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MEMORANDUM FOR: The Record

FROM:  Helen M. Golde, Acting Director
Office of Protected Resources

SUBJECT: Adoption of the U.S. Navy's Final Environmental Impact Statement on *Trident Support Facilities Explosives Handling Wharf (EHW-2)* -- DECISION MEMORANDUM

I. Background

I.A. NMFS' Proposed Action

The National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) is proposing to issue an incidental harassment authorization (IHA) pursuant to Section 101(a)(5)(D) of the Marine Mammal Protection Act (MMPA) for the unintentional taking of marine mammals incidental to the U.S. Navy's (Navy) construction of an explosives handling wharf (EHW-2) within the Hood Canal, Washington for the period of July 16, 2012 through July 15, 2013. This IHA would authorize the incidental taking of marine mammals during the first year of construction activities associated with the wharf construction project.

Under the MMPA, the Secretary of Commerce shall allow the incidental taking of marine mammals if the Secretary finds that the total of such taking will have a negligible impact on the species or stock, and will not have an unmitigable adverse impact on the availability of the species or stock for subsistence uses, provided that methods of take from the specified activity and other means of effecting the least practicable adverse impact on the species or stock and its habitat are prescribed. In addition, requirements related to monitoring and reporting must be established.

In November 2011, NMFS received a complete application from the Navy requesting an IHA for the take of six species of marine mammals (three cetaceans and three pinnipeds) incidental to construction activities associated with EHW-2 at Naval Base Kitsap Bangor (NBKB). The Navy requested authorization to take individuals of six species of marine mammals by Level B harassment, as a result of sound produced by pile driving activities.

The IHA would allow for the incidental take of marine mammals during the described activities and specified timeframes, and would prescribe the permissible methods of taking and other means of effecting the least practicable adverse impact on marine mammal species and their habitat, as well as requirements pertaining to the monitoring and reporting of such taking.



NMFS' determinations under the MMPA were made after analyzing the Navy's proposed action, as presented in the Navy's Environmental Impact Statement (EIS) and application for an IHA.

I.B. U.S. Navy's Proposed Action

The Navy will begin construction of the EHW-2, which will require the installation of a maximum of 1,250 steel piles, although not all piles would be installed during the first year of construction. The Navy would conduct a maximum of 195 days of impact and vibratory pile driving under the proposed IHA.

I.C. Comparison of U.S. Navy's Proposed Action to NMFS' Proposed Action

NMFS' proposed action (issuance of an IHA) would authorize take of marine mammals incidental to a subset of the activities analyzed in the Navy's EIS that are anticipated to result in the take of marine mammals, i.e., pile driving activities. Thus, these components of the Navy's proposed action are the subject of NMFS' proposed MMPA regulatory action. The purely terrestrial activities described in the EIS are not a component of NMFS' proposed action. The Navy's EIS contains a thorough analysis of the environmental consequences of their proposed action on the human environment, including a specific section addressing the effects of underwater sound on marine mammals.

NMFS was a cooperating agency in the development of the Navy's EIS. This allowed NMFS to ensure that the necessary information and analyses were included in the Navy's EIS to support NMFS' proposed action and allow for consideration of adoption of the document for NMFS' NEPA purposes.

II. Alternatives and Impact Assessment

II.A. Summary of the Alternatives Considered by the Navy

Six Alternatives were evaluated in the Navy's EIS, including five Alternatives that analyzed different design options for the wharf and trestle components and the No Action Alternative. These are summarized below:

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. The No Action alternative was rejected as not meeting the purpose and need of the proposed action, because the Navy would not have the required facilities to perform routine operations and upgrades required to maintain the current fleet of TRIDENT submarines at NBKB.

Alternative 1 (Preferred Alternative) – Combined Trestle, Large Pile Wharf: Under this alternative, the access trestles would be combined over shallow water to reduce impacts to shallow-water habitat and resources. The wharf would be supported primarily on large (up to 48-in diameter) piles, along with some smaller (24-in diameter) piles.

Alternative 2 – Combined Trestle, Conventional Pile Wharf: This alternative would have the same combined trestles as Alternative 1, but would use a conventional pile wharf supported on a larger number of smaller (24- to 36-in diameter) piles than the Large Pile Wharf. Otherwise, the dimensions of the Conventional Pile Wharf would be the same as those of the Large Pile Wharf. Pile driving would take longer than for Alternative 1.

Alternative 3 – Separate Trestles, Large Pile Wharf: Unlike Alternatives 1 and 2, this alternative would have completely separate access trestles. As a result, there would be more trestle piles and overwater area, including more area over shallow water. This Large Pile Wharf would be the same as Alternative 1.

Alternative 4 – Separate Trestles, Conventional Pile Wharf: This alternative would have the same separate trestles as Alternative 3 and the same Conventional Pile Wharf as Alternative 2.

Alternative 5 – Combined Trestle, Floating Wharf: This alternative would employ a floating wharf rather than a pile-supported wharf. The wharf would be supported on large concrete pontoons and connected to mooring dolphins. This alternative would use combined trestles similar to Alternatives 1 and 2. The floating wharf would be larger than the pile-supported wharves. This alternative would entail considerably fewer piles than the other alternatives.

The following alternatives were considered by 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 Trestle Locations
 - Onshore Trestle Layout
 - Diagonal Trestle Layout
- Terminal Concept
- Other Options for Meeting TRIDENT Mission Requirements without Construction of EHW-2
- Locating EHW-2 at a Different Site
- Combining Trestles with Existing EHW

II.B. Summary of Alternatives Considered by NMFS

For all of the Navy alternatives identified above, the Navy includes an associated list of standard protective measures specifically developed to minimize adverse impacts on marine mammals. NMFS worked closely with the Navy throughout the development of the EIS to identify additional mitigation measures (for marine mammals) that the Navy should consider in their analysis. As a result of this interaction, the Navy discussed and considered additional mitigation measures in its EIS that will reduce impacts to marine mammals to the least practicable adverse impact. The inclusion of the analysis of these mitigation measures strengthens the EIS support and coverage of NMFS alternatives, which are listed below.

- NMFS would not issue an IHA to the Navy for the take of marine mammals incidental to activities described in the Navy's preferred alternative (for NMFS, this constitutes the NEPA-required No Action Alternative).
- NMFS issues an IHA authorizing take of marine mammals incidental to activities described in Navy's preferred alternative, with the mitigation, monitoring and reporting measures presented in the Navy's EIS.
- NMFS issues an IHA authorizing take of marine mammals incidental to activities described in Navy's preferred alternative, but with additional mitigation requirements for marine mammals, potentially including additional measures developed by NMFS or suggested to NMFS via public comment on the proposed IHA.

II.C. Environmental Consequences

The Navy's EIS analyzed the impacts to wildlife as well as impacts to humans, marine vegetation, essential fish habitat and benthic invertebrates and other environmental resources. All alternatives would have the same types of environmental impacts; the magnitude of these impacts would vary among the alternatives. The principal types of impacts during project construction would include pile driving noise (and its effects on marine biota), turbidity, and air pollutant emissions. In the long term, impacts would include loss and shading of marine habitat including eelgrass, macroalgae and the benthic community, and interference with the migration of juvenile salmon. All action alternatives may result in behavioral disturbance of marine mammals and bird species, although no injury is expected. Impacts occurring during the course of NMFS' proposed action (i.e., under a 1-year IHA) would be short term in nature (from July 16-February 15). NMFS' proposed action concerns only those activities occurring during the first year of construction and impacting the marine environment.

Of the three major environmental areas described in the Navy's EIS (i.e., marine, upland, and social), the marine environment is the most sensitive to disruptions and change and would be most impacted by the project. Some impacts incurred by construction of the EHW-2 would become permanent, such as loss of habitat from pile placement and shading of marine vegetation by the overwater structures. Other impacts would be temporary, such as high noise levels produced by pile driving, which would propagate both underwater and overwater. Pile driving would also displace sediment, which would cause temporary (on the order of minutes to hours) turbidity and localized changes in water chemistry. Thus, pile driving has the potential to impact fish, wildlife, and other biological organisms that live in or use the marine environment, as well as human activities such as fishing and recreation. Threatened and endangered species of salmon use the NBKB waterfront and would be affected by construction noise, loss of habitat, and the partial barrier-to-migration effect caused by the EHW-2. Marbled murrelets, another threatened species, as well as several species of marine mammals are present in the project area, and construction noise would adversely affect these species as well. Impacts from operational activities following completion of construction would not be appreciably different from existing conditions, and impacts to the marine environment would be negligible.

Impacts to the upland environment would be minimal except for temporary clearing of vegetation. The impacts to the social environment would include temporary impacts from construction noise and air emissions (dust), changes in visual conditions, substantial benefits to

the local economy from increased employment during construction, increased energy use, and increased upland and marine traffic.

The Navy's EIS, which assesses the environmental consequences of the total project (including construction of the entire wharf as well as long-term operations) rather than solely the activity that would occur under NMFS' proposed action, concludes the impacts associated with the Navy's proposed action would largely be minimal and temporary. Specifically, construction of the wharf would result in temporary and localized disturbances of bottom sediments, temporary and localized changes in water quality, small-scale changes in wave and current patterns, temporary increases in noise levels during construction, temporary disturbance of marine vegetation and benthic organisms in a localized area, temporary degradation of fish habitat, direct temporary impacts to marine mammals, fish, and birds due to construction noise, increased vessel traffic, and human activity, as well as indirect effects on those animals due to temporary degradation of prey species' habitat. Long-term impacts from wharf operations, as well as permanent impacts from wharf construction, would include small-scale changes in flow patterns and sediment distribution under the wharf, localized shading effects on marine vegetation from overwater structures, localized, and indirect effects on prey species due to changes in benthic habitat and barriers to migratory fish. Impacts from construction and operation may adversely affect salmonid and groundfish EFH, but would not adversely affect coastal pelagic EFH.

Socioeconomics, environmental justice, the protection of children and the regional economy would not be significantly impacted as a result of the proposed action. There will be no disproportionately high and adverse environmental, human health and socioeconomic effects to minority and low income populations, including Indian tribes. Recent and proposed projects at NBKB and other projects in northern Hood Canal were examined to determine possible cumulative impacts. Two of these projects, the EHW-1 Pile Replacement Project (ongoing rehabilitation of the existing EHW) and the Test Pile Program (completed in 2011) are geographically co-located, could be occurring during the same timeframes (the EHW-1 Pile Replacement Project) and also involve the use of pile driving. All resource areas analyzed in the Navy's EIS have been evaluated for cumulative impacts including past, present and reasonably foreseeable future actions. The analysis indicates that no significant cumulative impacts are anticipated for reasons of geographical distance, the relative scale of projects, and the nature and magnitude of specific impacts. The Navy's analysis indicates that the EHW-2 project would not result in significant impacts to the human environment; however, mitigation measures have been designed by the Navy and NMFS to further reduce project impacts to marine mammals and fish.

II.D. Scoping Process and Public Input Received

The Navy's scoping period began with the publication of a Notice of Intent in the *Federal Register* on May 15, 2009. The scoping period lasted 64 days, during which time the Navy held three public scoping meetings and received 156 public comments. The Navy's draft EIS was responsive to these comments, and was made available for public review and comment on March 18, 2011 through a Notice of Availability published in the *Federal Register*. On March 21, 2011, the Navy published a Notice of Public Hearings in the *Federal Register*, which provided a brief description of the proposed action and announced the dates and locations of the public hearings, locations of the information repositories, and comment submission information. On May 3, 2011,

the Navy published a Notice for the Extension of Public Comment Period in the *Federal Register*, announcing that the comment period would end on May 17, 2011. During the 60-day review period, the Navy held three public hearings and received 328 formal comments. Subsequently, the Navy made a supplement to the draft EIS publicly-available for a 45-day comment period. The final EIS incorporates additional environmental analysis in response to issues raised by the public, agencies, and tribes during these public review periods.

III. NMFS Review

The NMFS Office of Protected Resources has reviewed the Navy's EIS and concludes that the impacts evaluated by the Navy are substantially the same as the impacts of NOAA's proposed action to issue an IHA to the Navy. In addition, the Office of Protected Resources has evaluated the Navy's EIS and found that it includes all required components for adoption by NOAA:

- discussion of the purpose and need for the proposed action;
- summary of the EIS, including the issues to be resolved, and in the FEIS, the major conclusions and areas of controversy including those raised by the public;
- listing of the alternatives to the proposed action
- description of the affected environment;
- description of the environmental impacts of the proposed action and alternatives, including cumulative impacts; and
- listing of agencies and persons consulted, and to whom copies of the EIS are sent.

All NMFS comments on the EIS were accepted by Navy and included in the FEIS. As a result of this review, the Office of Protected Resources has determined that it is not necessary to prepare a separate Environmental Assessment or EIS to issue an IHA to the Navy and that adoption of the Navy's EIS is appropriate.

IV. Conclusion and Findings

NOAA's proposed action is to issue an IHA to the Navy for the incidental take of marine mammals, by Level B harassment only, related to the EHW-2 project. NMFS' issuance of the IHA is conditioned upon the implementation of mitigation and monitoring measures as described in the Navy's EIS and application.

These measures include timing restrictions, the establishment of shutdown and buffer zones around each driven pile, monitoring of the action area for marine mammals, and the use of sound attenuation devices.

Based on this review and analysis, NMFS' Office of Protected Resources has adopted the EIS under the Council on Environmental Quality's Regulations for Implementing the National Environmental Policy Act (40 CFR 1506.3).