NUWC Keyport, nor would they support the mission of NUWC Keyport to provide test and evaluation services in environments that represent real war fighting conditions for emerging manned and unmanned vehicle program activities. Rather than duplicate capabilities of a separate range, alternatives were identified to enhance existing testing capabilities at the NAVSEA NUWC Keyport Range Complex.

No-Action Alternative: Under the No-Action Alternative, current activities would continue to be conducted on all three range sites and would continue to fit within the existing range dimensions currently established for the NAVSEA NUWC Keyport Range Complex. Currently, NUWC Keyport schedules the Keyport Range Site to be used an average of 55 days/year, the DBRC Site an average of 200 days/year, and the QUTR Site an average of 14 days/year of offshore use and minimally for surf-zone activities.

Implementing the No-Action Alternative for all three range sites would not allow NUWC Keyport to fulfill evolving mission requirements. Specifically, the following mission criteria would not be met, several of which are considered critical for achieving emerging mission objectives:

Weather/Natural Conditions

- Variable water depths from shore to 4,500 ft (1,372 m) depth for a variety of test platforms;
- Surf-zone access to simulate hostile littoral threat areas; and
- Multiple salinity and bathymetry types to simulate in-situ physical and operational environments of selected threat areas of the world.

Range Capabilities

- Locations where simulations can be provided to test collision avoidance in a safe manner.

Location and Maneuverability

- Various range sizes suitable to test search capabilities;

- Environment with approach and transit of several miles for launch platform standoff and endurance testing;
- Ability to conduct multiple test scenarios on an individual system within a variety of specialized environments located in close geographic proximity;
- Realistic navigational hazards, interference, and shipping traffic.

While implementation of the No-Action Alternative would not meet the evolving operational requirements for manned and unmanned vehicle testing, it is carried forward for further analysis as required under CEQ regulations.

Action Alternatives: As the three range sites within the NAVSEA NUWC Keyport Range Complex are geographically distinct, the set of alternatives for one range site is independent of the set of alternatives for another range site. Therefore, action alternatives are presented for each range site separately. For each range site, one or more action alternatives have been identified in addition to the No-Action Alternative and are summarized below.

Keyport Range Site:

Keyport Range Alternative 1 (Preferred Alternative) – extend range boundaries to the north, east and south, increasing the size of the range from 1.5 nm^2 to 3.2 nm^2 (5.1 km^2 to 11.0 km^2). The average annual days of use of the Keyport Range Site under this alternative would increase from the current 55 days to 60 days.

DBRC Site:

DBRC Alternative 1 – extend the southern boundary of this range by approximately 10 nm (19 km), thereby increasing the total operating area from approximately 32.7 nm^2 (112.1 km2) to approximately 44.0 nm^2 (150.8 km^2).

DBRC Alternative 2 (Preferred Alternative) – extend the southern boundary by approximately 10 nm (19 km) and the northern boundary to 1 nm (2 km) south of the Hood Canal Bridge (Highway 104). DBRC Alternative 2 would increase the operating area at the DBRC Site from approximately 32.7 nm^2 (112.1 km^2) to approximately 45.7 nm^2 (156.7 km^2). The same numbers and types of activities would occur under each DBRC Site alternative and there would be no increase in average annual days of use above current levels.

QUTR Site:

QUTR Alternative 1 – extend the range boundaries to coincide with the overlying special use airspace of W-237A plus locate an 8.4 nm^2 (28.8 km^2) surf zone at Kalaloch. The total range area under QUTR Alternative 1 would increase from approximately 48.3 nm^2 (165.5 km^2) to approximately 1,840.4 nm^2 (6,312.4 km^2).

QUTR Alternative 2 (Preferred Alternative) – extend the range boundaries the same as Alternative 1 but locate a 7.8 nm^2 (26.6 km^2) surf zone at Pacific Beach instead of at Kalaloch. The total range area under QUTR Alternative 2 would be 1,839.8 nm^2 (6,310.2 km^2).

QUTR Alternative 3 – extend the range boundaries the same as Alternative 1 but locate a 22.6 nm^2 (77.6 km^2) surf zone at Ocean City instead of at Kalaloch. The total range area under QUTR Alternative 3 would be 1,854.6 nm^2 (6,361.2 km^2). The same numbers and types of activities would occur under each QUTR Site alternative. The average annual number of days of use for offshore activities would increase under each QUTR Site action alternative from 14 days/year to 16 days/year in the offshore area. The average annual days of use for surf-zone activities would increase from 0 days/year to 30 days/year.

Each range site of the NAVSEA NUWC Keyport Range Complex encompasses a wide variety of RDT&E activities coordinated by NUWC Keyport. Under the Proposed Action, specific components such as launch, retrieval, and recovery methods and propulsion systems are evaluated and the example scenarios indicate how these activities would occur on the three range sites. Only the Preferred Alternatives under each range site fully meets the purpose and need of the Proposed Action as these Alternatives provide NAVSEA NUWC Keyport Range Complex the ability to maximize operational capability for known activities over the next five years, as well as enhance their RDT&E capacity by anticipating an increase in the overall tempo of RDT&E activities over the next five years. For the above action alternatives previously identified, the Navy includes an associated list of standard protective measures specifically developed to minimize adverse impacts on marine mammals.

B. Summary of Alternatives Considered by NMFS

NMFS' alternatives are not enumerated in the Navy EIS, but are supported by the analyses in that EIS, and consist of:

No Action Alternative: NMFS does not issue incidental take authorizations for the Navy's RDT&E activities (including the use of active acoustic sources). However, because the MMPA requires NMFS to issue take authorizations if it can make the required determinations, implementation of this alternative would not be in compliance with the MMPA.

Preferred Alternative: NMFS promulgates regulations and issues LOAs authorizing take of marine mammals incidental to the subset of the Navy RDT&E activities (i.e., those including the use of active acoustic sources) presented to NMFS as the specified activities described in the Navy's request for MMPA authorization (activities included within Navy's preferred alternatives) and including the mitigation, monitoring and reporting analyzed as part of the proposed action in Chapter 3 of the EIS.

Non-preferred Action Alternative: NMFS promulgates regulations and issues LOAs authorizing take of marine mammals incidental to a subset of the Navy RDT&E activities (i.e., those including the use of active acoustic sources) presented to NMFS as the specified activities described in the Navy's request for MMPA authorization (activities included within Navy's preferred alternatives), but without mitigation and monitoring requirements. However, because the MMPA requires holders of LOAs to reduce impacts on marine mammals to the lowest level practicable, implementation of this alternative would not be in compliance with the MMPA. For that reason, this alternative is not analyzed further.

C. The Environmentally Preferred Alternative

NMFS has identified the Navy's No Action Alternative as the Environmentally Preferred Alternative, in which current activities would continue to be conducted on all three range sites and would continue to fit within the existing range dimensions currently established for the NAVSEA NUWC Keyport Range Complex. Though the No-Action Alternative would result in slightly higher marine mammal impacts at the DBRC site due to lower sound propagation in the proposed southern extension of the range site for the Preferred Alternative, when impacts at the other range sites are also considered, the Preferred Alternative would have a greater environmental impact than the environmentally preferred alternative (No-Action Alternative) on marine mammals and threatened and endangered species due to an increase in range activities at those range sites. While the environmentally preferred alternative (No-Action Alternative) would have less environmental impact than the Preferred Alternative, it would limit the Navy in providing the capability to test and evaluate future undersea vehicle technology at the NAVSEA NUWC Keyport Range Complex. The environmentally preferred alternative (No-Action Alternative), therefore, would not fully meet the purpose and need of the proposed action.

IV. PUBLIC INVOLVEMENT

Public opportunities for review and comment have occurred throughout the development of the Navy's EIS and NMFS' development of the MMPA rule. 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 A of the FEIS, and the Final EIS was similarly made available in May 2010. The distribution list for the EIS is presented in Appendix A of the Final EIS/OEIS. NMFS personnel attended the information meetings and hearings on the Draft EIS, which were held in four locations in Washington State (see Appendix A).

During the public review process for the Draft EIS (DEIS), the Navy received 237 public comments from 19 agencies, organizations, and private citizens). The comments related to the following general categories: scope of the EIS; proposed action; affected resources; anthropogenic environment; impacts to marine mammals, birds, and fish; mitigation measures; and cumulative impacts. The Final EIS 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 Final EIS. Navy ensured the Final EIS was mailed to all individuals, agencies, and organizations that requested a copy of the final document, and that Final EIS remains available on the website at:
http://www.navsea.navy.mil/nuwc/keyport/Environmental/Documents.aspx.

The Navy received comment letters from the Environmental Protection Agency (EPA), the U.S. Department of the Interior, and an individual during the FEIS wait period, which NMFS were provided with and reviewed. EPA states that it is pleased with the Navy's response to its earlier comments on the draft FEIS concerning potential impacts to water quality and critical habitat in

Puget Sound and to protected resources in the Olympic Coast National Marine Sanctuary. All of the comments on the NAVSEA NUWC Keypoort Range Complex Extension FEIS that are related to NMFS' action (the issuance of an MMPA authorization) have been considered by NMFS in reaching this decision. The EPA comments reiterated comments they sent on the Draft EIS, which were already covered by Navy in the FEIS, and then expressed appreciation for the way the Navy addressed some of the comments in the FEIS. The DOI's comments pointed out two of the references the FEIS cited were not correct, and offered correction to the citations. The individual expressed his support of the proposed NAVSEA NUWC Keyport Range Complex Extension.

Substantial public involvement occurred in association with NMFS' rulemaking. On July 3, 2008 (73 FR 38183) NMFS published a notice of receipt of the application for letter of authorization for the U.S. Navy's NAVSEA NUWC Keyport Range Complex RDT&E activities, with a request for comments and information open through August 4, 2008. On July 7, 2009 (74 FR 32264), NMFS published a proposed rule in response to the Navy's request to take marine mammals incidental to military readiness RDT&E activities in the NAVSEA NUWC Keyport Range Complex and requested comments, information and suggestions concerning the request during a 30-day public comment period. During the public comment period, NMFS received comments from the Marine Mammal Commission, the Natural Resources Defense Council, Friends of the Earth, and two private citizens.

The comments were considered in developing the final rule, and are organized into 12 comments and detailed responses to those comments in the preamble to the final rule. The categories of public comments addressed MMPA concerns, mitigation, monitoring, and miscellaneous issues that are not specific to a category.

The detailed consideration of the 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 Final EIS Preferred Alternatives.

V. MITIGATION, MONITORING AND REPORTING MEASURES

The final rule includes detailed mitigation measures that must be implemented by Navy when conducting specified activities in the NAVSEA NUWC Keyport Range Complex. In addition, the final rule requires the Navy to implement extensive monitoring and reporting. 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 EIS/OEIS Preferred Alternatives. In addition, NMFS' final rule the requirements for Navy to implement an extensive monitoring and reporting program. In addition to the requirements that will be established in the rule and required of Navy, NMFS will conduct the following activities as part of the continuing MMPA implementation process:

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) for subsequent annual LOAs.

VI. CONCLUSIONS

Through the Final EIS 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 required under the final rule and LOAs. NMFS has also considered the public comments addressed to the Navy in the EIS and the comments addressed to NMFS during the proposed rule comment period. Consequently, NMFS has selected the alternative of issuing regulations and LOAs authorizing the unintentional harassment of marine mammals incidental to Navy activities in the NAVSEA NUWC Keyport Range Complex in accordance with the Preferred Alternatives of the Final EIS for the period January 2010 through January 2015, including in that regulation specified requirements for mitigation, monitoring and reporting.

Signed: _____ Date: 7/22/10

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