FINDING OF NO SIGNIFICANT IMPACT
FOR THE ISSUANCE OF AN INCIDENTAL HARASSMENT AUTHORIZATION
TO THE OFFICE OF NAVAL RESEARCH TO TAKE MARINE MAMMALS BY HARASSMENT
INCIDENTAL TO ACOUSTIC TECHNOLOGY EXPERIMENTS
IN THE WESTERN NORTH PACIFIC OCEAN

NATIONAL MARINE FISHERIES SERVICE

BACKGROUND

The National Marine Fisheries Service (NMFS) received an application from the Office of Naval Research (ONR), for an Incidental Harassment Authorization (IHA) to take marine mammals, by Level B harassment, incidental to Acoustic Technology Experiments (ATE) in one of nine provinces comprising the western North Pacific Ocean. Pursuant to the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1631 *et seq.*), authorization for incidental taking shall be granted provided that NMFS: (1) determines that the action would have a negligible impact on the affected species or stocks of marine mammals; (2) finds the action would not have an unmitigable adverse impact on the availability of those species or stocks of marine mammals for taking for subsistence uses; and (3) sets forth the permissible methods of taking, other means of effecting the least practicable impact on affected species and stocks and their habitat, and requirements pertaining to the mitigation, monitoring, and reporting of such takes.

In accordance with the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*), NMFS completed an Environmental Assessment (EA) titled "*Issuance of an Incidental Harassment Authorization to the Office of Naval Research to Take Marine Mammals by Harassment Incidental to Acoustic Technology Experiments in the Western North Pacific Ocean.*"

NMFS has prepared this Finding of No Significant Impact (FONSI) to evaluate the significance of the impacts of NMFS' action. It is specific to Alternative 2 in the EA, identified as the Preferred Alternative. Under this alternative, NMFS would issue an IHA with required mitigation, monitoring, and reporting measures. Based on NMFS' review of ONR's proposed activities and the measures contained in Alternative 2, NMFS has determined that no significant impacts to the human environment would occur from implementing the Preferred Alternative.

ANALYSIS

NAO 216-6 contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 CFR § 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below this section is relevant to making a FONSI and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ's context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in Fishery Management Plans (FMP)?

Response: NMFS does not anticipate that either ONR's proposed action (i.e., ATE) or NMFS' proposed action (i.e., issuing an IHA to ONR) would cause substantial damage to ocean and coastal habitats. The proposed NMFS action would authorize Level B harassment of marine mammals, incidental acoustic activities occurring over a period of about 2 weeks in the western North Pacific Ocean.

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCA) governs marine fisheries management in waters within the U.S. Exclusive Economic Zone, and requires federal agencies to consult with NMFS with respect to actions that may adversely impact Essential Fish Habitat (EFH). Because the ATE would take place in international waters of the western North Pacific Ocean, ONR does not need to consult with NMFS and the proposed action would not have adverse impacts to EFH.

2) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predatorprey relationships, etc.)?

Response: NMFS does not expect either ONR's proposed action or NMFS' proposed action (i.e., issuing an IHA to ONR that authorizes Level B harassment) to have a substantial impact on biodiversity or ecosystem function within the affected environment. The proposed action area is used by marine mammals for opportunistic foraging but is not considered a primary foraging ground. Deployment and operation of the sound sources would result in no physical alterations to the marine environment other than addition of elevated underwater sound levels, which may some temporary effect on marine mammals. The acoustic and oceanographic instrumentation that would be deployed operates in accordance with all applicable international rules and regulations related to environmental compliance, especially for discharge of potentially hazardous materials. No discharges of pollutants would result from the deployment and operation of the acoustic and oceanographic instruments and systems.

3) Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?

Response: NMFS does not expect either ONR's proposed action or NMFS' proposed action (i.e., issuing an IHA to ONR) to have a substantial adverse impact on public health or safety. The proposed action would occur in international waters of the western North Pacific Ocean, away from coastlines and human presence. Although research activities may carry some risk to the personnel involved (e.g., mechanical accidents), the applicant and those individuals working with the applicant would be required to be adequately trained or supervised in performance of the underlying activity to minimize such risk to personnel.

4) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species?

Response: The EA evaluates the affected environment and potential effects of NMFS' (i.e.,

issuing an IHA to ONR) and ONR's (i.e. ATE) actions, indicating that only the acoustic activities have the potential to affect marine mammals in a way that requires authorization under the MMPA. These temporary acoustic activities would not affect physical habitat features, such as substrates and water quality.

NMFS has determined that the proposed activity may result in some Level B harassment (in the form of short-term and localized changes in behavior), relative to the population sizes, of 34 species of marine mammals, eight of which are listed under the Endangered Species Act (ESA; 16 U.S.C. 1531 *et seq.*). Effects to EFH were addressed in question 1 and there is no designated critical habitat in the proposed action area. The Biological Opinion for this action concluded that the action is not likely to jeopardize the continued existence of ESA-listed marine mammals.

The following mitigation measures are planned for the proposed action to minimize adverse effects to protected species:

(1) vessel movement away from marine mammals;
(2) mitigation zone;
(3) delay and shutdown procedures;
(4) vessel-based visual monitoring; and
(5) passive acoustic monitoring.

Taking these measures into consideration, responses of marine mammals from the preferred alternative are expected to be limited to temporary avoidance of the area around the sound source and short-term behavioral changes, falling within the MMPA definition of "Level B harassment."

NMFS does not anticipate that marine mammal take by injury (Level A harassment), serious injury, or mortality would occur and expects that harassment takes would be at the lowest level practicable due to the incorporation of the mitigation measures required by the IHA. The take is anticipated to have a negligible impact on any species or stock. The impacts of the proposed action on marine mammals are specifically related to acoustic activities, and these are expected to be temporary in nature, negligible, and would not result in substantial impact to marine mammals or to their role in the ecosystem.

5) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: The primary impacts to the natural and physical environment are expected to be acoustic and temporary in nature (and not significant), and not interrelated with significant social or economic impacts. Issuance of the IHA would not result in inequitable distributions of environmental burdens or access to environmental goods.

NMFS has determined that issuance of the IHA would not adversely affect low-income or minority populations. Further, there would be no impact of the activity on the availability of the species or stocks of marine mammals for subsistence uses. Therefore, no significant social or economic effects are expected to result from issuance of the IHA or the proposed action.

6) Are the effects on the quality of the human environment likely to be highly controversial?

Response: The effects of this action on the quality of the human environment, that is, NMFS' issuance of an IHA for the take of marine mammals incidental to ATE, are not highly controversial. Specifically, there is not a substantial dispute about the size, nature, or effect of potential impacts from NMFS's proposed action or ONR's proposed action.

7) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas?

Response: Issuance of the IHA is not expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas as it would only authorize harassment to marine mammals. The action area does not contain, and is not adjacent to, areas of notable visual, scenic, historic, or aesthetic resources that would be substantially impacted.

8) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: The potential risks of active acoustic operations are not unique or unknown, nor is there significant uncertainty about impacts. NMFS has issued numerous IHAs for similar activities and conducted NEPA analysis on those projects. Each of these projects required marine mammal monitoring and monitoring reports have been reviewed by NMFS to ensure that activities have a negligible impact on marine mammals. In no case have impacts to marine mammals, as determined from monitoring reports, exceeded NMFS' analysis under the MMPA and NEPA. Therefore, the effects on the human environment are not likely to be highly uncertain or involve unique or unknown risks.

9) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

Response: Issuance of an IHA to ONR is not related to other actions with individually insignificant, but cumulatively significant impacts. Any other future authorizations will have to undergo the same permitting process and will take ONR's ATE into consideration when addressing cumulative effects. Should NMFS receive an application from applicants requesting authorization to take marine mammals incidental to specified activities in the action area, NMFS would also consider cumulative impacts to the affected species or stock, as required under NEPA.

10) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?

Response: The proposed action would not take place in any areas listed in or eligible for listing in the National Register of Historic Places and would not cause loss or destruction of significant scientific, cultural, or historical resources, as none exist within the action area.

11) Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?

Response: The proposed action cannot be reasonably expected to result in the introduction or spread of a non-indigenous species. The proposed action would take place in accordance with all applicable international rules and regulations related to environmental compliance.

12) Is the proposed action likely to establish a precedent for future actions with significant effects or does it represent a decision in principle about a future consideration?

Response: The proposed action would not set a precedent for future actions with significant effects or represent a decision in principle. Each MMPA authorization applied for under 101(a)(5) must contain information identified in NMFS' implementing regulations with no exceptions. NMFS considers each activity specified in an application separately and, if it issues an IHA to the applicant, NMFS must determine that the impacts from the specified activity would result in a negligible impact to the affected species or stocks.

NMFS has issued many authorizations for similar activities. A finding of no significant impact for this action, and for NMFS's issuance of an IHA, may inform the environmental review for future projects but would not establish a precedent or represent a decision in principle about a future consideration.

13) Can the proposed action reasonably be expected to threaten a violation of any Federal, State, or local law or requirements imposed for the protection of the environment?

Response: Issuance of the proposed IHA would not result in any violation of federal, state, or local laws for environmental protection. The applicant consulted with the appropriate federal, state, and local agencies during the application process and would be required to follow associated laws as a condition of the IHA.

14) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: The proposed action does not target any marine species and is not expected to result in any individual, long-term, or cumulative adverse effects. NMFS has determined that marine mammals may exhibit temporary behavioral changes such as avoidance of or changes in foraging patterns within the action area. However, NMFS does not expect the authorized harassment to result in significant cumulative adverse effects on the affected species or stocks or their prey.

Other activities in the area with incidental take authorizations include: the Navy's use of mid- and high-frequency active sonar and detonation of underwater explosives in the Hawaii Range Complex; the Navy's use of mid- and high-frequency active sonar and detonation of underwater explosives in the Mariana Islands Range Complex; the Navy's operations of Surveillance Towed Array Sensor System Low-frequency Active (SURTASS LFA) sonar; and Scripps Institution of Oceanography's low-energy marine geophysical survey. The seismic survey activities would not overlap in time with ONR's proposed action. Considering the expanse of the western North Pacific Ocean, the short duration of the ATE (2 weeks), and the fact that the proposed action would take place miles away from fishing grounds, commercial shipping lanes, ports, and other anthropogenic activities, ONR's proposed action is not likely to add an increment of disturbance which would cumulatively, when combined with other actions, result in significant adverse impacts to marine

mammals.

DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting EA titled "*Issuance of an Incidental Harassment Authorization to the Office of Naval Research to Take Marine Mammals by Harassment Incidental to Acoustic Technology Experiments in the Western North Pacific Ocean.*" and documents that it references, NMFS has determined that issuance of an IHA to ONR for the take, by Level B harassment only, of marine mammals incidental to conducting active acoustic operations in the western North Pacific Ocean in accordance with Alternative 2 in NMFS' 2013 EA would not significantly impact the quality of the human environment, as described in this FONSI and in the EA.

In addition, all beneficial and adverse impacts of the action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an Environmental Impact Statement for this action is not necessary. The EA thereby provides a supporting analysis for this FONSI.

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5.10.13
Date