

**Finding of No Significant Impact
on Issuance of an Incidental Harassment Authorization to the U.S. Air Force 86 Fighter
Weapons Squadron for
Take of Marine Mammals Incidental to the Long Range Strike Weapons Systems
Evaluation Program**

National Marine Fisheries Service

BACKGROUND

The National Oceanic Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS) proposes to issue an Incidental Harassment Authorization (IHA) to the U.S. Air Force 86 Fighter Weapons Squadron (86 FWS) 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). This IHA will be valid from October 1, 2016 through November 30, 2016 and authorizes takes, by Level A and Level B harassment, of marine mammals incidental to the Long Range Strike Weapons System Evaluations Program (LRS WSEP) in the Barking Sands Underwater Range Expansion (BSURE) area of the Pacific Missile Range Facility (PMRF), Kauai, Hawaii.

NMFS's proposed action is a direct outcome of the 86 FWS's request for an IHA for LRS WSEP activities, which involves munition strikes and detonation effects (overpressure and acoustic components). These types of activities have the potential to cause marine mammals in the vicinity of the project area to be behaviorally disturbed and/or have temporary threshold shifts (TTS), therefore, qualifies for a permit from NMFS. NMFS's criteria for an IHA requires that the taking of marine mammals authorized by an IHA will have a negligible impact on the species or stock(s), and, where relevant, will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses. In addition, the IHA must set forth, where applicable, the permissible methods of taking, other means of effecting the least practicable adverse impact on the species or stock and its habitat, and requirements pertaining to the monitoring and reporting of such takings.

The NDAA of 2004 (Public Law 108–136) removed the “small numbers” and “specified geographical region” limitations indicated earlier and amended 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 issuance of an IHA to the 86 FWS allows the taking of marine mammals, consistent with provisions under MMPA, and is considered a major federal action under the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321 *et seq.*). Therefore, we prepared this Finding of No Significant Impact (FONSI) to evaluate the significance of the impacts associated

with NMFS's issuance of an IHA. The preparation of this FONSI was completed in accordance with NEPA and the Council on Environmental Quality (CEQ) regulations in 40 CFR §§ 1500-1508.

ANALYSIS

The Council on Environmental Quality (CEQ) regulations at 40 C.F.R. § 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below is relevant to making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of NMFS's proposed action is analyzed based on 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 (EFH) as defined under the Magnuson-Stevens Act and identified in Fishery Management Plans (FMPs)?*

The LRS WSEP activities are of short-term duration and will involve surface detonations of up to one missile and eight bombs on one day.

The area encompassed by the 86 FWS's proposed action is within designated EFH and FEP for several species. The WPRFMC (Western Pacific Regional Fishery Management Council) has recently shifted toward an ecosystem-based approach, focusing fishery management activities on geographic areas that support various habitats and their associated species complexes rather than on individual species. Accordingly, the WPRFMC is in the process of replacing FMPs with Fishery Ecosystem Plans (FEPs). Five FEPs have been completed. FEPs associated with resources in the study area include the Hawaii Archipelago FEP and the Pacific Pelagic Fisheries FEP. The Hawaii Archipelago FEP does not establish new fishery management regulations but rather consolidates existing regulations contained in previous FMPs. The FEP identifies all demersal species (living on or near the seafloor) known to occur around the Hawaii Archipelago, designates them as one management unit, and incorporates all management provisions of the previous Bottomfish and Seamount Groundfish FMPs. The FEP also incorporates provisions of the previous Crustaceans, Precious Corals, and Coral Reef Ecosystems FMPs that are applicable to the area. EFH management units presently include bottomfish species (deep-slope and seamount species complexes consisting of snappers, groupers, jacks, pelagic armorhead, ratfish, and other similar taxa); crustaceans (spiny and slipper lobster species complex, deepwater shrimps, and Kona crab [*Ranina ranina*]); precious corals (non-reef-building corals occurring below the euphotic zone, historically important in the jewelry trade); and coral reef ecosystems (separate designations for currently harvested and potentially harvested coral taxa).

86 FWS's LRS WSEP missions in the BSURE area could potentially impact EFH by alteration of water quality through introduction of metals and chemical materials. Explosion byproducts, petroleum products, and battery acid deposited in the water or on substrates could have temporary and localized effects but would be quickly dispersed and diluted by water currents. Metals, explosives associated with unexploded ordnances (UXO), and plastics could be present at the mission site for long time periods, but effects to the water column would be limited to a small area around such items. Solid items could become corroded, encrusted, or covered with sediment, and constituents of unconsumed explosives would be subject to several physical,

chemical, and biological processes that render the materials harmless or would otherwise dissipate them to undetectable levels.

Physical disturbance of the water column would be temporary and would not alter the water in any measurable or lasting manner. However, effects to EFH from NMFS's proposed authorization is expected to be temporary and minor. Therefore, NMFS has preliminarily determined authorizing take of marine mammals incidental to 86 FWS's LRS WSEP activities in the BUSRE area would not have an adverse impact on EFH and an EFH consultation is not required.

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, predator-prey relationships, etc.)?*

The authorization of marine mammal take incidental to the LRS WSEP activities will not have a substantial impact on biodiversity or ecosystem function. The 86 FWS's activities may temporarily impact ecosystem function by i) temporarily creating elevated levels of underwater sound, thereby disturbing forage fish; ii) changes to the water environment from the explosion on the surface of the water and the release of fuel, debris, ordnance, and chemical materials into the water column. Release of these materials is expected to be inconsequential since they will be in small amounts and would naturally degrade. Therefore, the impacts to the area would be minor and temporary in nature.

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

The proposed action is not expected to result in any impacts related to public health and safety. All missions would be conducted in accordance with applicable flight safety, hazard area, and launch parameter requirements established for PMRF. A weapon hazard region would be established, with the size and shape determined by the maximum distance a weapon could travel in any direction during its descent. The hazard area is typically adjusted for potential wind speed and direction, resulting in a maximum composite safety footprint for each mission (each footprint boundary is at least 10 nm from the Kauai coastline). This information is used to establish a Launch Exclusion Area and Aircraft Hazard Area. These exclusion areas must be verified to be clear of all non-mission and non-essential vessels and aircraft before live weapons are released. In addition, a buffer area must also be clear on the water surface so that vessels do not enter the exclusion area during the launch window. Prior to weapon release, a range sweep of the hazard area would be conducted. The Range Facility Control Officer is responsible for establishing hazard clearance areas, directing clearance and surveillance assets, and reporting range status to the Operations Conductor. The Control Officer will submit all Notice to Airmen (NOTAMs) and Notice to Mariners (NOTMARs), and request all Federal Aviation Administration airspace clearances. The proposed action would not result in significant adverse impacts to health and safety.

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?*

Endangered or threatened fish, turtle, and marine mammal species may occur in the general vicinity of the LRS WSEP activities, but are not anticipated to be adversely impacted. The proposed action – NMFS’s authorization of incidental marine mammal take – is not expected to have a significant adverse impact on endangered or threatened species. There are several marine mammal species under NMFS’s jurisdiction listed as endangered under the Endangered Species Act (ESA) in the waters of Hawaii; however, none of these species are likely to occur in the project area during the time of year when mission activities are to occur. No incidental take of these species are authorized under the Marine Mammal Protection Act or exempted under the ESA. Humpback whales were listed as endangered under the ESA in 1973. NMFS evaluated the status of this population, and on September 8, 2016, NMFS divided the globally listed humpback whale into 14 distinct population segment (DPS), removed the current species-level listing, and in its place listed four DPSs as endangered and one DPS as threatened (81 FR 62259). The remaining nine DPSs were not listed because it was determined that they are not threatened or endangered under the ESA. The Hawaiian DPS of humpback whales, which would be present in the action area, was not listed under the ESA in NMFS’s final rule. Marine mammals that may be affected by the project activities are dwarf sperm whale (*Kogia sima*), pygmy sperm whale (*Kogia breviceps*), Fraser’s dolphin (*Lagenodelphis hosei*), minke whale (*Balaenoptera acutorostrata*), and humpback whale (*Megaptera novaeangliae*) which are all protected under the MMPA. Adverse effects are expected to be in the form of harassment, and take has been requested under the IHA for these species.

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

The proposed action will not have any social or environmental impacts. The impacts resulting from NMFS’ authorization of marine mammal take incidental to the LRS WSEP activities will be limited to temporary behavioral harassment or TTS of four species of marine mammals, and PTS of one species. No social or economic impacts will be associated with this authorization.

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

NMFS’s issuance of an IHA will not have effects on the human environment that are likely to be highly controversial. There is not substantial debate over the proposed action’s size, nature, or effect, nor is there such debate over the underlying action (the 86 FWS LRS WSEP activities). Due to the limited duration and intensity of the project, and the implementation of appropriate mitigation and monitoring measures, there will not be significant impacts to natural resources in the project area. During the public comment period on the proposed IHA, NMFS only received comments from the Marine Mammal Commission and two private citizens, which did not indicate that the environmental effects of NMFS’s action were likely to be highly controversial.

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?*

Since the activities are of short duration (approximately four hours), public recreational uses that may occur in the action area, will only be temporarily affected. Traditional resources would not be impacted. The LRS WSEP activities will occur 44 nm (81.5 km) offshore from Kauai, away from any structures, and will not significantly degrade the existing environment. No other unique characteristics of the geographic area are known. NMFS's issuance of an IHA would not result in substantial impacts to any such places. NMFS's proposed action will not adversely affect that habitat area.

8. *Are the proposed action's effects on the human environment likely to be highly uncertain or involve unique or unknown risks?*

The effects of the 86 FWS's proposed action are primarily related to munition strikes and detonation effects (overpressure and acoustic components). The implementation of mitigation and monitoring measures included in NMFS's IHA will ensure that no marine mammals are injured or killed, and that impacts to marine mammals are limited to temporary behavioral harassment, TTS, and potentially PTS. Monitoring of marine mammals that are behaviorally harassed, as well as numerous documented accounts of marine mammal behavior before, during, and after behavioral harassment, demonstrates that behavioral harassment of limited duration will not result in any permanent changes to the manner in which marine mammals utilize the vicinity of the activities. While NMFS's judgments on impact thresholds are based on somewhat limited data, enough is known for NMFS and the regulated entity (here the 86 FWS) to develop precautionary monitoring and mitigation measures to minimize the potential for significant impacts on biological resources. As such, the effects of NMFS's issuance of an IHA are not highly uncertain, and the action does not involve unique or unknown risks.

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

NMFS's issuance of an IHA is not related to other actions that have occurred in the BSURE area of PMRF. The environmental impacts of the proposed LRS WSEP activities may result in only temporary changes to the noise environment and water quality. While there may be a chance that the combination of the past, current, and proposed activities may impact these stocks of marine mammals, there is limited potential for the temporary impacts from the proposed action to affect resources to interact in cumulatively significant ways with impacts from these other actions.

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 (NRHP) or may cause loss or destruction of significant scientific, cultural, or historical resources?*

No structures eligible for the NRHP will be affected by the proposed action. No submerged archaeological sites are expected to occur in the project area. Traditional resources would not be impacted. Potential impacts to cultural resources are considered to be negligible or non-existent.

11. *Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?*

Neither the proposed action nor the underlying 86 FWS action is expected to result in the spread of any nonindigenous species. Sufficient precautionary measures will be taken by the 86 FWS to ensure that no introduction or spread of such species occurs.

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

The 86 FWS may have additional future projects in the BSURE area in PMRF that involve surface detonations. However, subsequent applications for incidental take authorizations will be independently analyzed on the basis of the best scientific information available. A finding of no significant impact for the LRS WSEP project, 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 Federal, state, or local law or requirements imposed for the protection of the environment?

The proposed action – NMFS's issuance of an IHA – is conducted in conformance with the MMPA. NMFS has made all appropriate determinations under other applicable statutes, and NMFS's action will not violate any laws or requirements. The 86 FWS's LRS WSEP activities in the BSURE area in PMRF may require issuance of more than one permit. The 86 FWS is pursuing all required permits; each agency will review the 86 FWS's action as appropriate to ensure that no federal, state, or local laws or requirements will be violated.

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?

NMFS' issuance of an IHA is specifically designed to reduce the effects of the 86 FWS LRS WSEP activities to the least practicable impact to marine mammals, through the inclusion of appropriate mitigation and monitoring measures. The issuance of an IHA does not result in significant cumulative impacts when considered with all other past, present, and reasonably foreseeable projects.

Similarly, the cumulative effects of the 86 FWS's activities and other past, present, and reasonably foreseeable activities are not considered significant. Specifically, the 86 FWS's proposed action is likely to result in no more than temporary changes to the noise environment and water quality. Therefore, there is limited potential for those effects to interact cumulatively with the effects of other past, present, and reasonably foreseeable projects. The Cumulative Impacts section of NMFS's EA addresses this topic in greater detail.

Implementation of the proposed action, in conjunction with other past, present, and reasonably foreseeable future actions, would not be expected to result in significant cumulative impacts to the environment. As such, the proposed action will not result in cumulative adverse effects that could have a substantial effect on species in the action area.

DETERMINATION

In view of the information presented in this document, the 86 FWS's application and the analysis contained in our Final EA, it is hereby determined the issuance of an IHA to 86 FWS would not significantly affect the quality of the human. In addition, we have addressed all beneficial and adverse impacts of the action to reach the conclusion of no significant impacts.

Donna S. Wieting
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Date