Final Designation of Critical Habitat for the Endangered Main Hawaiian Islands Insular False Killer Whale Distinct Population Segment

Final ESA Section 4(b)(2) Report (To accompany the Final Rule)

Prepared by:
National Marine Fisheries Service
Protected Resources Division
Pacific Islands Regional Office
1845 Wasp Blvd., Building 176
Honolulu, HI 96818

March 2018

U.S. Department of Commerce
National Oceanic and Atmospheric Administration

Table of Contents

List of Figures

List of Tables

List of Acronyms

CHRT	Critical Habitat Review Team
BARSTUR	Barking Sands Tactical Underwater Range
BSURE	Barking Sands Underwater Range Extension
DPS	Distinct Population Segment
DOD	Department of Defense
ESA	Endangered Species Act
FORACS	Fleet Operational Readiness Accuracy Check Site
FWS	Fighter Weapon Squadron
IFKW	Insular False Killer Whale
INRMP	Integrated Natural Resources Management Plan
JBPHH	Joint Base Pearl Harbor-Hickam
LRS	Long Range Strike
MHI	Main Hawaiian Islands
NDSA	Naval Defensive Sea Area
NMFS	National Marine Fisheries Service
PIRO	Pacific Islands Regional Office
PMRF	Pacific Missile Range Facility
SESEF	Shipboard Electronic Systems Evaluation Facility
SWTR	Shallow Water Training Range
W-	Warning Area
WSEP	Weapon System Evaluation Program

BACKGROUND AND SUMMARY

Purpose and Structure of the Report

This report contains the National Marine Fisheries Service (NMFS), Pacific Islands Regional Office (PIRO) recommendations for critical habitat under section 4 of the Endangered Species Act (ESA), for the main Hawaiian Islands (MHI) insular false killer whale (IFKW) distinct population segment (DPS), which was listed under the ESA on December 28, 2012 (77 FR 70915; November 28, 2012). This report documents NMFS' compliance with section 4(b)(2) of the ESA regarding the impacts of designating critical habitat for the MHI IFKW DPS. The report also describes the process followed, methods used, and conclusions reached for each step leading to the critical habitat designation along with the applicable laws, court rulings, executive orders, and policies.

We considered 24 particular areas for exclusion, each of which is discussed in this report. One area was considered for exclusion based on economic impacts and 23 were considered for exclusion based on national security impacts. Based on the considerations of economic and national security impacts of the proposed critical habitat designation, we recommend excluding the following 14 particular areas (one area, with two sites, for the Bureau of Ocean Energy Management (BOEM) and 13 areas requested by the Navy) from the areas considered for critical habitat: (1) the BOEM Call Area offshore of the Island of Oahu (which includes two sites, one off Kaena point and one off the south shore); (2) the Navy Pacific Missile Range Facility's Offshore ranges (including the Shallow Water Training Range (SWTR), the Barking Sands Tactical Underwater Range (BARSTUR), and the Barking Sands Underwater Range Extension (BSURE; west of Kauai); (3) the Navy Kingfisher Range (northeast of Niihau); (4) Warning Area 188 (west of Kauai); (5) Kaula Island and Warning Area 187 (surrounding Kaula Island); (6) the Navy Fleet Operational Readiness Accuracy Check Site (FORACS) (west of Oahu); (7) the Navy Shipboard Electronic Systems Evaluation Facility (SESEF) (west of Oahu); (8) Warning Areas 196 and 191 (south of Oahu); (9) Warning Areas 193 and 194 (south of Oahu); (10) the Kaulakahi Channel portion of Warning area 186 (the channel between Niihau and Kauai and extending east); (11) the area north and offshore of Molokai, (12) the Alenuihaha Channel, (13) the Hawaii Area Tracking System, and (14) the Kahoolawe Training Minefield.

In addition, the Ewa Training Minefield and the Naval Defensive Sea Area are precluded from designation under section 4(a)(3) of the ESA because they are managed under the Joint Base Pearl Harbor Hickam Integrated Natural Resource Management Plan that we find provides a benefit to the MHI IFKW.

Background

On November 28, 2012, NMFS published a final rule listing the MHI IFKW DPS under the ESA (77 FR 70915). The ESA requires NMFS to designate critical habitat (within the U.S.) for threatened and endangered species, to the maximum extent prudent and determinable (16 U.S.C. 1533). In considering information that would support this

designation, NMFS reviewed available information on false killer whales including, but not limited to, the following: recent satellite tracking information, peer-reviewed literature, NMFS' status review for false killer whales (Oleson *et al.* 2010), information considered in the proposed and final listing rules for the MHI IFKW DPS (75 FR 70169, November 17, 2010; and 77 FR 70915, November 28, 2012), and information received from a Recovery Planning Threats Workshop for MHI IFKWs held on October 25-28, 2016. NMFS also convened a Critical Habitat Review Team (CHRT) consisting of five NMFS staff members with experience working on issues related to MHI IFKWs and Hawaii's pelagic ecosystem (see the Final Biological Report for more information, NMFS 2018).

The CHRT identified one area as including the features essential to the conservation of the MHI IFKW DPS; this area ranges from the 45-m depth contour to the 3,200-m depth contour in waters that surround the main Hawaiian Islands from Niihau east to Hawaii (see Figure 1). Subsequent sections of this report will provide information about the process NMFS used to identify those areas meeting the definition of MHI IFKW critical habitat, and the process used to analyze the impacts of designating those areas in accordance with 4(b)(2) of the ESA. Additional information regarding MHI IFKW life history and status, and the determination of essential features and specific areas identified may be found in the Biological Report (NMFS 2018).

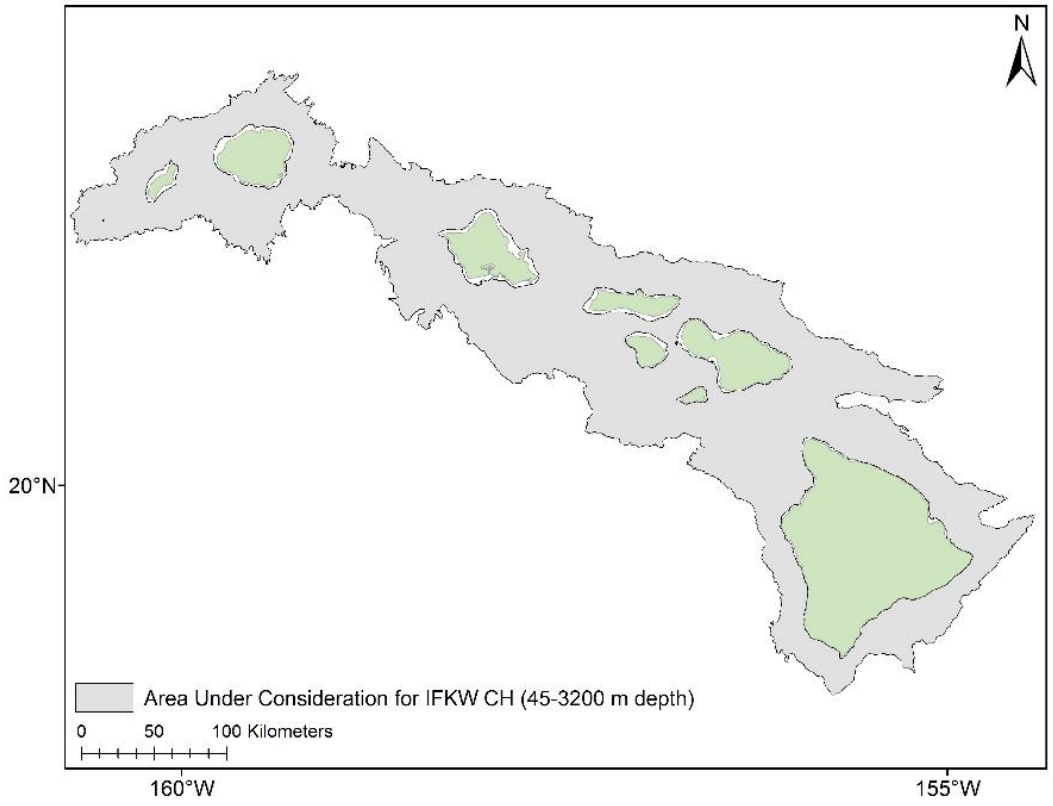

Figure 1. Area considered for MHI IFKW Critical Habitat (final designation maps can be found at the end of this report).

I. Statute and Regulations

We developed our recommendations consistent with statutory requirements and agency regulations, which are summarized below.

Findings and purposes of the ESA emphasize habitat conservation

In section 1 of the ESA, "Findings," (16 U.S.C. 1531 (a)(1)) Congress declared the following:

> "Various species of fish, wildlife and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation."

Section 2 of the ESA sets forth the purposes of the statute, beginning with habitat protection:

> "The purposes of this chapter are to provide a means whereby *the ecosystems upon which endangered species and threatened species depend may be conserved*, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section. [Emphasis added]"

"Critical Habitat" is specifically defined

Section 3(5)(A) of the ESA (16 U.S.C. 1532 (5)) defines critical habitat as follows:

> (5)(A) "The term 'critical habitat' for a threatened or endangered species means –
>
> (i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 1533 of this title, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and
>
> (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 1533 of this title, upon a determination by the Secretary that such areas are essential for the conservation of the species."

(B) “Critical habitat may be established for those species now listed as threatened or endangered species for which no critical habitat has heretofore been established as set forth in subparagraph (A) of this paragraph.”

(C) “Except in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species.”

“Conservation” is specifically defined

Section 3(3) of the ESA defines conservation (16 U.S.C. 1532(3)):

> “(3) The terms "conserve", "conserving", and "conservation" mean to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary.”

Specific information required for making designations and revisions

Section 4(a)(3) of the ESA requires NMFS to make critical habitat designations concurrently with the listing determination, to the maximum extent prudent and determinable, and goes on to describe how designations may be revised as appropriate:

> “(3) The Secretary, by regulation promulgated in accordance with subsection (b) of this section and to the maximum extent prudent and determinable -
> (A) shall, concurrently with making a determination under paragraph (1) that a species is an endangered species or a threatened species, designate any habitat of such species which is then considered to be critical habitat; and
> (B) may, from time-to-time thereafter as appropriate, revise such designation.”

Impacts of Designation Must be Considered and Areas May Be Excluded

Specific areas that fall within the definition of critical habitat are not automatically designated as critical habitat. Section 4(b)(2) (16 U.S.C. 1533(b)(1)(A)) requires the Secretary to first consider the impact of designation and permits the Secretary to exclude areas from designation under certain circumstances. Exclusion is not required for any areas.

> “The Secretary shall designate critical habitat, and make revisions thereto, under subsection (a)(3) of this section on the basis of the best scientific data available and after taking into consideration the economic impact, the impact to national security and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and

commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned."

Federal Agencies Must Insure Their Actions Are Not Likely to Destroy or Adversely Modify Critical Habitat

The regulatory intent of critical habitat is realized through section 7(a)(2) of the ESA. This section requires federal agencies to insure any actions they authorize, fund or carry out are not likely to result in the destruction or adverse modification of designated critical habitat (16 U.S.C. 1536(a)(2)). Section 7 also requires federal agencies to insure such actions are not likely to jeopardize the continued existence of the listed species:

> "Each federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available."

Authority to designate critical habitat is delegated to NMFS

The authority to designate critical habitat, including the authority to consider the impacts of designation, weigh the benefits of exclusion against the benefits of designation, and exclude particular areas, has been delegated to the Assistant Administrator of the NMFS (Department Organization Order 10-15 (5/24/04). NOAA Organization Handbook, Transmittal #34, May 31, 1993).

Approach to the designation

Based on this statutory direction and our discretion on whether to enter into a section 4(b)(2) exclusion analysis, our approach to designation included the following steps:

1) Identify specific areas eligible for critical habitat designation
    a. Identify areas meeting the definition of critical habitat.
    b. Identify military areas ineligible for designation.
2) Determine the impacts of designation
3) Conduct an ESA section 4(b)(2) analysis:
    a. Determine the benefits of designation.
    b. Determine the benefits of exclusion.
    c. Determine whether benefits of exclusion of any particular area outweigh benefits of designation, and recommend exclusion if appropriate.

Identify Areas Meeting the Definition of Critical Habitat

Areas that meet the ESA definition of critical habitat include specific areas

1) within the geographical area occupied by the species at the time of listing, if they contain physical or biological features essential to conservation of the species, and those features may require special management considerations or protection; and
2) outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation of the species.

To identify these specific areas, a CHRT was convened. The CHRT consisted of five biologists with experience working on issues related to MHI IFKWs and Hawaii's pelagic ecosystem. The CHRT identified one specific area that meets the definition of critical habitat for this DPS. This specific area ranges from the 45-m depth contour to the 3,200-m depth contour in waters that surround the main Hawaiian Islands from Niihau east to Hawaii (see Figure 1). The CHRT analysis and conclusions regarding how this specific area meets the definition of critical habitat, and may therefore be eligible for designation, is documented in a separate Final Biological Report (NMFS 2018), below we provide a summary.

Geographical Area Occupied by the Species

Pursuant to section 3(5)(A), the CHRT's first task was to determine "the geographical area occupied by the DPS at the time of listing." The CHRT identified that at the time of listing the range of the MHI IFKW DPS was conservatively estimated to extend from nearshore of the MHI out to 140 km (approximately 75 nautical miles) consistent with the description of the range for this population in NMFS 2012 Stock Assessment Report (SAR) (Carretta *et al.* 2013). However, new satellite-tracking data have improved NMFS' understanding of this DPS' habitat use and the range of this population was revised in NMFS' 2015 SAR (in accordance with a review and reevaluation of satellite tracking data by Bradford *et al.* (2015)) (Carretta *et al.* 2016) (see Figure 2). The CHRT agreed that the revised range in the 2015 SAR (established in Bradford *et al.* (2015)) provides the best available information to describe the areas occupied by this DPS at the time of listing, because this revised range includes all locations that tagged animals have visited in Hawaii's surrounding waters and accommodates for uncertainty in the data (limited data from certain months of the year and limited data from certain social clusters). Accordingly, areas considered for this designation that met the definition of the geographical area occupied by the DPS were limited to the range described in Bradford *et al.* (2015) and established for this population in the 2015 SAR (Carretta *et al.* 2016), as seen in Figure 2 (below).

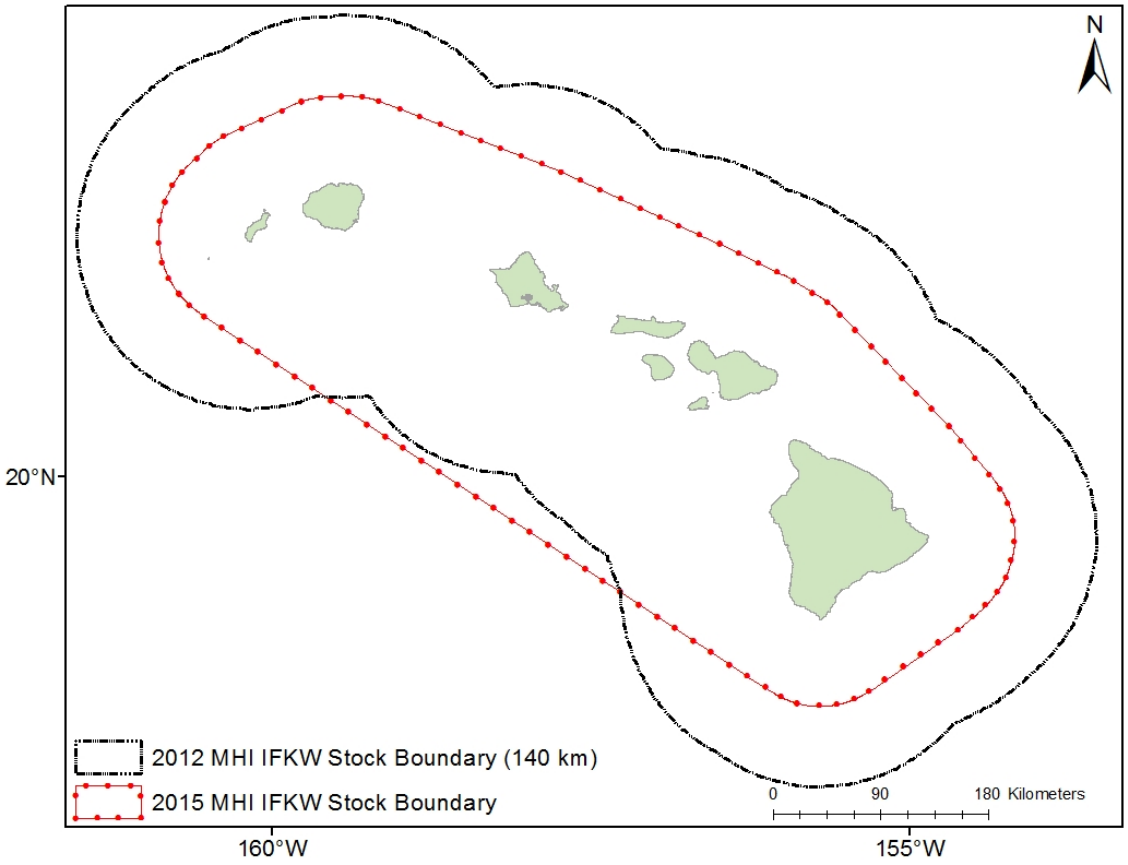

Figure 2. Range of the MHI IFKW as described in the 2012 and 2015 SARs (the MHI IFK range was revised in the 2015 SAR in accordance with Bradford et al. 2015).

Physical or Biological Features Essential to Conservation of MHI IFKWs

The CHRT determined the physical or biological features essential to the conservation of the MHI IFKW DPS based on their biology and life history (NMFS 2018).

Based on the best available scientific information, the following feature and associated characteristics were identified as essential for the conservation of the Hawaiian IFKW DPS:

Island-associated marine habitat for MHI insular false killer whales, which includes

a. Adequate space for movement and use within shelf and slope habitat;
b. Prey species of sufficient quantity, quality, and availability to support individual growth, reproduction, and development, as well as overall population growth;
c. Waters free of pollutants of a type and amount harmful to MHI IFKWs; and
d. Sound levels that would not significantly impair false killer whales' use or occupancy.

Full descriptions of the above essential features can be found in the Final Biological Report (NMFS 2018) which is available at the PIRO Web site:http://www.fpir.noaa.gov/PRD/prd_mhi_false_killer_whale.html#fwk_esa_listing.

"Specific Areas" Within the Occupied Geographical Area

One area was identified as including the essential features for the MHI IFKW DPS. This area ranges from the 45-m depth contour to the 3,200-m depth contour in waters that surround the main Hawaiian Islands from Niihau east to Hawaii (see Figure 1). To be eligible for designation as critical habitat under the ESA's definition of occupied areas, each specific area must contain at least one essential feature that may require special management considerations or protection. To meet this standard, the CHRT concluded that false killer whale satellite tracking data would provide the best available information to identify habitat use patterns by these whales and to recognize where the physical and biological feature (essential to their conservation) exist. Cascadia Research Collective provided access to MHI IFKW satellite tracking data for the purposes of identifying critical habitat for this DPS for the proposed and final rule. Due to the unique ecology of this island-associated population, habitat use is largely driven by depth. Thus, the feature essential to the species' conservation is found in those depths that allow the whales to travel throughout a majority of their range seeking food, and that provide opportunities to socialize and reproduce.

Because MHI IFKW individuals are generally found in deeper water offshore, the CHRT reviewed MHI IFKW satellite-tag location data and selected an inner boundary for this designation at the 45-m depth contour. This depth represents a point in the data where the frequency of MHI IFKW satellite-tag locations increase and appear to show more consistent use of deeper depths. The 3,200-m depth boundary was found to best align with the span of habitat used on the leeward and windward sides of the islands, allowed for ample space for these whales to move among areas of concentrated or high-use, and included habitat across the core portions of the range (see *Movement and Habitat Use*, and *Pubic Comments from the 2017 Proposed Rule* in the Final Biological Report (NMFS 2018)). The full range of depths - from the 45-m to the 3,200-m depth contours - incorporates a majority of the tracking locations of MHI IFKW (approximately 90 percent), and includes the feature and characteristics essential to the conservation of the MHI IFKWS DPS. This area considered for critical habitat includes 56,821 km^2 (21,933 mi^2) or about 30 percent of the MHI IFKW DPS' range.

Further information regarding MHI IFKW distribution may be found in the Final Biological Report (NMFS 2018). The boundaries chosen to define the specific area represent the best estimate of the areas necessary for the MHI IFKW DPS to seek food, and that provide opportunities to socialize and reproduce.

Special Management Considerations or Protection

An occupied specific area may be designated as critical habitat if it contains essential features that "may require special management considerations or protection." Joint NMFS and United State Fish and Wildlife Service (50 CFR 424.02) regulations define "special management considerations or protection" to mean "methods or procedures useful in protecting the physical or biological features essential to the conservation of listed species." In determining whether an area has essential features that may require special management considerations or protection, the Services do not base their decision on whether management is currently in place or whether that management is adequate.

We identified a number of activities that may threaten the identified essential feature, and characteristics, using past consultation history in the Hawaiian Islands, and available scientific and commercial knowledge regarding potential impacts to these features. We grouped these activities into activity types as follows: (1) in-water construction (including dredging); (2) energy development (including renewable energy projects); (3) activities that affect water quality; (4) aquaculture/mariculture; (5) fisheries; (6) environmental restoration and response activities (to oil spills, vessel groundings response, and marine debris clean-up activities); and (7) military activities. All of these activities may have an effect on one or more characteristics of the essential feature by altering the quantity, quality or availability of the feature that supports MHI IFKW critical habitat . The Final Biological Report (NMFS 2018) and the Final Economic Report (Cardno 2018) provide a description of the potential effects of each category of activities on the essential features.

Unoccupied Areas

Section 3(5)(A)(ii) of the ESA authorizes the designation of "specific areas outside the geographical area occupied at the time [the species] is listed" if these areas are essential for the conservation of the species. At the present time, we have not identified any unoccupied areas for designation.

Certain Military Lands are Precluded from Designation

In 2003 Congress amended section 4(a)(3)(B)(i) of the ESA to limit the designation of critical habitat on land controlled by the Department of Defense (DOD) (National Defense Authorization Act, P.L. No. 108-136):

> "The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation."

Regulations at 50 CFR 424.12(h) provide that in determining whether an applicable benefit is provided by a "compliant or operational" plan, NMFS will consider

(1) The extent of the area and features present;
(2) The type and frequency of use of the area by the species;
(3) The relevant elements of the INRMP in terms of management objectives, activities covered, and best management practices, and the certainty that the relevant elements will be implemented; and
(4) The degree to which the relevant elements of the INRMP will protect the habitat from the types of effects that would be addressed through a destruction-or-adverse-modification analysis.

As described above, these amendments to the ESA preclude the Secretary from designating military lands as critical habitat if those lands are subject to an Integrated Natural Resources Management Plan (INRMP) under the Sikes Act and the Secretary certifies in writing that the plan provides a benefit to the listed species (Section 4(a)(3), Public Law. No. 108-136). NMFS can find that an INRMP provides a benefit to a species where, as here, the species is not directly addressed in the INRMP. In these cases, we consider adaptive conservation management for the features essential to the conservation of the species (i.e., its habitat features) or the species itself either directly or indirectly. We also consider whether adaptive conservation management measures are effective and reasonably certain to be implemented.

The JBPHH INRMP overlaps with the areas considered for critical habitat in two areas (see Figure 3), the Naval Defensive Sea Area and the Ewa Training Minefield, which include approximately 27 km2 (~10 mi2) of area or approximately 0.5 percent of the areas considered for critical habitat. Based on our review of relevant data, including supplemental satellite-tracking information from Cascadia Research Collective (3 new animals), we consider these areas to be low-use (low-density) areas for MHI IFKWs, and that they travel through these areas at moderate levels (see Figure 4). We therefore consider these areas to be of low to moderate conservation value to MHI IFKWs in comparison to other areas meeting the definition of MHI IFKW critical habitat.

NMFS contacted DOD in May 2017 to help identify INRMPs that overlap with areas considered for critical habitat. The Navy's Joint Base Pearl Harbor-Hickam (JBPHH) INRMP was the only plan that overlaps with some of the area considered for MHI IFKW critical habitat. The JBPHH INRMP currently does not incorporate conservation measures that are specific to MHI IFKWs, as this DPS was listed in 2012 after this INRMP was drafted. The JBPHH INRMPwas compliant through the end of 2017; and although its five-year review as to operation and effect is late, the INRMP remains funded and effective. The Navy continues to implement and report on conservation measures outlined in it and is currently reviewing and updating the JBPHH INRMP with a goal of finishing in December 2018.

The Navy outlined several elements of the 2011 INRMP that were implanted or are ongoing and may benefit the MHI IFKW and their habitat (with the characteristic of the essential element that is addressed):

- fishing restrictions adjacent to and within areas that overlap the potential designation (prey),
- creel surveys that provide information about fisheries in unrestricted areas of Pearl Harbor (prey),
- restrictions on free roaming cats and dogs in residential areas, feral animal removal (water free of pollutants),
- participation in the Toxoplasmosis and At-large Cat Technical Working Group (which focuses on providing technical information to support policy decisions to address the effects of toxoplasmosis on protected wildlife and provides education and outreach materials on the impacts that free-roaming cats have on Hawaii's environment) (waters free of pollutants),
- efforts taken to prevent and reduce the spread of biotoxins and contaminants from Navy lands (including best management practices, monitoring for contamination, restoration of sediments, and spill prevention) (waters free of pollutants),
- a Stormwater Management Plan and a Stormwater Pollution Control Plan associated with their National Pollutant Discharge Elimination System (waters free of pollutants), and
- coastal wetland habitat restoration projects (waters free of pollutants) (DoN 2017a).

Although the 2011 JBPHH INRMP does not specifically address the MHI IFKW, we agree that several of the above measures support the protection of the MHI IFKW and the physical and biological features identified for this designation. We find the Navy's efforts focused on preventing the spread of toxoplasmosis, biotoxins, and other contaminants to the marine environment provides protections for MHI IFKW water quality, and addresses threats identified in our Final Biological Report (NMFS 2018). Specifically, the Navy's efforts that focused on preventing the spread of toxoplasmosis, biotoxins, and other contaminants to the marine environment provide protections for MHI IFKW water quality and address threats to this feature characteristic; these threats are identified in our Final Biological Report (NMFS 2018). Additionally, the Navy's active participation as a member of the Toxoplasmosis and At-Large Cat Technical Working Group helps address conservation issues for JBPHH and elsewhere. We find that measures taken to improve water quality, including restoration projects and pollution prevention plans, directly improve or maintain the water quality characteristic of MHI IFKW critical habitat and may provide ancillary benefits to MHI IFKW prey that also rely on these marine ecosystems. Additionally, fishery restrictions in the NDSA and Ewa Training Minefield provide protections to fish resources in the surrounding areas and within the limited overlap area.

Some of the protections associated with the management of stormwater and pollution address effects that would otherwise be addressed through an adverse modification analysis (provided they are not already addressed through baseline protections). Other conservation measures associated with preventing the spread of toxoplasmosis to the marine environment or that enhance quantity or quality of prey, address effects to MHI IFKW habitat that otherwise may not be subject to a section 7 consultation or an adverse

modification analysis. In these instances, the Navy's INRMP provides protections aligned with 7(a)(1) of the ESA, which instructs federal agencies to aid in the conservation of listed species.

In continued coordination with the Navy, the revised JBPHH INRMP will include information about the endangered MHI IFKW DPS, where their range overlaps with the areas managed by the base, information about the threats to these whales, and references to standard operating procedures used by the Pacific Fleet to minimize impacts to marine mammals, including MHI IFKWs. The Navy is also investing significant effort into understanding baseline conditions of the Pearl Harbor Watershed with the hope of partnering with others to conduct projects that lessen the effects of hardened shorelines and increase the water quality of this watershed (pers. communication Navy staff, S. Hanser and C. Campora, and NMFS staff I. Lundgren March 2018). Continued efforts towards these goals will also support the prey and water free of pollutants characteristics of MHI IFKW habitat.

As part of an adaptive management approach for this INRMP, NMFS staff participates in JBPHH INRMP annual reviews to provide recommendations about plan implementation and effectiveness and to receive information about upcoming plan amendments. These reviews help ensure that the plan provides an effective mechanism for addressing MHI IFKW conservation within areas managed under the JBPHH INRMP. Specifically, the reviews provide a reliable method for feedback, regular assurances that the above-described conservation measures are being implemented, and a procedure for assessing and modifying measures to ensure conservation effectiveness.

Although not essential to our determination that the JBPHH INRMP provides a benefit to the MHI IFKW, we also take into consideration additional future measures that the Navy plans to include in updates to the INRMP by December 2018. These expected additional measures include (1) specific information about MHI IFKWs, (2) where MHI IFKWs may be found in areas managed by the installation, (3) new projects associated with watershed enhancement, and (4) mandatory mitigation measures already used by the Pacific Fleet to minimize impacts to MHI IFKWs as they use these areas. Procedural mitigation measures are mandatory activity-specific measures taken to avoid or reduce the potential impacts on biological resources from stressors, including those that may cause acoustic or physical disturbance to marine mammals during Navy training and testing. These procedural measures are required in the Navy's Protective Measures Assessment Protocol consistent with letters of authorization for training activities issued under the MMPA and supporting ESA analyses. Procedural mitigation measures are adaptively managed as new information becomes available about effective mitigation techniques and are identified in the current Hawaii-Southern California Training and Testing Final Environmental Impact Statement. Examples of measures include training personnel to spot and identify marine mammals (lookouts), reporting requirements for trained lookouts, and halt or maneuvering requirements when marine mammals are spotted within identified mitigation zones of Navy activities (DON 2017c). Although not restricted to the JBPHH areas, these mandatory mitigation measures help ensure that the

Navy will avoid or reduce the impacts from acoustic stressors on MHI IKFWs as the INRMP is updated by December 2018. Additionally, continued efforts towards these goals will also support the prey and water free of pollutants characteristics of MHI IFKW habitat.

After consideration of the above factors, we determined that the Navy's JBPHH INRMP provides a benefit to the MHI IFKW and its habitat. In accordance with 4(a)(3)(B)(i) of the ESA, areas managed under this INRMP are not eligible for the designation of MHI IFKW critical habitat. Therefore, the Ewa Training Minefield and the Naval Defense Sea Area, both found south of Oahu, are not eligible for designation (see Figure 3).

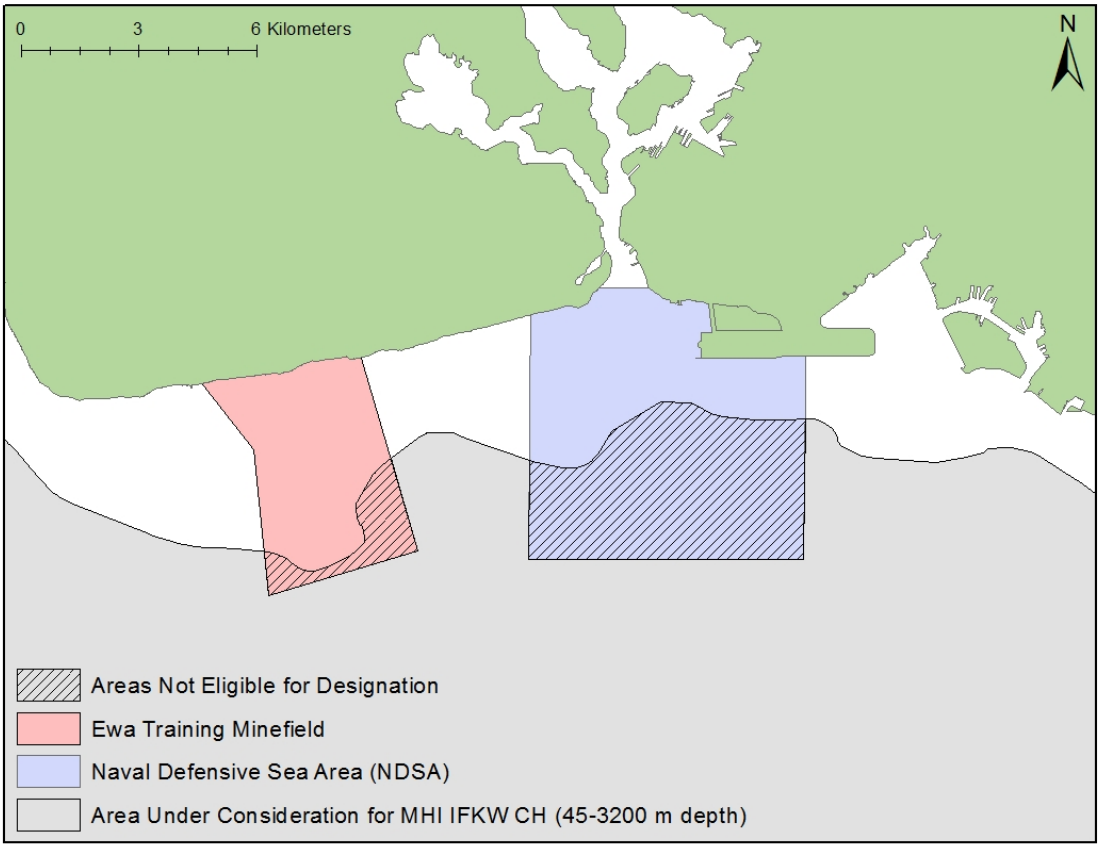

Figure 3. JBPHH INRMP areas that overlap with the areas considered for MHI IFKW Critical Habitat and that are not eligible for designation.

II. Conduct a Section 4(b)(2) Analysis

Section 4(b)(2) of the ESA requires us to use the best scientific information available in designating critical habitat. It also provides that before we designate any "particular area," we are to consider the economic impact, national security impact, and any other relevant impact. Once impacts are determined, the agency has the discretion to weigh the

benefits of excluding any particular area (that is, avoiding the economic, national security or other costs) against the benefits of designating it (that is, the conservation benefits to the species). If the agency concludes that the benefits of the exclusion outweigh the benefits of designation, it has discretion to exclude (i.e., "may exclude"), so long as exclusion will not result in extinction of the species.

Identify "Particular" Areas

The first step in conducting the ESA section 4(b)(2) analysis is to identify the "particular areas" to be analyzed. The "particular areas" considered for exclusion are defined based on the impacts identified. As only one specific area is considered for designation, where we considered economic impacts and weighed the economic benefits of exclusion against the conservation benefits of designation, we selected particular areas identified in the Economic Report (Cardno 2018), where economic impacts were noted to be administrative costs of section 7 consultation for non-federal entities. Within these areas, where the costs of designation may be higher than the cost of administrative efforts, we reviewed MHI IFKW use of the habitat, the existing baseline protections that may protect that habitat, and how essential features may be affected by activities that occur in these areas to most effectively consider the conservation value of the designation. We also considered exclusions based on impacts to national security for 15 particular areas identified by and used for training by the DOD. We did not identify other relevant impacts that would require exclusion consideration for the proposed designation, and solicited additional information through the proposed rule public comment process. We received no additional information about other relevant impacts through public comment process.

Determine Incremental Impacts

Section 4(b)(2) of the ESA provides that the Secretary shall consider "the economic impact, impact to national security, and any other relevant impact of specifying any particular area as critical habitat." The primary impact of a critical habitat designation stems from the requirement under section 7(a)(2) of the ESA that federal agencies insure that their actions are not likely to result in the destruction or adverse modification of critical habitat. Determining this impact is complicated by the fact that section 7(a)(2) contains the associated requirement that federal agencies must also insure their actions are not likely to jeopardize the species' [in this case the DPS'] continued existence. The true impact of this designation is the extent to which federal agencies modify their actions to ensure their actions are not likely to destroy or adversely modify the critical habitat of the DPS, beyond any modifications they would make because of the DPS' listing and the jeopardy requirement. Additional impacts of designation include state and local protections that may be triggered as a result of the designation and the benefits from educating the public about the importance of each area for species conservation. Thus, the impacts (costs and benefits) of the designation include conservation impacts for MHI IFKWs and their habitat, economic impacts, impacts on national security, and other relevant impacts that may result from the designation and the application of ESA section 7(a)(2).

In the analysis of economic impacts (see the Final Economic Report (Cardno 2018)), we attempted to estimate and analyze the incremental economic impacts of designation beyond the impacts that would result from the species' listing and the section 7 consultation under the jeopardy clause, consistent with 50 CFR 424.19. This is also consistent with OMB's 2003 guidelines directing federal agencies to measure the costs of the regulatory action against a baseline, which it defines as "best assessment of the way the world would look absent the proposed action." Uncertainties exist, however, with regard to future management actions associated with MHI IFKW critical habitat; specifically, protections provided under the listing of the species, as well as some existing federal, state, and local regulations, may overlap some with protections that have been identified with the designation of critical habitat. While these overlaps do exist, we acknowledge that the additional consideration of essential features at these sites involves an additional layer of analysis, and the potential for more stringent management efforts that have not yet been realized in the consultation process thus far. Due to these uncertainties, it was difficult to exclude all potential impacts that may be required under the baseline (i.e., protections already afforded MHI IFKWs under its listing, or under other federal, state, and local regulations). The Final Economic Analysis Report (Cardno 2018) describes in more detail the types of activities that may be affected by the designation, the potential range of changes we might seek in those actions, and the estimated relative level of economic impacts that might result from administrative costs of such changes. Our considerations of these economic impacts are described in the next three sections of this report.

Once we determined the impacts of the designation, we then determined the benefits of designation and the benefits of exclusion. The benefits of designation include the conservation benefits for MHI IFKWs and their habitat that result from the critical habitat designation and the application of ESA section 7(a)(2). The benefits of exclusion include the economic impacts, national security impacts, and other relevant impacts of the designation that would be avoided if a particular area were excluded from the critical habitat designation. The following sections describe how we determined the benefits of designation and the benefits of exclusion and how these benefits were considered, as required under section 4(b)(2) of the ESA, to identify particular areas that may be eligible for exclusion from the designation. We also summarize the results of this consideration process and determinations on the areas that may be eligible for exclusion.

Determine the Benefits of Designation

The primary benefit of designation is the protection afforded under section 7 of the ESA, requiring all federal agencies to ensure their actions are not likely to destroy or adversely modify designated critical habitat. This is in addition to the requirement that all federal agencies ensure their actions are not likely to jeopardize the continued existence of the species. The designation is also expected to provide educational and awareness benefits to federal, state and local planning agencies engaged in protecting Hawaii's natural resources.

In addition to the protections described above, Chapter 13 of the Final Economic Report (Cardno 2018) discusses other forms of benefits that may be attributed to the designation, including but not limited to, use benefits, and non-use or passive use benefits. Direct use benefits include positive changes that protections associated with the designation may provide for resource users such as increased fishery resources, sustained or enhanced aesthetic appeal in ocean areas, or wildlife-viewing opportunities. Additionally, indirect use benefits are described as those experienced by nearby resource users, such as enhanced water or prey quality in nearshore areas that may be in some part attributable to the designation (Cardno 2018). Non-use or passive benefits include among others existence, bequest, and cultural values (Cardno 2018). Chapter 13 of the Final Economic Report (Cardno 2018) provides additional information about these types of values.

As discussed earlier in this report, the ESA focuses on habitat as a fundamental tool in recovery of a species. By identifying the essential features that are described in the ESA as "essential to the conservation" of the DPS, we are in turn identifying those features without which conservation of the DPS would not be possible. This designation of MHI IFKW critical habitat would incorporate habitat within the DPS' range containing features that are essential for conservation (i.e., survival and recovery). Thus, by designating critical habitat and preventing adverse modification throughout these areas, we seek to provide the potential for recovery of MHI IFKWs, the benefits of which would be realized in the potential future increase in abundance and successful conservation of the DPS. It is difficult to assess the expected benefit that MHI IFKW critical habitat is likely to have on recovery of the species. This is in part because we are unable to isolate and quantify the effect that the designation would have on recovery separate from all other ongoing or planned conservation efforts for the MHI IFKW DPS. Additionally, it is difficult to accurately predict the future harm to the habitat that would have otherwise been realized without the protections associated with critical habitat.

The designation of critical habitat is also expected to provide educational and outreach benefits by informing both the entities engaged in section 7 consultations, and the general public about the status of MHI IFKWs, including the areas and features (or habitat) important to the DPS' conservation. The introduction of this information provides potential for increased education and awareness. Potential benefits from this educational awareness may be attained if parties engage in activities to benefit the DPS or the essential features that they were made aware of through the critical habitat designation process. Additional benefits of the designation may be reflected in the overall value that people place on the conservation of MHI IFKWs.

The benefits described here are not directly comparable to the costs of designation for purposes of conducting the section 4(b)(2) analysis described below. Ideally, benefits and costs should be compared on equal terms in the same units (e.g., dollars to dollars); however, there is insufficient information regarding the extent of the benefits and the associated values to monetize all of these benefits. For instance, we have not identified any available data to monetize the benefits of designation. This is in part because we

cannot accurately determine the incremental benefits that a critical habitat designation may have on MHI IFKW recovery separate from other existing or future conservation efforts. Given the lack of information that would allow us either to quantify or monetize the benefits of the designation for MHI IFKWs discussed above, we determined that conservation benefits should be considered from a qualitative stand point.

In determining the benefits of designation, we considered a number of factors. We took into account MHI IFKW use of the habitat, the existing baseline protections that may protect that habitat regardless of designation, and how essential features may be affected by activities that occur in these areas if critical habitat were not designated to provide an understanding of the importance of protecting the habitat for the overall conservation of the DPS.

We relied on density analysis of satellite-tracking data as well as an analysis of travel throughout the areas to provide information about MHI IFKW habitat use (Figure 4). The descriptions of "MHI IFKW habitat use" provided in the sections below describe habitat in terms of high and low-use areas using the density analysis described in Baird *et al.* (2012) as well as a description of how these areas may be used for travel. Cascadia Research Collective supplied satellite-tracking information to support NMFS' determination of this critical habitat designation for the proposed and final rule. For the proposed rule, density analysis of data received included information from 27 tagged individuals (18 from Cluster 1, 1 from Cluster 2, 7 from Cluster 3, and 1 from Cluster 4) (Baird pers. communication June 2017). For the final rule (and this report), data from a total of 30 tagged individuals (2 additional animals from cluster 1 and 1 additional animal from cluster 4) was used to inform the analyses (Baird pers. communication January 2018). High-use areas denote areas where satellite-tracking information indicates concentrated use by MHI IFKWs. High – moderate travel areas provide further understanding about areas that may more frequently support travel. The conservation value for high-use and high-traveled areas is inferred to be higher than low-use and low-traveled areas of the range; however, all areas support the essential features and meet the definition of critical habitat for this DPS. As noted in the Final Biological Report (NMFS 2018), there is limited representation of some social clusters in the tracking data, and information is limited during certain months of the year. Accordingly, the available satellite-tracking information may not be fully representative of MHI IFKW's habitat use. While describing MHI IFKW use for the exclusion of some particular areas, we provide additional information that may supplement our current understanding of MHI IFKW habitat use patterns (e.g., observational data from boat surveys). In these instances, we describe how this information may enhance our understanding of the conservation value of the area. Generally, we describe high-use areas as indicating areas of higher conservation value where greater foraging and/or reproductive opportunities are believed to exist. Additionally high-moderate travel areas indicate areas of concentrated travel and may represent areas of enhanced conservation value over strictly low-use areas. However, within a restricted range, low-use and low-traveled areas continue to offer essential features and may provide unique opportunities for foraging as oceanic conditions vary seasonally or temporally.

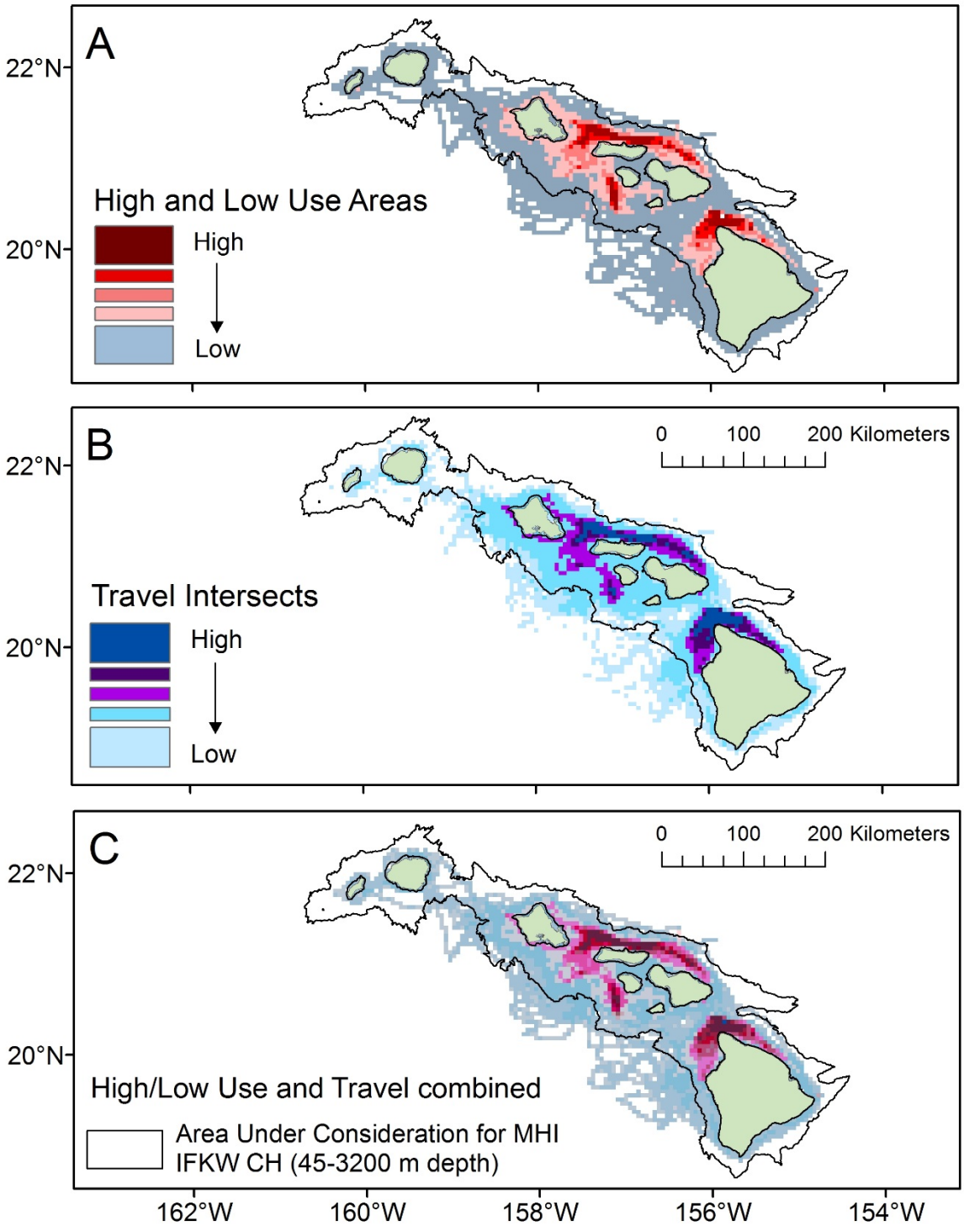

Figure 4. MHI IFKW high use areas by all four clusters representing 30 satellite-tagged individuals through August 2017; Cluster 1 (n=20), cluster 2 (n=1), cluster 3 (n=7), and cluster 4 (n=2). Data provided by Cascadia Research Collective. Density analysis methodology described in Baird *et al.* 2012. See the Final Biological Report for more information (NMFS 2018).

Determine the Benefits of Exclusion Based on Economic Impacts

To determine the economic benefits of excluding particular areas from designation, the Final Economic Report (Cardno 2018) considered the federal activities that may be subject to a section 7 consultation and the range of potential changes that may be required for each of these activities under the adverse modification provision. Where possible, the analysis focused on changes beyond those impacts that result from the listing of the species or are established within the environmental baseline. However, as discussed above, the report acknowledges that some existing protections to prevent species jeopardy are likely to overlap with those protections that may be put in place to prevent adverse modification (Cardno 2018). The project modification impacts represent the benefits of excluding each particular area (that is, the impacts that would be avoided if an area were excluded from the designation).

Federal activities that occur within the specific area and that may affect the MHI IFKW critical habitat were identified in the Final Economic Report (Cardno 2018) using PIRO's records of section 7 consultations within the MHI. From the consultation history, we were able to identify projects considered under the jeopardy provision of the ESA and occurring in the developed MHI. Using these sources and relying on NMFS' experience and professional judgment in conducting section 7 consultations, the federal activities that might trigger section 7 consultations were identified in the Special Management Considerations or Protection section of this report. These include (1) in-water construction (including dredging); (2) energy development (including renewable energy projects); (3) activities that affect water quality; (4) aquaculture/mariculture; (5) fisheries; (6) environmental restoration and response activities (to oil spills, vessel groundings response, and marine debris clean-up activities); and (7) military activities. The identification of these activities and the associated threats are further discussed in the Final Biological Report (NMFS 2018) and the Final Economic Report (Cardno 2018).

The range of modifications that may be sought to avoid destruction or adverse modification of critical habitat of the MHI IFKW were identified for the affected activities. The baseline level of protection afforded MHI IFKWs by activity type were also identified. The Final Economic Report (Cardno 2018) estimates the impacts based on activities that are considered reasonably foreseeable, which includes activities that are currently authorized, permitted, or funded, or for which proposed plans are currently available to the public. Projections were evaluated for the next ten-year period. They relied upon NMFS' records of section 7 consultations to estimate the average number of projects that were likely to occur within the specific area (i.e., projections were also based on past numbers of consultations) and/or to determine the level of consultation (formal, informal) that would be necessary based on the described activity.

The Final Economic Report (Cardno 2018) identifies the total estimated present value of the quantified impacts in addition to those consultation costs resulting from the listing of the species to be between approximately $196,000 to $213,000 dollars over the next ten years. On an annualized undiscounted basis, the impacts are equivalent to $19,600 to $21,300 dollars per year. These impacts only include additional administrative effort to

consider critical habitat in section 7 consultations for the 7 activities identified under Special Management Considerations or Protection. Across the MHI, economic impacts are expected to be small and largely associated with the administrative costs borne by federal agencies. However, private energy developers may also bear the administrative costs of consultation for large energy projects; these costs are estimated between 0-3,000 dollars over the next ten years (Cardno 2018).

Table 1. Summary of Economic Impacts (from 2018-2027 undiscounted).

Sector	Sub-sector	Brief Description	Entities Bearing the Cost	Costs Low	Costs High
In-water Construction	Dredging and dredging disposal	Section 7 consultations - Timeline assumes 1 formal consultation over the 10-year period.	NMFS and ACOE	$5,000	$5,000
In-water Construction	Buoys, Moorings, and FADs	Section 7 consultations - Timeline assumes 6 informal consultations and 3 technical assistances over the 10-year period.	NMFS and ACOE	$17,000	$17,000
In-water Construction	Cable Laying	Section 7 consultations - Timeline assumes 11 informal consultations and 1 technical assistance over the 10-year period.	NMFS and ACOE	$29,000	$29,000
Military Activities	Department of Defense (Hawaii Range Complex)	Section 7 consultations - Timeline assumes 3 formal and 2 informal consultations over the 10-year period. The 3 formal consults are expected every 5 years given that the HI-SOCAL Training and Testing EIS is consistently re-evaluated.	NMFS and DoD (Navy)	$26,000	$26,000
Military Activities	U.S. Coast Guard	Section 7 consultations - Timeline assumes 2 informal consultations over the 10-year period.	NMFS and USCG	$11,000	$11,000
Energy Development	Wind Energy	Section 7 consultations - Timeline assumes 3 formal consultations over the 10-year period, one for each of the three proposed offshore wind energy development projects.	NMFS, BOEM, and Project Developer(s) (applicants)	$0	$16,000
Aquaculture	Offshore Aquaculture	Section 7 consultations - Timeline assumes 7 informal consultations over the 10-year period.	NMFS, NMFS-SFD (as an action agency), and ACOE	$18,000	$18,000
Fisheries	Not applicable (NA)	Section 7 consultations - Timeline assumes 6 formal and 17 informal consultations over the 10-year period. Three of the formal consultations are re-initiations of consultations for each of the three-fisheries that have a federal nexus.	NMFS and NMFS-SFD (as an action agency)	$90,000	$90,000
TOTAL	NA	NA	NA	**$196,000**	**$196,000**

*This table only reflects quantified impacts of the designation and does not take into account those impacts that are uncertain as acknowledged in the Final Economic Report (Cardno 2018).

Both the Final Biological Report and the Final Economic Report recognize that some of the future impacts of the designation are difficult to predict (NMFS 2018, Cardno 2018). Currently, federal fishery management modifications to avoid adverse modification are not expected, because current management regimes appear sufficient to address any indirect impacts that federal longline fisheries or the bottomfish fishery may have on MHI IFKW prey species. Although considered unlikely, NMFS cannot rule out future management measures as more information is gained about foraging ecology, or as we gain a better understanding of the relative importance of certain prey species to the health and recovery of a larger MHI IFKW population. Similarly, modifications to water quality standards were not predicted as a result of this designation; however, future modifications were not ruled out, because future revised management measures could result as more information is gained about how pollutants may result in impacts to MHI IFKW critical habitat.

In summary, economic impacts from the designation are largely attributed to the administrative costs of consultations. Generally, the quantified economic impacts for this designation are relatively low, because in Hawaii most projects that would require section 7 consultation occur on or nearshore and would not overlap the designation. Projects with a federal nexus (i.e., funded, authorized, or carried out by a federal agency) that occur in deeper waters are already consulted on under section 7 to ensure that activities are not likely to jeopardize MHI IFKWs, and throughout the specific areas, activities of concern are already subject to multiple environmental laws, regulations, and permits which afford the essential features a high level of baseline protections. Despite these protections, significant uncertainty remains regarding the true extent of the impacts that some activities like fishing and activities affecting water quality may have on the essential features, and economic impacts of the designation may not be fully realized. Because the economic impacts of these activities are largely speculative, we lack sufficient information with which to balance them against the benefits of designation.

Exclusions Based on Economics

The Final Economic Report (Cardno 2018) found that costs attributed to this designation are largely administrative in nature and that a majority of those costs are borne by federal agencies, with only a small cost of consultation (approximately 3,000 dollars over the next ten years) borne by non-federal entities. Consistent with the unique obligations that Congress imposed for federal agencies in conserving endangered and threatened species and our joint policy with U.S. Fish and Wildlife (81 FR 7226; February 11, 2016), we do not consider the federal administrative costs associated with the consultation process as a "benefit" for the purposes of excluding any particular areas. Rather, we only consider costs of consultation borne by non-federal entities to be a benefit of exclusion. Our economic analysis identified that costs to non-federal entities are associated with three potential wind-energy projects in two sites off Oahu, referred to as the BOEM Call Area offshore the island of Oahu, Hawaii (Cardno 2018). This currently includes an area off Kaena point and off the south shore of Oahu (81 FR 41335; June 24, 2016; see Figure 5),

BOEM provided comments on our proposed rule indicating their appreciation for the proposed BOEM Call Area exclusion. The Navy submitted comments on the proposed rule noting that, while they support the exclusion of areas suitable for renewable energy development, portions of the currently identified BOEM Call Areas are not suitable for renewable energy development due to national security concerns. In support of identifying areas for renewable energy development, the Navy completed an assessment of areas (see http://greenfleet.dodlive.mil/rsc/department-of-the-navy-hawaii-offshore-wind-compatibility/) around Oahu noting wind farms areas that are not compatible with military activities and identifying only small sections of the two sites that are compatible (DON 2016). However, BOEM has not revised the Call Area boundaries as a result of the Navy's assessment and we have not been advised of any planned revisions.

In determining the economic costs of this designation, we rely on the best available information to identify where economic costs are likely to occur. The two sites noticed as the BOEM Call Area remain significant in meeting Hawaii's renewable energy goals as these sites have been identified as areas where wind resources, water depth, and proximity to shore are favorable for wind-energy development (81 FR 41335; June 24, 2016). Given that the boundaries of these two sites have not been revised and that the sites are noted as significant for energy development, our exclusion analysis is based on the areas of the current BOEM Call Area (as published in 81 FR 41335; June 24, 2016). Because the economic costs were attributed to both sites combined (Cardno 2018), we considered these sites in combination for exclusion. Specifically, we considered whether the benefits of exclusion (the economic impacts) outweigh the benefits of designation for the entire Call Area.

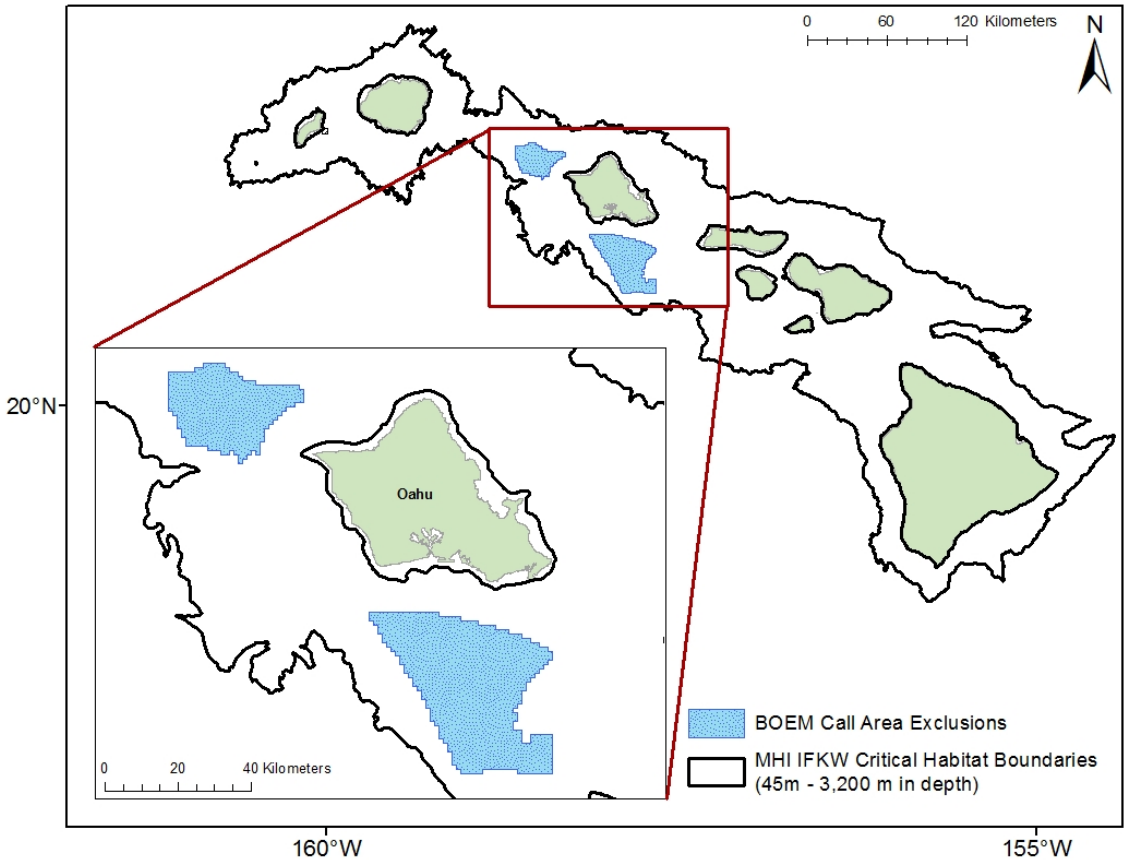

Figure 5. Areas identified foreconomic exclusion.

The Economic Impacts: The economic impacts for the BOEM Call Area as a whole are estimated to range between $0 to $3,000 dollars over the next ten years, based on three anticipated wind-energy projects. Although the direct economic costs of this designation are expected to be low, NMFS also considers the potential intangible costs of designation in light of Executive Order 13795, which sets forth the nation's policy for encouraging environmentally responsible energy exploration and production, including on the Outer Continental Shelf, to maintain the Nation's position as a global energy leader and foster energy security. In particular, both Hawaii's State Energy Office and the Bureau of Ocean Energy Management expressed concerns that the designation may discourage companies from investing in offshore energy projects in areas that are identified as critical habitat. They also noted that the costs of lost opportunities could be significant in meeting Hawaii's renewable energy goals (Cardno 2018). Specifically, because Oahu has the greatest energy needs and limited areas available for this type of development, and receiving energy via interconnection between islands is too difficult, these wind projects off Oahu are considered necessary to meet the State of Hawaii's renewable energy goals of 100 percent renewable energy by 2045 (Cardno 2018).

Conservation Benefits: In identifying benefits to the conservation of MHI IFKWs, we consider whether designation of critical habitat in the area leads to additional

conservation of the DPS above what is already provided by being listed under the ESA in the first place. For these sites we consider several factors to understand the importance of protecting the habitat including: MHI IFKW use of the habitat, the existing baseline protections that may protect that habitat regardless of designation, and how essential features may be affected by activities that occur in these areas if critical habitat were not designated.

MHI IKFW Use of the Area: The BOEM Call Area sites identified for exclusion (see Figure 5) overlap with approximately 1,961 km^2 (757mi^2) of the areas considered for designation, specifically 621 km^2 (240 mi^2) in the north site and 1,341 km^2 (518 mi^2) in the south site. This is equivalent to about 3.5 percent of the overall area considered for designation. Density analysis of satellite-tracking information indicates that these sites are low-use and mostly lower traveled for MHI IFKWs, with very small overlap into a moderately traveled area. Although little information is available from Cluster 2 and 4 animals, observation data and the newest tracking information suggests that Cluster 4 animals may show preferences for areas near penguin banks, southwest of Lanai or in the channel between Oahu and Molokai. Cluster 2 animals are observed more near the island of Hawaii and information suggests that this cluster may show preferences for the north Maui area (Baird, pers. communication, August 15, 2017).

Level of Protection Already Provided by Management: Chapter 3 of the Economic Report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018), including provisions of the ESA and Marine Mammal Protection Act (MMPA) that protect this DPS from activities that may adversely affect the health of the population. Projects in these areas are likely to undergo formal section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs and other protected species, such as monk seals and sea turtles. These reviews take into consideration how activities as a whole may affect MHI IFKWs, and other protected species. Other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment may also provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., the Clean Water Act as amended by the Oil Pollution Act, and fishing regulations and essential fish habitat consultations under the Magnuson-Stevens Fishery Conservation and Management Act) (Cardno Inc. 2017). The effects of large in-water construction projects, such as those involving offshore energy projects, on prey species, noise, and the availability of island-associated habitat for MHI IFKW, are not well understood and monitoring that may be recommended through a section 7 consultation process could provide important information to ensure protections for this DPS.

Because the IFKW population is relatively small and has a restricted range, similar monitoring projects are likely to be recommended during section 7 consultations to ensure that their activities are not likely to jeopardize MHI IFKWs. We anticipate that conservation measures implemented as a result of consultation to address impacts to the species will also provide incidental protections to habitat features. Accordingly, we

anticipate that the additional conservation benefits gained from the consultations specifically as a result of this designation will be minimal. Further, if these areas are used for floating wind-farm structures it is unlikely that any additional federal actions will occur in this area that would otherwise require consultation to protect essential features.

Recommendation: After considering the economic impacts of this designation, we find that the benefits of exclusion outweigh the benefits of designation. The extent of the area encompasses approximately 1,961 km^2 (757 mi^2) of the area considered for critical habitat (approximately 3.5 percent of the area considered for critical habitat). Although the quantified economic impacts are estimated to be low for projects that may happen in this area, government entities have expressed concerns that a designation in areas highlighted by BOEM for wind-energy projects could discourage investors and possibly impede Hawaii's renewable energy goals. Further, designation in this area may limit the Section 2, Executive Order 13795, *Implementing an America-First Offshore Energy Strategy*, policy of encouraging environmentally responsible energy exploration and production that will foster energy security and resilience for the benefit of the American people.

This area includes mostly low-use and lower traveled areas for MHI IFKWs, and although the sites overlap to a small degree with moderately traveled areas and are adjacent to and provide pathways to high-use areas that are considered areas of high conservation value (see Determine the Benefits of Designation), NMFS is satisfied that there are sufficient pathways within critical habitat to allow for unimpeded transit. Moreover, there is currently no information that suggests current high-use areas are likely to expand into these sites considered for exclusion. Although large in-water construction projects are an activity of concern for this DPS, consultations required to ensure that activities are not likely to jeopardize the MHI IFKWs are likely to achieve substantially the same conservation benefits for this DPS and additional federal activities (which may result in destruction or adverse modification) are not expected in this area if developed for wind energy.

Given the significance of this offshore area in supporting renewable energy goals for the State of Hawaii and the goals of Executive Order 13795, the low administrative costs of this designation, and the low-use by MHI IKFWs, we find that the benefits of exclusion of this area outweigh the benefits of designation. Based on our best scientific judgment and acknowledging the relatively small size of the area (approximately 3.5 percent of the overall designation), and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanisms), we conclude that exclusion of this area will not result in the extinction of the species.

Exclusions Based on National Security

The Secretary must consider possible impacts on national security when determining areas to designate as critical habitat. In developing the proposed MHI IFKW critical habitat we contacted the Department of Defense (DOD) and the Coast Guard with

information regarding the areas considered for MHI IFKW critical habitat, and requested they identify areas they own or control which may overlap with the areas considered. They were also asked to identify if those areas of overlap are subject to an INRMP, or if NMFS should consider any particular area for exclusion from critical habitat based on the impacts to national security.

The national security impacts of the area considered for MHI IFKW critical habitat are analyzed below. For the proposed rule, the impacts were analyzed based on responses from DOD (Navy, Marine Corps, and Air Force) and Department of Homeland Security (Coast Guard) to a May 2017 letter from NMFS describing areas being considered for MHI IFKW critical habitat and requesting identification of any national security impacts. The Navy and Coast Guard each submitted a request that all areas be excluded from critical habitat out of concerns associated with activities that introduce noise to the marine environment. Although we considered the request for exclusion of all areas proposed for critical habitat, we also separately considered specific areas and activities identified by the Navy in their responses (DON 2017a). The Coast Guard did not provide more specific explanations with regard to particular areas. The Air Force provided a request for exclusion that included the waters leading to and from the offshore ranges of the Pacific Missile Range Facility (PMRF). As the PMRF offshore ranges were also highlighted as important to Navy activities, we included considerations associated with the Air Force's request for exclusion for the PMRF ranges with the Navy's information, due to the similarities between the activities and impacts identified for these areas (e.g., both requests in this area were associated with training and testing activities). We separately considered the waters leading to the range because activities differ from those planned for the PMRF ranges and DOD does not exert control over these areas. Although not specifically requested for exclusion, the Navy highlighted the Puuloa Underwater Detonation Range in the materials they provided; however, this area was not considered for exclusion because it does not overlap with the areas considered for critical habitat.

For the proposed rule, we considered 13 sites for exclusion, and we proposed eight of those sites for national security exclusion. At that time we also notified the public that we would be considering six additional requests submitted by the Navy, which were subsets of a larger area that the Navy initially requested for exclusion, but which NMFS determined should not be excluded under 4(b)(2) (82 FR 51186; November 3, 2017; DON 2017b). Of these six areas, we are excluding two – the Kalakahi Channel portion of Warning area 186 and the Alenuihaha Channel. In addition to these six areas the Navy requested the exclusion of two areas in February 2018 – north and south of Maui, which are subsets of the Four Island Region request for exclusion that we proposed not to grant in the proposed rule (DON 2018a). As described below, NMFS determined not to exclude either of these areas. However, the Navy later requested exclusion of two areas, the Hawaii Area Tracking System and the Kahoolawe Training Minefield, which were also subsets of the Four Island Region request for exclusion that we proposed not to grant in the proposed rule (and located within the area described as south of Maui). As described below, NMFS has determined to exclude these areas.

For this final report, we reevaluated our previous considerations based on the supplemental satellite tracking information (see Figure 4) and considered a total of 23 sites for exclusion. The results of the impacts vs. benefits for the 23 sites are summarized in Table 2, and described in detail below.

Table 2. Summary of National Security 4(b)(2) weighing process.

DOD Site; Agency	DOD control/use of area	National Security activities in the area	Uniqueness of the site to NS	Expected Change to Consultation	Size (% of potential critical habitat); Importance to IFKWs	Likelihood non-DOD federal activities require consultation
(1) Entire Area Considered for Designation; Navy and Coast Guard	No control over large portions of the requested area	Requested by both the Navy and Coast Guard; both expressed concerns about activities that may introduce noise to the marine environment	Supports all activities within the Hawaii Range Complex	Major and minor impacts	56,821 km2 (100%); High and low-use & high and low-travel areas	Likely in large portions of this request
(2) PMRF Offshore Areas; Navy and Air Force	DOD use of the area likely to discourage additional activities	Active sonar, explosives, vessel movement, and impulsive sounds typically generated in close vicinity to or at the water surface from weapons firing and inert impact of non-explosive munitions	Area very unique for Navy activities - only area with large hydrophone range	Major impact	843 km2 (1.5%); low-use and low-travel areas	Unlikely
(3) Waters enroute to PMRF from the Port Allen Harbor; Air Force	No control over the area and use is not known to discourage other activities	Vessel movement	Provides access to other unique areas	Minor Impact	1,077 km2 (2%); low-use and low-travel areas	Possible

Table 3 . Summary of National Security 4(b)(2) weighing process (continued).

DOD Site; Agency	DOD control/use of area	National Security activities in the area	Uniqueness of the site to NS	Expected Change to Consultation	Size (% of potential critical habitat); Importance to IFKWs	Likelihood non-DOD federal activities require consultation
(4) Kingfisher Range; Navy	DOD use of the area likely to discourage additional activities	Active sonar and vessel movement	Area unique for Navy activities - Kingfisher range used for unique training	Minor Impact	14 km2 (0.03 %); low-use and low-travel areas	Unlikely
(5) Warning Area 188; Navy	DOD areas that are controlled or heavily used may discourage additional activities on portions of this area	Active sonar, explosives, vessel movement, and impulsive sounds generated in close vicinity to or at the water surface from weapons firing and inert impact of non-explosive munitions	One of two areas where explosive events are likely due to logistics	Major impact	2,674 km2 (5%); low-use and low-travel areas	Possible in portions
(6) Kaula and Warning Area W-187; Navy	DOD use of the area likely to discourage additional activities	Non-explosive munition exercises targeting the island itself; rare miss may impact water and unlikely to be in potential designation	Area unique for Navy activities - target for aerial (inert)	Minor Impact	266 km2 (0.5%); low-use and low-travel areas	Unlikely

Table 4. Summary of National Security 4(b)(2) weighing process (continued).

DOD Site; Agency	DOD control/use of area	National Security activities in the area	Uniqueness of the site to NS	Expected Change to Consultation	Size (% of potential critical habitat); Importance to IFKWs	Likelihood non-DOD federal activities require consultation
(7) W-189, HELO Quickdraw Box and Oahu Danger Zone; Navy	DOD areas that are controlled or heavily used may discourage additional activities on portions of this area	Active sonar, explosives, vessel movement, and impulsive sounds generated in close vicinity to or at the water surface from weapons firing and inert impact of non-explosive munitions. Notes that area is "low-use" for active sonar	Uniqueness not provided	Major impact	2,886 km2 (5%); mostly low-use and low- travel, but one high-use and some moderate- travel areas	Possible/Likely
(8) Fleet Operational Readiness Accuracy Check Site Range (FORACS); Navy	DOD use of the area likely to discourage additional activities	Active sonar and vessel movement	Area unique due to instrumentation and nearshore infrastructure	Major impact	74 km2 (0.1%); mostly low-use with some moderate and low-travel areas	Unlikely
(9) Shipboard Electronic Systems Evaluation Facility Range (SESEF); Navy	DOD use of the area likely to discourage additional activities	Vessel movement	Allows for maneuvering checks that can't be tested in port	Minor Impact	74 km2 (0.1%); low-use and low-travel areas	Unlikely

Table 5. Summary of National Security 4(b)(2) weighing process (continued).

DOD Site; Agency	DOD control/use of area	National Security activities in the area	Uniqueness of the site to NS	Expected Change to Consultation	Size (% of potential critical habitat); Importance to IFKWs	Likelihood non-DOD federal activities require consultation
(10) W-196 and 191; Navy	DOD areas that are controlled or heavily used may discourage additional activities on portions of this area	Vessel movement, and impulsive sounds generated in close vicinity to or at the water surface from weapons firing and inert impact of non-explosive munitions	Uniqueness not provided	Minor Impact	728 km2 (1%); low-use and low-travel areas	Unlikely
(11) W 193 and 194; Navy	DOD areas that are controlled or heavily used may discourage additional activities on portions of this area	Explosives, vessel movement, and impulsive sounds generated in close vicinity to or at the water surface from weapons firing and inert impact of non-explosive munitions	Uniqueness not provided	Major impact	458 km2 (1%); low-use and low-travel areas	Unlikely
(12) Four Islands Region (Maui, Lanai, Molokai Kahoolawe); Navy	No control over the broad area and use is not known to discourage other activities	Active sonar, vessel movement, and impulsive sounds generated in close vicinity to or at the water surface from weapons firing and inert impact of non-explosive munitions	Crucial for submarine training	Major impact	15,389 km2 (27%); high and low-use as well as high to low-travel areas	Likely

Table 6. Summary of National Security 4(b)(2) weighing process (continued).

DOD Site; Agency	DOD control/use of area	National Security activities in the area	Uniqueness of the site to NS	Expected Change to Consultation	Size (% of potential critical habitat); Importance to IFKWs	Likelihood non-DOD federal activities require consultation
(13) Hawaii Island; Navy	No control over the broad area and use is not known to discourage other activities	Active sonar, explosives, and vessel movement	Unique area to support training that does not exist elsewhere	Major impact	16,931 km2 (30%); high and low-use as well as high to low-travel areas	Likely
(14) Kaulakahi Channel Portion of W-186	DOD areas that are controlled or heavily used may discourage additional activities on portions of this area	Sonar common during RIMPAC, supports air to surface gunnery exercises	Unique for supporting RIMPAC (every 2 years), Naval Surface Fire Support, and Submarine Commanders Course	Major impact	1,631 km2 (3%); low-use and low-travel areas	Possible
(15) Area North and East of Oahu	DOD areas that are controlled or heavily used may discourage additional activities on portions of this area	Sonar, explosives, vessel movement, impulsive sound, notes say "low-use" for active sonar	Supports flying operations and provides unique bathymetry for anti-submarine warfare training	Major impact	2,472 km2 (4%); includes overlap with high to low-use as well as high to low travel areas	Possible

Table 7. Summary of National Security 4(b)(2) weighing process (continued).

DOD Site; Agency	DOD control/use of area	National Security activities in the area	Uniqueness of the site to NS	Expected Change to Consultation	Size (% of potential critical habitat); Importance to IFKWs	Likelihood non-DOD federal activities require consultation
(16) Area to the South of Oahu	No control over the broad area and use in most areas is not known to discourage other activities	Sonar, and vessel movement	Important for air to ship coordinated trainings and surface ship sonar use (proximity to Pearl Harbor)	Major impact	1,803 km2 (3%); mostly low-use and low-travel, some moderate-travel areas	Likely
(17) Kaiwi Channel	No control over the broad area and use is not known to discourage other activities	Sonar and vessel movement	Important for submarine training and coordinated suface, air, and submarine training	Major impact	2,355 km2 (4%); mostly high to medium use and high to medium travel areas	Possible
(18) Area North and Offshore of Molokai	No control over the broad area and use is not known to discourage other activities	Sonar and vessel movement	Unique bathymetry important for submarine training	Major impact	596 km2 (1%); mostly low-use and low-travel areas, very small overlap with high-use and high-travel areas	Possible

Table 8. Summary of National Security 4(b)(2) weighing process (continued).

DOD Site; Agency	DOD control/use of area	National Security activities in the area	Uniqueness of the site to NS	Expected Change to Consultation	Size (% of potential critical habitat); Importance to IFKWs	Likelihood non-DOD federal activities require consultation
(19) Alenuihaha Channel	No control over the broad area and use is not known to discourage other activities	Sonar and vessel movement	Unique area supports sea, air, and land-based units to work in conjunction with one another in controlled airspace in close proximity to the Pohakaloa Training Area	Major impact	2,690 km2 (5%); mostly low-use and low-travel areas, overlaps a small to medium sized area of potential critical habitat.	Possible
(20) Area north of Maui	No control over the broad area and use is not known to discourage other activities	Sonar and vessel movement	Crucial for submarine training	Major impact	2,590 km2 (5%); mostly low-use and low-travel areas, but some overlap with high-use and high and moderate-travel areas	Possible
(21) Area south of Maui	No control over the broad area and use is not known to discourage other activities	Sonar and vessel movement	Crucial for submarine training	Major impact	1,899 km2 (3%); mostly low-use and low-travel areas, but provides contiguous habitat between several high-use areas	Possible

Table 9. Summary of National Security 4(b)(2) weighing process (continued).

DOD Site; Agency	DOD control/use of area	National Security activities in the area	Uniqueness of the site to NS	Expected Change to Consultation	Size (% of potential critical habitat); Importance to IFKWs	Likelihood non-DOD federal activities require consultation
(22) Hawaii Area Tracking System	DOD use of the area likely to discourage additional activities	Sonar, vessel movement, and torpedo exercises	Only shallow water area in the Pacific between Southern California and China with bathymetry that replicates the conditions needed to train crews and commanding officers on realistic scenarios	Major impact	96 km2 (0.2%); low-use and low-travel areas	Unlikely
(23) Kahoolawe Training Minefield	DOD use of the area likely to discourage additional activities	Sonar and vessel movement	Only training minefield optimized for submarines in Hawaii and is required for certification	Major impact	12 km2 (0.02%); low-use and low-travel areas	Unlikely

Table 10. Summary of Exclusion Determinations.

DOD Site, Agency	Exclusion Warranted	Summarized Rationale
(1) Entire Area Considered for Designation, Navy and Coast Guard	No	This area includes the entire designation and all benefits from MHI IFKW critical habitat would be lost. Impacts from delays and possible modifications to consultation are outweighed by benefits of protecting the habitat.
(2) PMRF Offshore Areas, Navy and Air Force	Yes	This area overlaps a relatively small area of low-use and lower traveled areas of MHI IFKW habitat where DOD maintains control of the area. This area is unique for DOD and provides specific opportunities for DOD training and testing. The impacts from delays and possible major modifications to consultation outweigh benefits of protecting low-use and lower traveled habitat where future non-DOD federal actions are unlikely.
(3) Waters enroute to PMRF from the Port Allen Harbor, Air Force	No	This area overlaps a relatively small area of low-use and lower traveled MHI IFKW habitat that is not owned or controlled by DOD and where non-DOD activities may occur. Impacts from section 7 consultations are expected to be minor. Thus, short delays for minor modifications to consultation are outweighed by benefits of protecting this habitat from future DOD and non-DOD federal actions. Note: a portion of this area is now excluded from critical habitat because it overlaps with the Kaulakahi Channel portion of Warning area 186.
(4) Kingfisher Range, Navy	Yes	This area overlaps a small area of low-use and lower traveled MHI IFKW habitat where DOD maintains control of the area. This area is unique for DOD and provides specific opportunities for DOD training. Impacts from short delays from minor modifications to consultation outweigh benefits of protecting low-use and lower traveled habitat where future non-DoD federal actions are unlikely.
(5) Warning Area 188, Navy	Yes	This area overlaps a medium area of low-use and lower traveled MHI IFKW habitat. DOD maintains control over a portion of the habitat, but does not control deeper waters. Impacts from delays and possible major modifications to consultation outweigh benefits of protecting low-use and lower traveled habitat where future non-DoD federal actions are less likely.
(6) Kaula and Warning Area W-187, Navy	Yes	This area overlaps a small area of low-use and very low traveled MHI IFKW habitat where DOD maintains control of the area. This area is unique for DOD and provides specific opportunities for DOD training. Impacts from short delays by informal consultation outweigh benefits of protecting low-use and very low traveled habitat where future non-DoD federal actions are unlikely.

Table 11. Summary of Exclusion Determinations (Continued).

DOD Site, Agency	Exclusion Warranted	Summarized Rationale
(7) W-189, HELO Quickdraw Box and Oahu Danger Zone, Navy	No	This area overlaps a medium area of low-use and moderate to low traveled MHI IFKW habitat and a small high-use area for MHI IFKWs. The DOD does not maintain control over these waters and non-DOD activities are expected in portions of this area. Impacts from delays and possible modifications to consultation are outweighed by benefits of protecting both high and low-use and moderate to low traveled MHI IFKW habitat from future DOD and non-DOD federal actions.
(8) Fleet Operational Readiness Accuracy Check Site Range (FORACS), Navy	Yes	This area overlaps a small area of low-use and moderate to low traveled MHI IFKW habitat where DOD maintains control of the area. This area is unique for DOD and provides specific opportunities for DOD testing to maintain equipment accuracy. Impacts from delays and possible modifications to consultation outweigh benefits of protecting low-use and moderate to low traveled habitat where future non-DoD federal actions are unlikely.
(9) Shipboard Electronic Systems Evaluation Facility Range (SESEF), Navy	Yes	This area overlaps a small area of low-use and lower traveled MHI IFKW habitat where DOD maintains control of the area. This area is unique for DOD and provides specific opportunities for DOD testing to maintain equipment accuracy. Impacts from delays and possible modifications to consultation outweigh benefits of protecting low-use and lower traveled habitat where future non-DoD federal actions are unlikely.
(10) W-196 and 191, Navy	Yes	This area overlaps a relatively small area of low-use and lower traveled MHI IFKW habitat that is not controlled by DOD but where non-DoD federal actions are unlikely. Impacts from short delays and possible modifications to consultation outweigh benefits of protecting low-use and lower traveled habitat where future non-DoD federal actions are unlikely.
(11) W 193 and 194, Navy	Yes	This area overlaps a relatively small area of low-use and lower traveled MHI IFKW habitat that is not controlled by DOD but where non-DoD federal actions are unlikely. Impacts from short delays and possible modifications to consultation outweigh benefits of protecting low-use and lower traveled habitat where future non-DoD federal actions are unlikely.
(12) Four Islands Region (Maui, Lanai, Molokai Kahoolawe), Navy	No	This area includes a relatively large area of both high and low-use and high and lower traveled MHI IKFW habitat that is not controlled by DOD. Impacts from delays and possible major modifications to consultation are outweighed by benefits of protecting the entire area, which includes both high and low-use and high and lower traveled MHI IFKW habitat, from future DOD and non-DOD federal actions.

Table 12. Summary of Exclusion Determinations (Continued).

DOD Site, Agency	Exclusion Warranted	Summarized Rationale
(13) Hawaii Island, Navy	No	This area includes a relatively large area of both high and low-use and high and lower traveled MHI IKFW habitat that is not controlled by DOD. Impacts from delays and possible major modifications to consultation are outweighed by benefits of protecting the entire area, which includes both high and low-use and high and lower traveled MHI IFKW habitat, from future DOD and non-DOD federal actions.
(14) Kaulakahi Channel Portion of W-186, Navy	Yes	This area overlaps a small to medium area of low-use and lower traveled MHI IFKW habitat that is not controlled by DOD. This area is unique for DOD and provides specific opportunities for DOD training and testing. The impacts from delays and possible major modifications to consultation outweigh benefits of protecting low-use and lower traveled habitat where future non-DOD federal actions are unlikely.
(15) Area North and East of Oahu, Navy	No	This area overlaps a medium area of both high-use and low-use and high to low traveled MHI IFKW habitat. The DOD does not maintain control over these waters and non-DOD activities are expected in portions of this area. Impacts from delays and possible modifications to consultation are outweighed by benefits of protecting both high and low-use and high and low traveled MHI IFKW habitat, from future DOD and non-DOD federal actions.
(16) Area to the South of Oahu, Navy	No	This area overlaps a medium area of low-use and moderate to low traveled MHI IFKW habitat. The DOD does not maintain control over these waters and non-DOD activities are expected in portions of this area. Impacts from delays and possible modifications to consultation are outweighed by benefits of protecting both low-use and moderate to low traveled MHI IFKW habitat, from future DOD and non-DOD federal actions.
(17) Kaiwi Channel, Navy	No	This area includes a medium area with mostly high-use and high to low traveled MHI IKFW habitat that is not controlled by DOD. Impacts from delays and possible major modifications to consultation are outweighed by benefits of protecting the entire area, which includes both high and low-use and high to low traveled MHI IFKW habitat, from future DOD and non-DOD federal actions.
(18) Area North and Offshore of Molokai, Navy	Yes	This area overlaps a relatively small area of potential critical habitat and includes mostly low-use and low-travel area for MHI IKFWs. This area also includes very small portions of high-use and moderate to low travelled MHI IFKW habitat on the southern boundary of the area. The DOD does not maintain control over these waters and non-DOD activities may occur in these areas. The impacts from delays and possible major modifications to consultation outweigh benefits of protecting mostly low-use and lower traveled habitat at the edge of the designation.

Table 13. Summary of Exclusion Determinations (Continued).

DOD Site, Agency	Exclusion Warranted	Summarized Rationale
(19) Alenuihaha Channel, Navy	Yes	This area overlaps a small to medium sized area of potential critical habitat and includes mostly low-use and low-travel area for MHI IKFWs. The DOD does not maintain control over these waters and non-DOD activities may occur in these areas. The impacts from delays and possible major modifications to consultation outweigh benefits of protecting mostly low-use and lower traveled habitat.
(20) Area north of Maui, Navy	No	This area overlaps a medium area with high-use and high to low traveled MHI IFKW habitats. The DOD does not maintain control over these waters and non-DOD activities may occur in these areas. Impacts from delays and possible modifications to consultation are outweighed by benefits of protecting portions of high-use and high to low traveled MHI IFKW habitat, from future DOD and non-DOD federal actions.
(21) Area south of Maui, Navy	No	This area overlaps a small to medium area of low-use and lower traveled MHI IFKW habitat and is located between three high-use areas of the designation allowing for contiguous travel between those areas. The area is not controlled by DOD. This area is unique for DOD and provides specific opportunities for DOD training and testing. Impacts from delays and possible modifications to consultation are outweighed by benefits of protecting contiguous habitat between MHI IFKW high-use areas, from future DOD and non-DOD federal actions.
(22) Hawaii Area Tracking System	Yes	This area overlaps a small area of low-use and lower traveled MHI IFKW habitat where DOD maintains control of the area. This area is unique for DOD and provides specific opportunities for DOD training. The impacts from delays and possible major modifications to consultation outweigh benefits of protecting mostly low-use and lower traveled habitat.
(23) Kahoolawe Training Minefield	Yes	This area overlaps a small area of low-use and lower traveled MHI IFKW habitat where DOD maintains control of the area. This area is unique for DOD and provides specific opportunities for DOD training. The impacts from delays and possible major modifications to consultation outweigh benefits of protecting mostly low-use and lower traveled habitat.

For each of the sites listed below, information is provided on the impacts to national security and the benefits to the conservation of MHI IFKWs of designating the site as critical habitat. Impacts to national security may arise when DOD actions at a site are required for national security and are likely to result in adverse modification or destruction of the essential feature. In these instances, section 7 consultation requirements that may cause delays or modifications to the activity, potentially affecting national security. For activities in the areas identified below, consultation under section 7 will already be required because of the listing of MHI IFKWs so consultation for critical habitat would add an additional layer of consultation or reinitiation rather than an entirely new consultation. If additional consultation requirements are likely due to critical habitat at a site, then consideration of other factors is needed to characterize subsequent impacts to national security, such as the type and frequency of additional consultation, potential delays and requirements resulting from the additional consultation, and how unique the DOD activities are at the site.

Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the DPS above what is already provided by being listed under the ESA in the first place. We weighed the potential for additional conservation by considering several factors that provide an understanding of the importance of protecting the habitat for the overall conservation of the DPS, including the following: use of the habitat by MHI IFKWs, existing baseline protections that may protect that habitat regardless of designation, and the likelihood of other federal (non-DOD) actions being proposed within the site that would be subject to section 7 consultation associated with critical habitat.

Based on the information below, for each site we qualitatively compare the national security impacts to the conservation benefits in order to determine which is greater. If national security impacts outweigh conservation benefits, the site is excluded from proposed critical habitat. If conservation benefits outweigh national security impacts, the site is not excluded from critical habitat. The decision to exclude any sites from a designation of critical habitat is always at the discretion of NMFS. In no circumstances is an exclusion of any site required by the ESA (81 FR 7226; February 11, 2016).

The entire area considered for critical habitat

The Navy requested the entire area under consideration for MHI IFKW critical habitat for exclusion because this potential designation overlaps with the Hawaii Operating Area (OPAREA), which is one of three components of the Hawaii Range Complex (HRC), that provides surface and subsurface ocean areas and special use airspace that supports military readiness activities (Figure 6). The Coast Guard additionally requested an exclusion for the entire area due to unspecified concerns associated with carrying out all of their activities in the waters that surround Hawaii. The designation includes all waters from the 45-m depth contour to the 3,200-m depth contour surrounding the MHI; this request for exclusion includes all 56,821 km^2 (21,933 mi^2) of this potential designation.

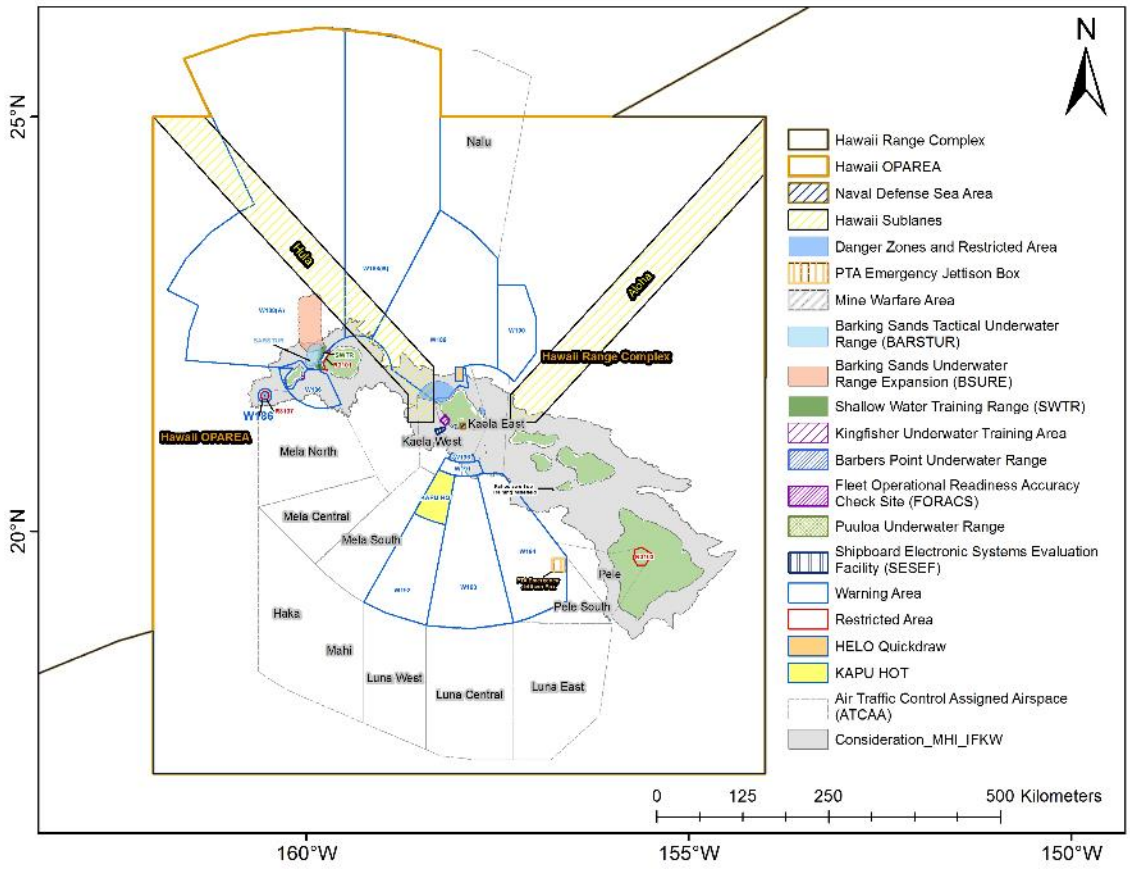

Figure 6. The entire designation and overlapping military areas of significance.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). The Navy describes activities in this region to include on-going training and testing activities in the Hawaii OPAREA, which they noted are also described in the HSTT FEIS (DoN 2013), and the HRC FEIS (DoN 2008). These activities include vessel movement, the use of active and passive sonar systems, or the expenditure of munitions (e.g., non-explosive exercise torpedoes or high explosive large caliber munitions) from ships, submarines, or aircraft. Activities also include explosives and weapons firing that generate in-water noise. The Navy noted that training and testing using in-water explosives is not typically conducted in areas that are not designated as underwater training ranges or within Special Use Airspace for safety reasons (DoN 2017a). The Coast Guard additionally requested an exclusion for the entire area to allow for activities associated with search and rescue, maritime transportation (maintaining aids to navigation), law enforcement, oil spill response, and training.

The Type and Frequency of Additional Consultation: Navy training and testing in the Hawaiian Islands is currently described by the Hawaii-Southern California Training and Testing Environmental Impact Statement/Overseas Environmental Impact Statement (HSTT EIS/OEIS) (DoN 2013), and covered by two Letters of Authorization under the MMPA, and a Biological Opinion under the ESA, as amended in April 2015 through reinitiation of the consultation. These documents cover Navy activities through 2018. Military readiness activities under the current MMPA Final Rule and Letters of Authorization for the HSTT are subject to the terms of a stipulated settlement agreement in *Conservation Council of Hawaii v NMFS*, 14-cv-153 (D. Haw 2015). These terms expire when the Final Rule lapses in December 2018 and NMFS issues a new Final Rule/Letter of Authorization along with a supporting biological opinion and NEPA analysis. The Navy has released a draft EIS describing activities proposed after 2018 (DON 2017c) and has already initiated consultation to ensure that these activities meet their obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential features of MHI IFKW critical habitat. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas, may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in extensive effects, this process may also include requirements to modify the activity in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be addressed readily through the recently initiated consultation, because the cumulative duration of temporary changes to the habitat is not expected to alter the overall conservation value of that habitat for MHI IFKWs.

The Coast Guard similarly undergoes consultation for activities that may affect protected species in Hawaii's waters. Currently the Coast Guard is engaged with NMFS in a national programmatic consultation to address activities associated with maintaining aids to navigation. If this consultation is finished prior to the designation being finalized, reinitiation may be required to consider additional impacts to MHI IFKW critical habitat. This reinitiation is expected to be readily addressed as the activities described are not expected to adversely affect the MHI IFKW essential feature. The Coast Guard has also identified that they expect to undergo consultation associated with the revision of the Hawaii Area Contingency Plan to address response to oil and other hazardous spills. As this consultation has not been initiated, it is likely that any concerns associated with the impacts that these activities may have on MHI IFKW critical habitat may be incorporated into the overall consultation. Given the goal of this plan is to protect marine species and their habitats from hazards, changes to the consultation are likely to be administrative in nature to recognize the boundaries of the designation and the essential features.

Uniqueness of DOD Activities at the Site: The Navy identified that the mission of the HRC is to support naval operational readiness by providing a realistic, live training environment for forces assigned to the U.S. Pacific Fleet, the Fleet Marine Force, and other users. The Navy reported that the range allows training to take place using a

geographic scope that replicates possible real world events, with the channels between islands providing geography necessary for opposed transit scenarios. The presence of the instrumented tracking ranges at PMRF, as well as DOD warning areas and special use airspace, allow safe and structured training with sufficient flexibility to interject tactical challenges and enhance realism for exercise participants. The Navy also noted that access to an instrumented range is critical for testing of military systems (e.g., anti-submarine warfare sources and sensors on unmanned platforms). Without this access, capabilities of new platforms would not be adequately tested and transfer of improved technologies to the warfighter would be hindered (DoN 2017a). The Coast Guard provided no explanation as to the uniqueness of this site.

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: The area identified for designation includes both high-use and low-use areas as well as high and low travel areas for MHI IFKWs. High-use areas likely indicate areas of higher conservation value where greater foraging and/or reproductive opportunities exist. High-use areas within this region include waters extending from north of Maui to northwest of Molokai and extending west towards Oahu and south into the channel between Molokai and Oahu; small areas are found to the west and southwest of Lanai; as well as off the west coast and around the northwest tip of Hawaii Island (see Figure 4). Heavily traveled areas also indicate areas of importance to MHI IFKWs as these areas may overlap with high-use areas and allow access to and from important areas. As noted at the beginning of this section, satellite-tracking information does not offer a full understanding of spatial habitat use, because it is limited in certain months of the year and data from social clusters 2 and 3 are limited. Therefore, other high-use areas may exist within the potential designation that are not yet recognized.

Level of Protection Already Provided by Management: Chapter 3 of the Final Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above the Navy and Coast Guard undergo section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment. To meet requirements associated with understanding the impacts of these larger activities, the Navy implements marine mammal monitoring programs that include $1-2 million dollars per year of marine mammal research and monitoring activities in

Hawaii's waters; MHI IFKW are considered a priority species for these efforts (DoN 2017a). Additionally, in the HSTT DEIS/OEIS (www.hstteis.com), Navy has proposed geographic mitigation measures based upon NMFS designated Biologically Important Areas for false killer whales and beaked whales (van Parijs 2015). Specifically, Navy has proposed a new area encircling Hawaii Island and a second new area in the 4-Islands region (Maui Nui) both of which are designed to provide additional protection for MHI IFKW (among other species) (DON 2017b, and HSTT Proposed Rule). Mitigation measures include the following: limiting the amount of use of surface ship hull-mounted mid-frequency active sonar (300 hours annually) and dipping sonar (20 hours annually); prohibiting explosives during training and testing off of Hawaii Island; and prohibiting surface ship hull-mounted mid-frequency active sonar from November 15 through April 15 in an area that surrounds portion of the Maui Nui area. More detail on these proposed measures can be found at the following websites: www.hstteis.com and www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., in accordance with the Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018); however, areas of the potential designation also overlap with other managed areas that may provide some degree of protections for water quality or prey resources. These include areas that overlap with the Hawaiian Islands Humpback Whale National Marine Sanctuary, Essential Fish Habitat, fishing restricted sites, or the two areas managed under the JBPHH INRMP (see Certain Military Lands are Precluded from Designation).

Likelihood of Non-DOD Actions Subject to Critical Habitat: As this request covers the entire proposed designation, some specific areas within this area may be heavily utilized or controlled by the DOD (e.g., PMRF offshore ranges, Kingfisher, or FORACs below), and activities that are non-DOD, which could otherwise affect essential features are unlikely to occur on these specific areas. However, a large portion of this request includes areas where it is possible that non-DOD federal actions will be proposed. Within these areas, projects may occur that could affect the essential features, but which would no longer be subject to the critical habitat consultation if the area was excluded from the designation. Of particular concern would be large in-water construction activities that may adversely affect island-associated habitat for MHI IFKWs such that MHI IFKW use or occupancy is significantly impaired.

Recommendation: We recommend that this area not be excluded from the critical habitat designation because the benefits of exclusion do not appear to outweigh the benefits of designation. The extent of the area requested encompasses the entire marine area (approximately 56,821 km^2 (21,933 mi^2)) proposed for critical habitat and all

benefits associated with this designation would be lost with this exclusion. Moreover, neither the DOD or the Coast Guard provided a reasonably specific justification of an incremental impact on national or homeland security such that the entire area should be excluded. The DOD and Coast Guard do not control all of the marine waters surrounding the MHI, and other federal actions take place in these surrounding areas. Therefore, other federal activities subject to ESA section 7 may occur in these waters that may impact essential features of critical habitat.

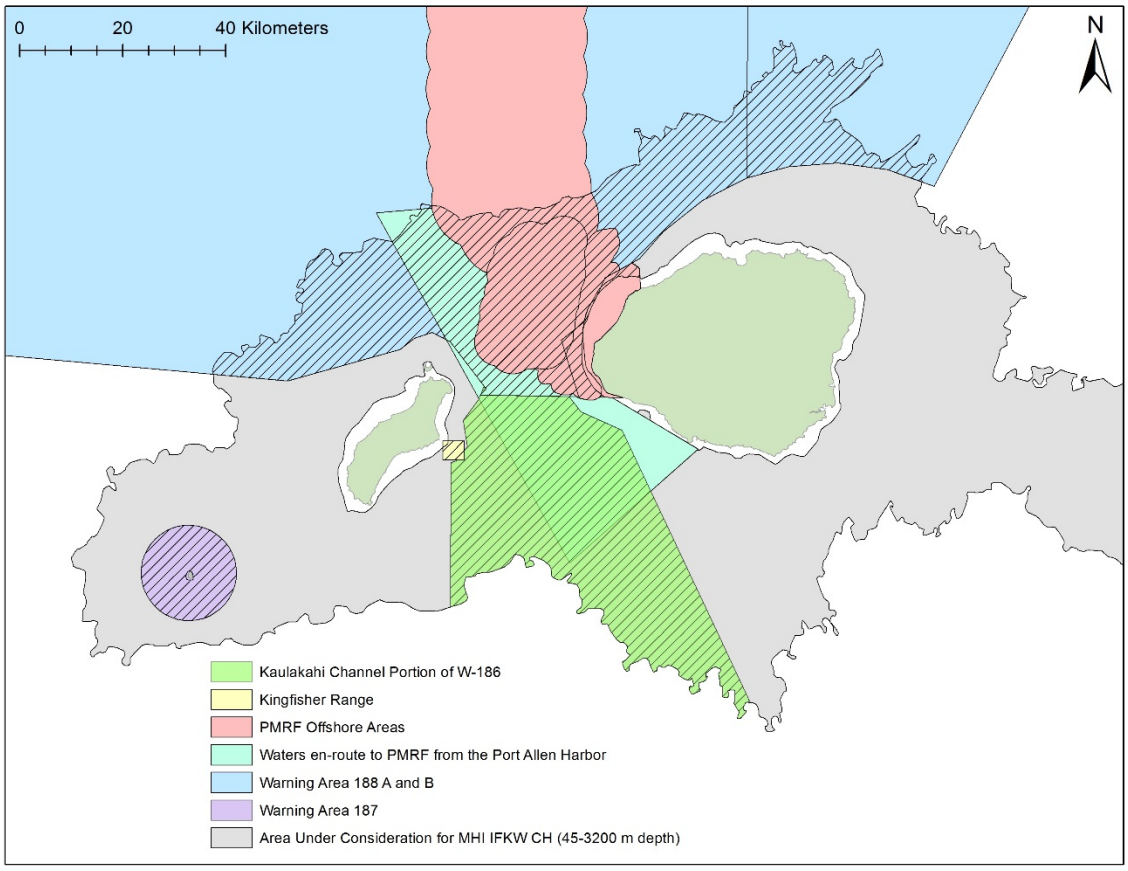

Figure 7. Areas requested for exclusion near Niihau and Kauai.

Pacific Missile Range Facility (PMRF) Offshore Areas; including Shallow Water Training Range (SWTR), Restricted Area R3101, Barking Sands Tactical Underwater Range (BARSTUR), Barking Sands Underwater Range Extension (BSURE)

Off the southwest portion of Kauai, this area includes overlapping ranges that are used by the DOD to track training events in almost real time. The PMRF range is instrumented with bottom-mounted hydrophones and is divided into 3 sub-ranges, the Shallow Water Training Range (SWTR), the Barking Sands Tactical Underwater Range (BARSTUR), and the Barking Sands Underwater Range Extension (BSURE). The combined range extends from shallow water (SWTR, 100-1000m), to mid-water depths (BARSTUR,

~1,000-2,000m), to very deep ocean (BSURE, ~2,000-4,000m) (DoN 2017a). Because these ranges overlap geographically and the Navy's descriptions of activities for these areas are largely similar, we grouped these areas together for the purposes of this analysis. The ranges shown in Figure 7 above overlap with approximately 843 km^2 (~325 mi^2) or approximately 1.5 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). The Navy noted that the PMRF range supports training, tactics development, and testing of air, surface, and subsurface weapons systems. The instrumentation on the ranges yields a 10-ft. tracking accuracy, which is crucial for reconstruction, grading and feedback on events. Ongoing testing and evaluation programs include torpedo, torpedo defense, submarine and periscope detection, ship-defense systems, and other miscellaneous programs (such as gunnery and special weapons tests). This range supports activities for the Navy, the Air Force, and training events with foreign fleets. The Navy described activities that include temporary exposure to in-water noise (i.e., active sonar, explosives, vessel movement, and impulsive sounds generated in close vicinity to or at the water surface from weapons firing and inert impact of non-explosive munitions) (DoN 2017a). In addition to the description of activities provided by the Navy, the Air Force highlighted activities that take place in this area that support their weapons testing and evaluation, as well as training capabilities. Specifically, they noted that the 86 Fighter Weapon Squadron (FWS) requires the capability to conduct operational evaluations of long-range strike weapons with large footprints as part of the Long Range Strike (LRS) Weapon System Evaluation Program (WSEP) and to properly train units for real-world operational expectations in a time of war. The Air Force identified that these activities create in-water noise and are planned to occur up to five consecutive days annually during the summer and fall months (DoAF 2017).

The Type and Frequency of Additional Consultation: The Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential features of MHI IFKW critical habitat. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be readily addressed through this consultation because the cumulative duration of temporary changes to the habitat are not expected to alter the overall conservation value of that habitat for MHI IFKWs.

The Air Force completed an ESA consultation (NMFS 2017) and was issued a Letter of Authorization (82 FR 40998; August 29, 2017) to take marine mammals incidental to to LRS WSEP exercises on BSURE. This consultation is intended to cover activities beginning in August of 2017-2021. Designation of these areas as critical habitat would require reinitiation of consultation to consider any additional affects that these activities may have on the essential features.

Uniqueness of DOD Activities at the Site: The Navy noted that the existing infrastructure at and offshore of PMRF is unique and irreplaceable, and provides a full spectrum of range support, including radar, underwater instrumentation (e.g., bottom-mounted transducers and hydrophones), telemetry, electronic warfare, remote target command and control, communications, data display and processing, and target/weapon launching and recovery facilities. Because of its unique infrastructure and un-encroached geographic range, it is also the lead range for a variety of testing and evaluation events (DoN 2017a). The Air Force noted that the BSURE portion of the PMRF is currently the only range area that could support LRS WSEP activities and satisfy most of the FWS operational objectives (DoAF 2017).

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by the species' listing. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range is low-use for MHI IFKWs, and supports low travel areas for MHI IFKWs. Although low use and thus not areas of highest conservation value, these areas may continue to provide opportunities for foraging as oceanic conditions vary seasonally or temporally, and so may have value to the whales.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018). These include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy and Air Force undergo section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment. To meet requirements associated with understanding the impacts of these larger activities, the Navy implements marine mammal monitoring programs that include $1-2 million dollars per year of marine mammal research and monitoring activities in Hawaii's waters;

MHI IFKW are considered a priority species for these efforts (DoN 2017a) and most of this monitoring investment occurs in the waters off PMRF.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., The Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: DOD use of this area is likely to discourage additional activities that would otherwise be subject to section 7 consultation. For this reason, there is low likelihood of federal actions being proposed by non-DOD agencies that would affect MHI IFKW critical habitat at this site.

Recommendation: We conclude that the benefit to national security of excluding this area outweighs the conservation benefit of designation, and recommend that PMRF ranges off Kauai be excluded from the areas considered for critical habitat designation. The most important factors supporting this exclusion are that this area is a unique and important place for DOD activities, and potential impacts from those activities will result in modifications to the DOD consultation process and potential modifications to the DOD activities. The benefits of designating this low-use and low-travel habitat is reduced somewhat by the protections already afforded to some of the characteristics of the essential feature, and because DOD use of this area is likely to discourage other federal activities that may otherwise require consultation. While DOD must still insure that activities in this area are not likely to jeopardize the continued existence of the MHI IFKW, the exclusion of this area means DOD will not be required to consult to insure that its activities are not likely to adversely modify habitat or essential features within this area. Based on our best scientific judgment and acknowledging the small size of this area, and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanism), we conclude that exclusion of this area will not result in the extinction of the species.

Waters en-route to PMRF from the Port Allen Harbor

This includes waters leading from Port Allen Harbor and Kikiaola Harbor to the offshore areas of the PMRF ranges described above. NMFS received a request for exclusion from the U.S. Air Force for the combined PMRF ranges and this area. As the PMRF offshore areas, under Navy jurisdiction, are being assessed separately above, we have included the Air Force's information and request regarding the PMRF range in the above analysis and provide a separate determination for the waters leading to the ranges here. The area shown in Figure 7 above overlaps with approximately 1,077 km^2 (~416 mi^2) or approximately 2 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation

requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). This area is requested for exclusion to support vessels traveling to the PMRF offshore range to participate in LRS WSEP mission activities, which occur in and outside the PMRF offshore range (in and beyond the potential designation for critical habitat). The Air Force identified that activities occur for up to five consecutive days annually during the summer and fall months; vessel travel to support these activities may occur before and after training events (DoAF 2017).

The Type and Frequency of Additional Consultation: The Air Force completed an ESA consultation (NMFS 2017) and was issued a Letter of Authorization (82 FR 40998; August 29, 2017) to take marine mammals incidental to to LRS WSEP exercises on BSURE. A critical habitat designation in this area would require reinitiation of consultation to consider impacts associated with vessel movements to and from the PMRF ranges. As vessel traffic associated with this activity is expected to result in a temporary introduction of sound to this area for brief periods annually, this activity is not expected to adversely affect the MHI IFKW essential feature and reinitiation of consultation is expected to be relatively simple to address.

Uniqueness of DOD Activities at the Site: Vessel travel through this area is unique in that it supports the Air Force's operational evaluations of long-range strike weapons with large footprints as part of LRS WSEP operations and training that occurs on the PMRF ranges.

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range is low-use for MHI IFKWs, and supports low travel areas for MHI IFKWs. Although low use and thus not areas of highest conservation value, these areas may continue to provide opportunities for foraging as oceanic conditions vary seasonally or temporally, and so may have value to the whales.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018). These include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Air Force undergoes section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among

other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., The Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible that non-DOD federal actions will be proposed within this site that could affect the essential features, but that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

Recommendation: We recommend that this area not be excluded from the critical habitat designation because the benefits of exclusion do not appear to outweigh the benefits of designation. The extent of the area requested encompasses approximately 1,077 km^2 (~416 mi^2) or approximately 2 percent of the area considered for critical habitat. However, the burden associated with consultation is expected to be relatively small. The Air Force does not control these waters, and other federal actions may take place in this area that otherwise could be subject to section 7 or may impact essential features of critical habitat.

Although we did not exclude "Waters Enroute to PMRF" in this weighing process, we note that a portion of this area was excluded from critical habitat because it overlaps with the Kaulakahi Channel Portion of W-186 where the benefits of exclusion (for Navy activities) were found to outweigh the benefits of designation (see below).

Kingfisher Range

This underwater training area is approximately 2 miles off the southeast coast of Niihau at a depth of between 300 and 1,200 ft (90 and 366 m). It is a simulated underwater minefield that is used to test the kingfisher mine detection system and train operators. The area shown in Figure 7 overlaps with approximately 14 km^2 (~6 mi^2) or approximately 0.03 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). Kingfisher provides a simulated underwater minefield that is used to test the kingfisher mine detection system and train operators. This involves the use of active sonar. These training and testing activities may produce in-water noise (i.e., active sonar and vessel movement) in areas considered for critical habitat (DoN 2017a).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, the Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may impact the essential features of critical habitat. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat.

Uniqueness of DOD Activities at the Site: The Navy notes that the Kingfisher Range is unique in the HRC in that target depths support surface ship training. If units are unable to practice this skill, they will be unable to train for maneuvering in a mined environment at a safe and ideal training location. Without this critical and perishable skills training, military personnel will not be adequately trained for deployment in support of National Command Authority and Combatant Commander tasking. If the testing and evaluation community is similarly unable to test mine detection and classifications under development, military personnel will be unable to rely on these vital systems while deployed in support of National Command Authority and Combatant Commander tasking (DoN 2017a).

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range is low-use for MHI IFKWs and supports low travel areas for MHI IFKWs. Although low use and thus not areas of highest conservation value, these areas may continue to provide opportunities for foraging as oceanic conditions vary seasonally or temporally, and so may have value to the whales.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018). These include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy undergoes section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., The Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: DOD use of this area is likely to discourage additional activities that would otherwise be subject to section 7 consultation. For this reason, there is low likelihood of federal actions being proposed by non-DOD agencies that would affect MHI IFKW critical habitat at this site.

Recommendation: We conclude that the benefit to national security of excluding this area outweighs the conservation benefit of designation, and recommend that Kingfisher range off Niihau be excluded from the areas considered from critical habitat designation. Several factors support this exclusion. This area is a unique and important place for DOD activities and potential impacts from those activities will result in modifications to the DOD consultation process. The benefits of designating this small and low-use and low-travel area are reduced somewhat by the protections already afforded to some of the characteristics of the essential feature, and because DOD use of this area is likely to discourage other federal activities that may otherwise require consultation. While DOD must still insure that activities in this area are not likely to jeopardize the continued existence of the MHI IFKW, the exclusion of this area means DOD will not be required to consult to insure that its activities are not likely to adversely modify habitat or essential features within this area. Based on our best scientific judgment and acknowledging the small size of this area (approximately 0.03 percent of the area considered for designation), and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanism), we conclude that exclusion of this area will not result in the extinction of the species.

Warning Area 188

This includes two large offshore warning areas west and north of Kauai. This area overlaps with the submarine transit lane "Hula" northeast of Kauai. The areas shown in Figure 7 overlap with approximately 2,674 km^2 (~1,032 mi^2) or approximately 5 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). Training and testing activities in this area of the range were noted to produce in-water noise (i.e., active sonar, explosives, vessel movement, and impulsive sounds generated in close vicinity to or at the water surface from weapons firing, and inert impact of non-explosive munitions) (DoN 2017a).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, the Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential features of critical habitat within these documents and within this upcoming consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in extensive effects, this process may also include requirements to modify the activity in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be resolved relatively easily through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs.

Uniqueness of DOD Activities at the Site: The Navy noted that W-188 is one of two areas of the HRC where operators are most likely to schedule explosive events because this area allows for ease of scheduling, safety, instrumentation and airspace concerns (DoN 2017a).

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range is low-use for MHI IFKWs and supports low travel areas for MHI IFKWs. Although low use and thus not areas of highest conservation value, these areas may continue to provide opportunities for foraging as oceanic conditions vary seasonally or temporally, and so may have value to the whales.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018). These include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy undergoes section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., The Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: Non-DOD activities that may otherwise affect the essential features may be discouraged from portions of this area that are controlled or heavily used by DOD (e.g., PMRF ranges). However, it is possible that non-DOD federal actions will be proposed outside of the range and within this site that could affect the essential features, but that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

Recommendation: We conclude that the benefit to national security of excluding this area outweighs the conservation benefit of designation, and recommend that Warning area 188 be excluded from the areas considered from critical habitat designation. Several factors support this exclusion. This area is a unique and important place for DOD activities and potential impacts from those activities will result in modifications to the DOD consultation process and potential modifications to the DOD activities. The benefits of designating this low-use and low-travel area are reduced somewhat by the protections already afforded to some of the characteristics of the essential feature and because DOD control over or use of portions of this area is likely to discourage other federal activities that may otherwise require consultations. While DOD must still insure that activities in this area are not likely to jeopardize the continued existence of the MHI IFKW, the exclusion of this area means DOD will not be required to consult to insure that its activities are not likely to adversely modify habitat or essential features within this area. Based on our best scientific judgment and acknowledging the size of this area, and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanism), we conclude that exclusion of this area will not result in the extinction of the species.

Kaula and Warning Area 187

This DOD site is located 37 km (23 mi) west-southwest of Kawaihoa Point on Niihau and includes the surrounding warning area waters. The area shown in Figure 7 overlaps with approximately 266 km^2 (~103 mi^2) or approximately 0.5 percent of the area considered for designation. The island and waters immediately adjacent do not overlap with the potential designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). Activities at Kaula include bombing and gunnery exercises using non-explosives munitions. The non-explosive munitions expended on Kaula are targeting the island itself

and would only impact the water in the case of a rare miss, and the shallowest nearshore waters around Kaula less than 45 m deep are not part of the area considered for critical habitat. The Navy notes that the potential for any harm to marine mammal habitat from gunnery practice rounds is very remote. Navy modeling suggests that marine mammals may be exposed to sounds caused by the firing of weapons and inert impact of non-explosive munitions on the water's surface. However, as stated above, munitions are only targeted ashore at Kaula and are not expected to impact the water. Kaula Island averages approximately 55 scheduled events per year, which typically doubles during the years in which the OPAREA hosts the Rim of the Pacific Exercise. The Navy also noted that training and testing activities may produce in-water noise (from vessel movement and impulsive sounds from ordnance generated in close vicinity to or at the water surface) in proposed critical habitat (DoN 2017a).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, the Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may impact the essential features of critical habitat within these documents and within this upcoming consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. The activities identified may be readily addressed through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs.

Uniqueness of DOD Activities at the Site: The Navy notes that Kaula is an invaluable site, because the small islet is uninhabited and fully surrounded by restricted airspace, which makes it unique. It is particularly useful for smaller events because it is close to Oahu (DoN 2017a). We defer to the Navy's expert judgment concerning the importance of this area to military training and preparedness.

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range is low-use for MHI IFKWs and supports low travel areas for MHI IFKWs. Although low use and thus not areas of highest conservation value, these areas may continue to provide opportunities for foraging as oceanic conditions vary seasonally or temporally, and so may have value to the whales.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above the Navy undergoes section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., The Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: DOD use of this area is likely to discourage additional activities that would otherwise be subject to section 7 consultation. For this reason, there is low likelihood of federal actions being proposed by non-DOD agencies that would affect MHI IFKW critical habitat at this site.

Recommendation: We conclude that the benefit to national security of excluding this area outweighs the conservation benefit of designation, and recommend that Kaula and Warning Area 187 off Niihau be excluded from the areas considered for critical habitat designation. Several factors support this exclusion. This area is a unique and important place for DOD activities and potential impacts from those activities will result in modifications to the DOD consultation process to some degree. The benefits of designating this very low-use and low-travel habitat area is reduced somewhat by the protections already afforded to some of the characteristics of the essential feature and because DOD use of this area is likely to discourage other federal activities that may otherwise require consultation. While DOD must still insure that activities in this area are not likely to jeopardize the continued existence of the MHI IFKW, the exclusion of this area means DOD will not be required to consult to insure that its activities are not likely to adversely modify habitat or essential features within this area. Based on our best scientific judgment and acknowledging the small size of this area (approximately 0.5 percent of the area considered for designation), and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanism), we conclude that exclusion of this area will not result in the extinction of the species.

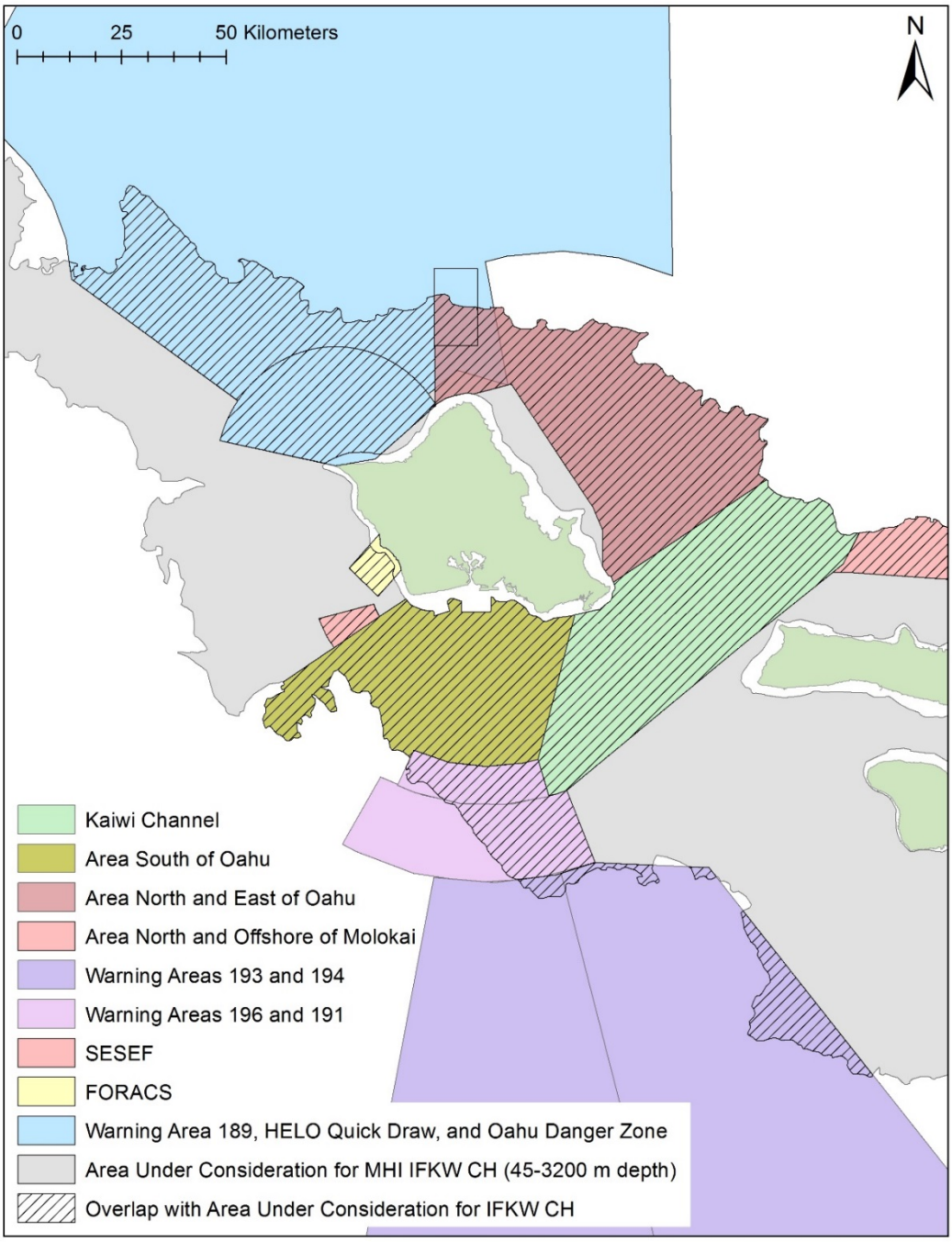

Figure 8. Areas requested for exclusion near Oahu.

Warning Area 189, HELO Quickdraw Box and Oahu Danger Zone

W-189 includes airspace north and west of Oahu, but only the nearshore portion of it overlaps with the proposed critical habitat. Additionally, the submarine transit lane "Hula" northwest and west of Oahu, where active sonar may be used, overlaps with W-89. The areas shown in Figure 8 overlap with approximately 2,886 km^2 (~1,114 mi^2) or approximately 5 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). The Navy notes that this area is used for gunnery and rockets as well as dipping sonar during anti-submarine warfare training. It is considered an area of "low use" of active sonar (DoN 2017a). The Quick Draw Box is a sub-area within W-189 identified to isolate live-fire activities and increase coordination with units using this area. A danger zone is identified in 33 CFR 335.1350 as an arc NW out from Kaena Point Light. The danger zone is closed to the public and all shipping on specific dates to be designated for actual weapons firing and no person, vessel or other craft shall enter or remain in the area during the times designated for firing except as authorized. On dates not specified for firing, the area will be open to normal maritime traffic (DoN 2017a).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, the Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential features of critical habitat within these documents and within this upcoming consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in extensive effects, this process may also include requirements to modify the activity in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be resolved relatively easily through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs.

Uniqueness of DOD Activities at the Site: The Navy did not identify how this specific area is unique, but indicated the importance of sustaining military training with realistic training environments for sailor preparedness.

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for

additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that the overlap area falls into mostly low-use areas for MHI IFKWs. However, offshore of Kaena point an area is highlighted as high-use for MHI IFKWs. This area overlaps with moderate to low travel areas for MHI IFKWs. High-use areas likely indicate areas of higher conservation value where greater foraging and/or reproductive opportunities exist. High to moderate travel areas provide further understanding about areas that may more frequently support travel. Within a restricted range, all areas contain the essential feature and may provide opportunities for foraging as oceanic conditions vary seasonally or temporally.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above the Navy undergoes section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., The Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018). This area overlaps to some degree with Sanctuary waters and bottomfish restricted fishing sites, which may also provide some protection for water quality and prey species respectively.

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible that non-DOD federal actions will be proposed within this site that could affect the essential features, but that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation. The Bureau of Ocean Energy Management (BOEM) has identified two general wind lease areas, the northwest portion of which overlaps with this area; however, as noted in the Exclusions Based on Economics section of this report, this area will be proposed for economic exclusion. Accordingly, a small portion of this area (approximately 56 km^2 or 22 mi^2) being requested for national security exclusion is already proposed for economic exclusion.

Recommendation: We recommend that this area not be excluded from the critical habitat designation because the benefits of exclusion do not appear to outweigh the benefits of designation. The extent of the area requested encompasses approximately 2,886 km^2 (~1,114 mi^2) of the area considered for critical habitat, which includes a high-use area of high conservation value. Only the danger zone is closed to the public during designated firing dates, and other federal actions take place in these surrounding areas that may otherwise affect the MHI IFKW essential feature. Therefore, other federal activities subject to ESA section 7 may occur in these waters that may impact essential features of critical habitat.

Fleet Operational Readiness Accuracy Check Site Range (FORACS)

The Fleet Operational Readiness Accuracy Check Site (FORACS) Range AND Surface Ship Radiated Noise Measurement (SSRNM) System are located off Oahu's west coast and connected by an undersea data transmission cable to the Fleet Technical Evaluation Center on the west coastline. This area is used to check range and bearing accuracy for Navy ships and to assess noise coming from vessels as they operate. The area shown in Figure 8 overlaps with approximately 74 km^2 (~29 mi^2) or approximately 0.1 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). Activities on the FORACS range allows Navy ships to ensure equipment function and calibration as well as vessel noise levels and signature. Systems that are checked during FORACS testing include radars, passive sonars, and active sonars. The Navy noted that ships will conduct a series of "runs" on the range, each taking approximately 1.5 hours. Both active and passive sonar can be checked on a single run. During a run the ship will approach the target, which could be a stationary underwater acoustic transducer located offshore or the shore station, making a slow turn to eventually track outbound from the target and establish a bearing to the target in use. This information is compared with the known bearing. During active sonar testing range-to-target information is also evaluated.

The SSRNM hydrophone array is located within the FORACS range and receives noise (i.e., propulsion, ship machinery and flow noise) coming from vessels for analysis. SSRNM testing is conducted on Navy ships to evaluate their waterborne acoustic characteristics while underway thus reducing vulnerability to undersea warfare threats. Ships and submarines may also conduct sonar maintenance while on the range (DoN 2017a).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential features of

critical habitat within these documents and within this upcoming consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity or employ mitigation in order to minimize effects to MHI IFKW critical habitat.

Uniqueness of DOD Activities at the Site: The Navy indicated that system checks at the FORACS and SSRNM sites cannot be completed anywhere else because they require infrastructure on the bottom and on the adjacent land. If this important testing did not occur, military systems and equipment could fall out of calibration, ships could be vulnerable to undersea threats due to excessive vessel noise, and units would not fully prepared for duty (DoN 2017a).

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range is low-use for MHI IFKWs and supports moderate to low travel areas for MHI IFKWs. Although not a high-use or high travel area, and thus not of highest conservation value, these areas may continue to provide opportunities for foraging as oceanic conditions vary seasonally or temporally, and so may have value to the whales.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above the Navy undergoes section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with

ensuring water quality and sustainable fish resources (e.g., The Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: Few if any federal actions by non-DOD agencies have been proposed at this site that are likely to affect the MHI IFKW essential feature. For this reason, there is low likelihood of federal actions being proposed by non-DOD agencies that would affect MHI IFKW critical habitat at this site.

Recommendation: We conclude that the benefit to national security of excluding this area outweighs the conservation benefit of designation, and recommend that the FORACS range off Oahu be excluded from the areas considered for critical habitat designation. Several factors support this exclusion. This area is a unique and important place for DOD activities and potential impacts from those activities will result in modifications to the DOD consultation process and potential modifications to the DOD activities. The benefits of designating this low-use and moderate to low-use travel area are reduced somewhat by the protections already afforded to some of the characteristics of the essential feature and because DOD use of this area is likely to discourage other federal activities that may otherwise affect the essential features and require consultation. While DOD must still insure that activities in this area are not likely to jeopardize the continued existence of the MHI IFKW, the exclusion of this area means DOD will not be required to consult to insure that its activities are not likely to adversely modify habitat or essential features within this area. Based on our best scientific judgment and acknowledging the small size of this area (approximately 0.1 percent of the area considered for designation), and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanism), we conclude that exclusion of this area will not result in the extinction of the species.

Shipboard Electronic Systems Evaluation Facility Range (SESEF)

The Shipboard Electronic Systems Evaluation Facility Range (SESEF) is located southwest of Oahu and overlaps with approximately 74 km^2 (~29 mi^2) or approximately 0.1 percent of the area considered for designation (see Figure 8. Areas requested for exclusion near Oahu).

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). The Shipboard Electronic Systems Evaluation Facility (SESEF) southwest of Oahu provides state-of-the-art test and evaluation of combat systems that radiate or receive electromagnetic energy. Tests are conducted to evaluate ship, shore, and aircraft systems that emit or detect electronic emissions. These systems include those used for radio communications, data transfer, navigation, radar, and systems that identify friend and foe. The test equipment operated by the facility allows for a performance evaluation of the

ship, shore, or aircraft system. Tests conducted by the facility fall into one of two broad categories: Quick Look and System Performance tests. Neither test uses ordnance or sonar. System performance tests generally require longer periods of dedicated testing and require the ship to maneuver in pre-defined geometries within a certain geographic area (i.e., the offshore range) (DoN 2017a).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, the Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may impact the essential features of critical habitat within these documents and within this upcoming consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. While it is unlikely that activities at this site will result in extensive effects, additional analyses are expected to ensure the protection of essential features

Uniqueness of DOD Activities at the Site: The Navy noted that some SESEF associated testing can be completed while in port, however other testing requires detailed analyses and specific maneuvering on the range. If these system checks could not be conducted Navy combat, communications, and navigational systems could go out of calibration without the operators' knowledge. That could make Navy platforms unable to accurately resolve their targets, unable to correctly position themselves and increase the risk of collisions and grounding, or could make Navy ships more vulnerable to electronic attack (DoN 2017a).

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range is low-use for MHI IFKWs and supports low travel areas for MHI IFKWs. Although low use and thus not areas of highest conservation value, these areas may continue to provide opportunities for foraging as oceanic conditions vary seasonally or temporally, and so may have value to the whales.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above the Navy undergoes section 7 consultations (under the ESA) to ensure that

their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., The Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: DOD use of this area is likely to discourage additional activities that would otherwise be subject to section 7 consultation. For this reason, there is low likelihood of federal actions being proposed by non-DOD agencies that would affect MHI IFKW critical habitat at this site.

Recommendation: We conclude that the benefit to national security of excluding this area outweighs the conservation benefit of designation, and recommend that SESEF range off Oahu be excluded from the areas considered for critical habitat designation. Several factors support this exclusion. This area is a unique and important place for DOD activities and potential impacts from those activities will result in modifications to the DOD consultation process. The benefits of designating this low-use and low-travel area are reduced somewhat by the protections already afforded to some of the characteristics of the essential feature and because DOD use of this area is likely to discourage other federal activities that may otherwise require consultation. While DOD must still insure that activities in this area are not likely to jeopardize the continued existence of the MHI IFKW, the exclusion of this area means DOD will not be required to consult to insure that its activities are not likely to adversely modify habitat or essential features within this area. Based on our best scientific judgment and acknowledging the small size of this area (approximately 0.1 percent of the area considered for designation), and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanism), we conclude that exclusion of this area will not result in the extinction of the species.

Warning Areas 196 and 191

These are two warning areas located south of Oahu at the outer edges of the designation. The areas shown in Figure 8 overlap with approximately 728 km^2 (~281 mi^2) or approximately 1 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). The

Navy indicated that gunnery exercise and gun testing for anti-surface warfare occurs in this area. These training and testing activities may produce in-water noise (i.e., vessel movement, and impulsive sounds generated in close vicinity to or at the water surface from weapons firing, and inert impact of non-explosive munitions) in proposed critical habitat.

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may impact the essential features of critical habitat within these documents and within this upcoming consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity or apply mitigation in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be readily addressed through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs.

Uniqueness of DOD Activities at the Site: The Navy did not identify how this specific area is unique, but indicated the importance of sustaining military training with realistic training environments for sailor preparedness.

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range is low-use for MHI IFKWs and supports low travel areas for MHI IFKWs. Although low use and thus not areas of highest conservation value, these areas may continue to provide opportunities for foraging as oceanic conditions vary seasonally or temporally, and so may have value to the whales.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above the Navy undergoes section 7 consultations (under the ESA) to ensure that

their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., The Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018)

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible but unlikely that non-DOD federal actions will be proposed within this site that could affect the essential features, due to the small scale of this area and its geographical remoteness from the islands.

Recommendation: We conclude that the benefit to national security of excluding this area outweighs the conservation benefit of designation, and recommend that Warning Areas 196 and 191 off Oahu be excluded from the areas considered for critical habitat designation. Several factors support this exclusion. Consultations could result in modifications to DOD military readiness activities conducted in these areas. Yet only a small fraction of the warning areas (300 square miles) overlaps with areas considered for critical habitat. The benefits of designating this small (approximately 1 percent of the area considered for designation) and low-use and low-travel area are reduced somewhat by the protections already afforded to some of the characteristics of the essential features and because DOD use of this area and the remoteness of this area is likely to discourage other federal activities that may otherwise require consultation. While DOD must still insure that activities in this area are not likely to jeopardize the continued existence of the MHI IFKW, the exclusion of this area means DOD will not be required to consult to insure that its activities are not likely to adversely modify habitat or essential features within this area. Based on our best scientific judgment and acknowledging the small size of this area, and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanism), we conclude that exclusion of this area will not result in the extinction of the species.

Warning Areas 193 and 194

Only small portions of W-193 and W-194 overlap with the proposed critical habitat. The areas shown in Figure 8 overlap with approximately 458 km^2 (~177 mi^2) or approximately 1 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential feature, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already

be required by the fact that MHI IFKWs are listed as endangered under the ESA). The Navy indicated that this area is used for anti-surface warfare and anti-submarine warfare training and testing. These training and testing activities may produce in-water noise (i.e., explosives, vessel movement, and impulsive sounds generated in close vicinity to or at the water surface from weapons firing, and inert impact of non-explosive munitions) in proposed critical habitat.

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, the Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may impact the essential features of critical habitat within these documents and within this upcoming consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity or apply mitigation in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be readily addressed through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs.

Uniqueness of DOD Activities at the Site: The Navy did not identify how this specific area is unique, but indicated the importance of sustaining military training with realistic training environments for sailor preparedness. We defer to the Navy's expert judgment on the importance of these sites to military preparedness.

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range is low-use for MHI IFKWs and supports low travel areas for MHI IFKWs. Although low use and thus not areas of highest conservation value, these areas may continue to provide opportunities for foraging as oceanic conditions vary seasonally or temporally, and so may have value to the whales.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As

noted above the Navy undergoes section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible but unlikely that non-DOD federal actions will be proposed within this site that could affect the essential features, due to the small scale of this area and its geographical remoteness from the islands.

Recommendation: We conclude that the benefit to national security of excluding this area outweighs the conservation benefit of designation, and recommend that Warning Areas 193 and 194 south of Oahu be excluded from the areas considered for critical habitat designation. Several factors support this exclusion. This area is a unique and important place for DOD activities and potential impacts from those activities will result in modifications to the DOD consultation process and potential modifications to the DOD activities. The benefits of designating this small (approximately 1 percent of the area considered for designation), low-use and low-travel area are reduced somewhat by the protections already afforded to some of the characteristics of the essential feature and because DOD use and the remote nature of this area is likely to discourage other federal activities that may otherwise require consultation. While DOD must still insure that activities in this area are not likely to jeopardize the continued existence of the MHI IFKW, the exclusion of this area means DOD will not be required to consult to insure that its activities are not likely to adversely modify habitat or essential features within this area. Based on our best scientific judgment and acknowledging the small size of this area, and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanism), we conclude that exclusion of this area will not result in the extinction of the species.

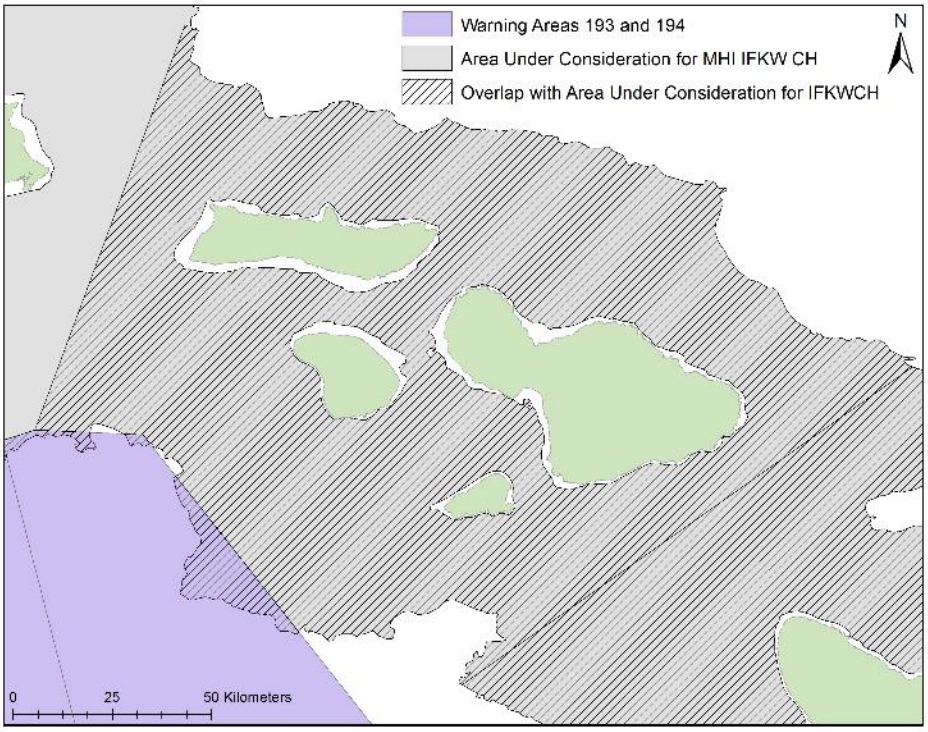

Figure 9. Four Island Region requested for exclusion.

Four Island Region (Maui, Lanai, Molokai, Kahoolawe)

The Navy highlighted the four island region around Maui, Lanai, Molokai, and Kahoolawe as important to submarine training and certification. No boundary was provided for this highlighted area; however, the Navy included a map depicting all waters surrounding these islands that overlap with the areas considered for designation (DoN 2017a). For purposes of determining the approximate size of this area we have drawn boundaries that cross through the channels between Oahu and Molokai, and Maui and Hawaii. The area shown in Figure 9 overlaps with approximately 15,389 km^2 (~5,940 mi^2) or approximately 27 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). Submarine crews utilize this area for training and deployment certifications in a variety of warfare mission areas (Undersea warfare; Antisubmarine warfare; Intelligence, Surveillance and Reconnaissance; and Mine Countermeasure), shallow water operations and ship control, shallow water navigation, and shallow water weapons employment. Submarine training and certification activities can include participation by surface ASW forces and maritime patrol and reconnaissance aircraft, which may employ active mid-frequency and high-frequency sonar. These training and testing activities may produce in-water noise (e.g., active sonar, vessel movement, and impulsive sounds generated in close

vicinity to or at the water surface from weapons firing, and inert impact of non-explosive munitions) in proposed critical habitat (DoN 2017a).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, the Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential features of critical habitat within these documents and within this upcoming consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity or apply mitigation in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be readily addressed through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs.

Uniqueness of DOD Activities at the Site: The Navy stated that this area is crucial to retaining the ability to train submarine crews year round in the unique bathymetry of the Four-Island Region. This area provides unique environmental characteristics that allow for training in waters that are shallow and navigationally constrained. This network of shallow water inter-island channels is unique within the Eastern/Mid Pacific training range complexes, and it provides an unmatched opportunity to train on searching for submarines in shallow water and avoiding active sonar searches. This is the only training minefield optimized for submarines in Hawaii and it is required to support several certifications necessary to achieve military preparedness.

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range supports both high-use and low-use areas for MHI IFKWs. Additionally, this area supports high to low-travel areas. High-use areas likely indicate areas of higher conservation value where greater foraging and/or reproductive opportunities exist. High to moderate travel areas provide further understanding about areas that may more frequently support travel. Cluster 2 animals are observed more near the island of Hawaii and information suggests that this cluster may show preferences for the north Maui area (Baird, pers. communication, August 15, 2017). High use areas within this region include waters extending from north of Maui to northwest of Molokai

and extending west towards Oahu and south into the channel between Molokai and Oahu; additionally, small areas are found to the west and southwest of Lanai.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy undergoes section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment. Additionally, in the HSTT DEIS/OEIS (www.hstteis.com), the Navy has proposed geographic mitigation measures based upon NMFS designated Biologically Important Areas for false killer whales and beaked whales (van Parijs 2015). Specifically, the Navy has proposed a new area encircling Hawaii Island and a second new area in the 4-Islands region (Maui Nui) both of which are designed to provide additional protection for MHI IFKW (among other species) (DoN 2017b, and HSTT Proposed Rule). Mitigation measures include the following: limiting the amount of use of surface ship hull-mounted mid-frequency active sonar (300 hours annually) and dipping sonar (20 hours annually); prohibiting explosives during training and testing off of Hawaii Island; and prohibiting surface ship hull-mounted mid-frequency active sonar from November 15 through April 15 in an area that surrounds portion of the Maui Nui area. More detail on these proposed measures can be found at the following website: www.hstteis.com and www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., the Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible that non-DOD federal actions will be proposed within this site that could affect the essential features, but that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

Recommendation: We recommend that this area not be excluded from the critical habitat designation because the benefits of exclusion do not appear to outweigh the benefits of designation. While we give great deference to the Navy's judgment regarding the importance of military activities in the identified area, this area also has significant conservation value. The extent of the area requested encompasses a large area

(approximately 27 percent of the area considered for designation) that includes several areas that are high-use for MHI IFKWs. Other federal actions may take place in these surrounding areas. Therefore, other federal activities subject to ESA section 7 may occur in these waters that may impact feature characteristics. Although the DOD consultation process and potential activities may change as a result of designating this area, understanding the impacts that these activities may have on the MHI IFKW essential feature is important to support the conservation of this DPS.

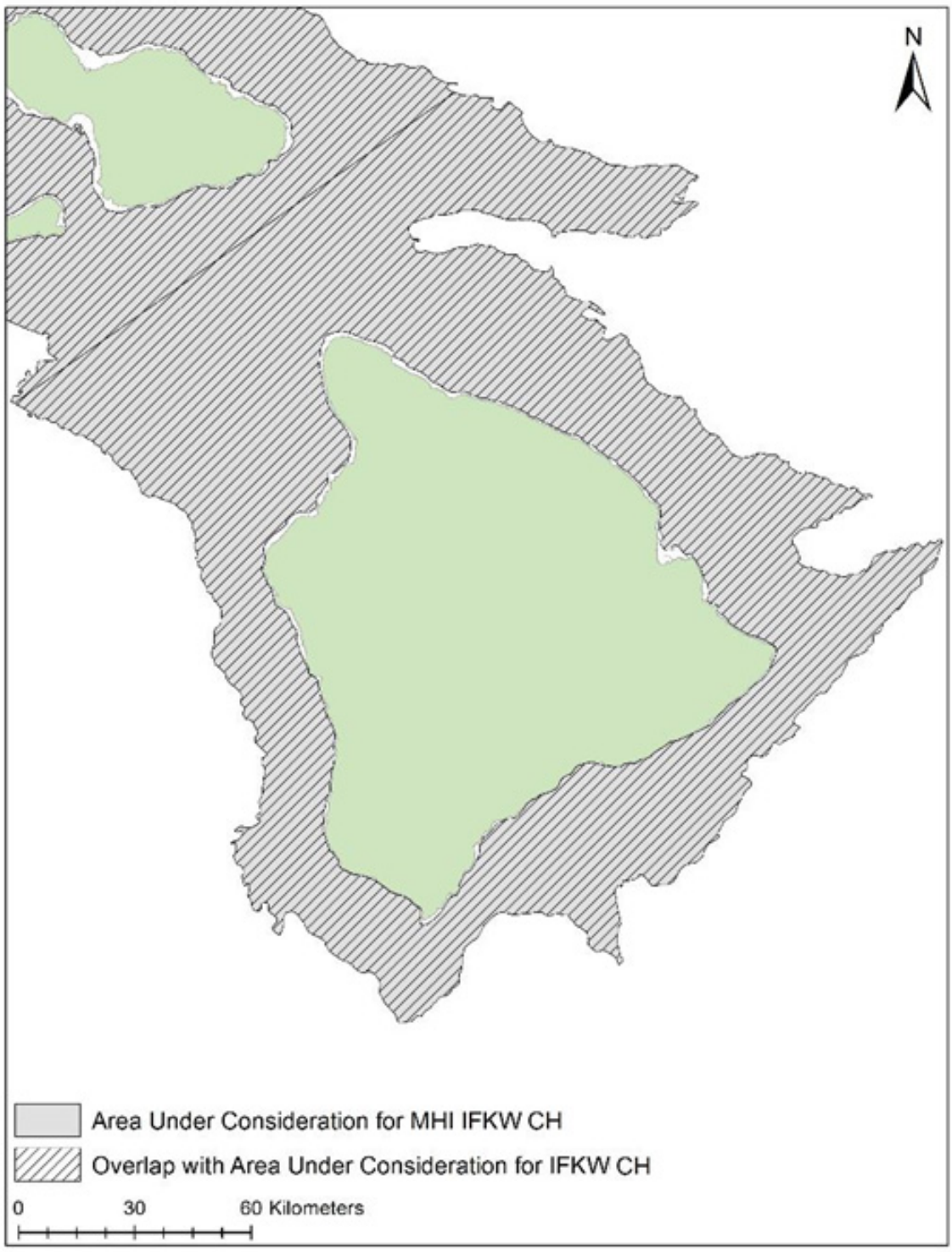

Figure 10. Hawaii Island request for exclusion.

Hawaii

The Navy highlighted the waters surrounding the Island of Hawaii as important to Navy training. No boundary was provided for this highlighted area; however, the Navy included a map depicting all waters surrounding this Island that overlap with the areas considered for designation (DoN 2017a). For purposes of determining the approximate size of this area we have drawn a boundary that crosses through the channel between Maui and Hawaii. The area shown in Figure 10 overlaps with approximately 16,931 km^2 (~6,535 mi^2) or approximately 30 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential feature, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). Training in the Alenuihaha Channel, as well as the waters west of Hawaii Island, allows for the integration of carrier strike group operations during simulated strait transits and amphibious landings. Active sonar is used to support strike maneuver and protect high value units (e.g., aircraft carriers) as aircraft go to strike at Pohakaloa Training Area (PTA) live fire range ashore, and most often occurs during RIMPAC. The Alenuihaha Channel allows sea, air, and land-based units to work in conjunction with one another in controlled airspace in close proximity to the PTA. The area around Hawaii Island is used by surface ships with anti-submarine warfare capability to train to clear the sea space for any submarine threat before Marines go ashore at Kawaihae Harbor or during amphibious movements into the PTA. The Alenuihaha Channel is one of the best locations for integrated air to ground marine operations. The approaches to the beaches are near large open water areas for strike group maneuvering and submarine activities, and are under controlled airspace and military warning areas, so multiple aircraft can be safely de-conflicted from civilian air traffic. Other waters around Hawaii are occasionally used for unit level training. Additionally, testing events may occur around Hawaii. Specifically, Intelligence, Surveillance and Reconnaissance (ISR) testing involving active sonar is used in waters west of Hawaii (off Kona) (DoN 2017a).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, Navy training and testing activities are covered under biological opinions through 2018. The Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential feature of critical habitat within this consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity or apply mitigation in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be readily

addressed through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs

Uniqueness of DOD Activities at the Site: The Alenuihaha Channel as well as the waters west of Hawaii Island provide a unique training capability that does not exist elsewhere in the Hawaii Range Complex. Hawaii Island is unique in that it is the only capable air to ground range able to support carrier strike group activities near a channel. These areas provide a unique and irreplaceable capability within the Hawaii Range Complex that allows naval forces to conduct realistic, integrated training in an environment that replicates the actual areas where they will be called to serve (DoN 2017a).

Limiting or restricting mid-frequency active sonar training in the Alenuihaha Channel would force the relocation of portions of Undersea Warfare training, Independent Deployer Certification training, Rim of the Pacific, and unit level training exercises to other channels in the Hawaiian OPAREAs farther from the Pohakuloa Training Area. Segmenting these training events over time and space could result in an unacceptable loss of realism, could result in increased safety risks, and erode readiness. The ability of a strike group to defend itself from submarine attack while transiting a strait (i.e., restricted waters) is critical to its survival in forward operating areas. Without this critical skills training, military personnel will not be adequately trained for deployment in support of National Command Authority and Combatant Commander tasking (DoN 2017a).

Conservation Benefits:
Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range supports both high-use and low-use areas for MHI IFKWs. Additionally, this area supports high to low travel areas for MHI IFKWs. High-use areas likely indicate areas of higher conservation value where greater foraging and/or reproductive opportunities exist. High to moderate travel areas provide further understanding about areas that may more frequently support travel. These high-use areas are found off the west coast and around the northwest tip of the Island. As noted at the beginning of this section, satellite-tracking information does not offer a full understanding of spatial habitat use, because it is limited in certain months of the year and data from social clusters 4 and 2 are limited. Tracking data from Cluster 3 individuals indicate that the northwest tip of the Island may be important to this cluster. Although largely underrepresented in tracking-data, observational data indicate that Cluster 2 animals are more commonly found off the Island of Hawaii.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy undergoes section 7 consultations (under the ESA) to ensure that its activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment. Additionally, in the HSTT DEIS/OEIS (www.hstteis.com), the Navy has proposed geographic mitigation measures based upon NMFS designated Biologically Important Areas for false killer whales and beaked whales (van Parijs 2015). Specifically, Navy has proposed a new area encircling Hawaii Island and a second new area in the 4-Islands region (Maui Nui) both of which are designed to provide additional protection for MHI IFKW (among other species) (DoN 2017b, and HSTT Proposed Rule). Mitigation measures include the following: limiting the amount of use of surface ship hull-mounted mid-frequency active sonar (300 hours annually) and dipping sonar (20 hours annually); prohibiting explosives during training and testing off of Hawaii Island; and prohibiting surface ship hull-mounted mid-frequency active sonar from November 15 through April 15 in an area that surrounds portion of the Maui Nui area. More detail on these proposed measures can be found at the following website: www.hstteis.com and www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., the Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible that non-DOD federal actions will be proposed within this site that could affect the essential feature, but that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

Recommendation: We recommend that this area not be excluded from the critical habitat designation because the benefits of exclusion do not appear to outweigh the benefits of designation. While we give great deference to the Navy's judgment regarding the importance of military activities in the identified area, this area also has significant conservation value. The extent of the area requested encompasses a large area (approximately 30 percent of the area considered for designation) that includes a high-use area for MHI IFKWs and is recognized as important to Cluster 2 animals, which are underrepresented in tracking information. The DOD does not control the marine waters

surrounding Hawaii Island, and other federal actions take place in these surrounding areas. Therefore, other federal activities subject to ESA section 7 may occur in these waters that may impact the essential feature of critical habitat. Although the DOD consultation process and potential activities may change as a result of designating this area, understanding the impacts that these activities may have on the MHI IFKW essential feature is important to support the conservation of this DPS.

Kaulakahi Channel Portion of W-186

This area and the activities described are a subset of the Navy's request for the much larger "Entire Area" submitted on June 22, 2017. We have reevaluated this geographically limited portion of the initial request in response to information submitted by the Navy on October 10, 2017. Although the June 22, 2017 request provided a full description of the defense activities in this area, the Navy's supplemental submission in October 2017 helped improve our understanding of the geographic scope of the particular impacts to national security. For example, the supplemental request clarified that the Channel Portion of the W-186 area is used to support activities happening on the Pacific Missile Range Facility (PMRF) Offshore Areas (DON 2017b, DON 2018). The area shown in Figure 7 overlaps with approximately 1,631 km^2 (630 mi^2) or approximately 3 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential feature, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). W-186 is designated as special use air space and supports activities associated with the Pacific Missile Range Facilities Offshore Areas (see above). The Navy does not use the Kaulakahi Channel routinely during regular training and operations; however, it is common to use this channel for training with mid-frequency active sonar during RIMPAC, due to its proximity to PMRF Offshore. In addition, this area supports helicopter air to surface gunnery exercises and crew small arms exercises (DON 2018).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, Navy training and testing activities are covered under biological opinions through 2018. The Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential feature of critical habitat within this consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity or apply mitigation in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be readily addressed through this consultation because the cumulative duration of temporary

changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs.

Uniqueness of DOD Activities at the Site:
The site's proximity to the PMRF Offshore Ranges and providing support for activities that occur on the PMRF Offshore ranges (see PMRF Offshore Ranges above), including support for Submarine Command Course, Naval Surface fire Support, and RIMPAC (DON 2018).

Conservation Benefits:
Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range is low-use and supports low travel areas for MHI IFKWs. Although low use and thus not areas of highest conservation value, these areas may continue to provide opportunities for foraging as oceanic conditions vary seasonally or temporally, and so may have value to the whales.

Level of Protection Already Provided by Management:
Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018). These include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Air Force undergoes section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., The Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible that non-DOD federal actions will be proposed within this site that could affect the essential feature, but that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

Recommendation: In light of our improved understanding of the defense activities conducted and the reduced size of the requested exclusion, we conclude that the benefit to national security of excluding this area outweighs the conservation benefit of designation, and recommend that Kaulakahi Channel portion of Warning area 186 be excluded from the areas considered for critical habitat designation. Several factors support this exclusion. This area is a unique and important place for DOD activities and potential impacts from those activities will result in modifications to the DOD consultation process and potential modifications to the DOD activities. The benefits of designating this low-use and low-travel area are reduced somewhat by the protections already afforded to some of the characteristics of the essential feature. While DOD must still insure that activities in this area are not likely to jeopardize the continued existence of the MHI IFKW, the exclusion of this area means DOD will not be required to consult to insure that its activities are not likely to adversely modify habitat or the essential feature within this area. Based on our best scientific judgment and acknowledging the size of this area, and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanism), we conclude that exclusion of this area will not result in the extinction of the species.

Area North and East of Oahu including a small portion of W-189 and the Helo Quickdraw Box

This area and the activities described are a subset of the Navy's request for the much larger "Entire Area" and a reassessment of the eastern portion of the W-189 and the HELO Quickdraw box area submitted on June 22, 2017. We have reevaluated this geographically limited portion of the initial request in response to information submitted by the Navy on October 10, 2017. Although the June 22, 2017 request provided a full description of the defense activities in this area, the Navy's supplemental submission in October 2017 helped improve our understanding of the geographic scope of the particular impacts to national security. For example, the supplemental request clarified that the areas north and east of Oahu support activities in the Helo Quickdraw Box (DON 2017b, DON 2018); this information improved our understanding of the geographic scope of particular impacts to areas around Oahu. We considered this area separately from the initial Warning Area 189, HELO Quickdraw Box and Oahu Danger Zone exclusion request, because this request highlighted area more to the north and east of Oahu. The area shown in Figure 8 overlaps with approximately 2,472 km^2 (954 mi^2) or approximately 4 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential feature, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). The Navy referred back to information provided for Warning Area 189, HELO Quickdraw Box and Oahu Danger Zone for the activities occurring in this area. In addition, the Navy noted impulsive and non-impulsive source use in the area (DON 2018).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, Navy training and testing activities are covered under biological opinions through 2018. The Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential feature of critical habitat within this consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity or apply mitigation in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be readily addressed through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs.

Uniqueness of DOD Activities at the Site: The bathymetry in this area is important for anti-submarine warfare training since it replicates the bathymetry of areas in the western Pacific where the ships and submarines will deploy and may encounter enemy combatants (DON 2018).

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that the overlap area falls into mostly low-use areas for MHI IFKWs, but that some overlap occurs with high and medium-use areas for MHI IFKWs in the southeast corner leading towards the Kaiwi Channel. Additionally, this area overlaps with moderate and low travel areas for MHI IFKWs. High-use areas likely indicate areas of higher conservation value where greater foraging and/or reproductive opportunities exist. High to moderate travel areas provide further understanding about areas that may more frequently support travel. Within a restricted range, low-use areas continue to offer essential feature and may provide unique opportunities for foraging as oceanic conditions vary seasonally or temporally.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy undergoes section 7 consultations (under the ESA) to ensure that

its activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Additional protections for the the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., the Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible that non-DOD federal actions will be proposed within this site that could affect the essential features, but that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

Recommendation: We recommend that this area not be excluded from the critical habitat designation because the benefits of exclusion do not appear to outweigh the benefits of designation. While we give great deference to the Navy's judgment regarding the importance of military activities in the identified area, this area also has significant conservation value. The extent of the area requested encompasses approximately 2,472 km^2 (~954 mi^2) of the area considered for critical habitat, which includes some high and medium use areas of high conservation value as well as moderate travel areas. Further, other federal actions may take place in these surrounding areas that may otherwise affect the MHI IFKW essential feature. Therefore, other federal activities subject to ESA section 7 may occur in these waters that may impact essential features of critical habitat.

Area to the South of Oahu

This area and the activities described are a subset of the Navy's request for the much larger "Entire Area" submitted on June 22, 2017. We have reevaluated this geographically limited portion of the initial request in response to information submitted by the Navy on October 10, 2017. Although the June 22, 2017 request provided a full description of the defense activities in this area, the Navy's supplemental submission in October 2017 helped improve our understanding of the geographic scope of the particular impacts to national security. For example, supplemental request clarified that the areas south of Oahu support activities near Pearl Harbor (DON 2017b, DON 2018); this information improved our understanding of the geographic scope of particular impacts to areas around Oahu. We considered this area separately from the initial Warning Area 189, HELO Quickdraw Box and Oahu Danger Zone exclusion request, because this request highlighted area more to the north and east of Oahu. The area shown in Figure 8 overlaps with approximately 1,803 km^2 (696 mi^2) or approximately 3 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential feature, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). Helicopter Maritime Strike Squadron (HSM-37) conducts coordinated operations in these areas south of Oahu with ships stationed out of Pearl Harbor. This area is primarily used for ship-air integration including, but not limited to: Deck Landing Qualifications, Vertical Replenishment training, and aviation flight team training (DON 2018). This area is also frequently used for sonar as ships head out to sea for training and testing in the W-193 and W-194 areas, PMRF, FORACS, SESEF, and through the Kaiwi Channel.

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, Navy training and testing activities are covered under biological opinions through 2018. The Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may impact the essential features of critical habitat within this consultation (DON 2018). In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity or apply mitigation in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be readily addressed through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs.

Uniqueness of DOD Activities at the Site: This area is in close proximity to MCBH Kaneohe Bay, which significantly shortens the distance required for transit to training sites. If these operating areas are pushed further away from Oahu it will increase the risk of executing these missions by increasing the distance to fly, decreasing training time on station, and increasing distance to emergency fuel source and airfields. This area is of great importance for surface ship sonar use, both unit level (e.g. 1 ship) and group training and testing events given the close proximity to Pearl Harbor (DON 2018).

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that these sites are low-use for MHI IFKWs. Although this area supports mostly low travel, moderate-travel areas exist along the northern edge of this area leading towards the Maui nui area. Little information is available from Cluster 2 and 4 animals. Observation data and the newest tracking information suggests that Cluster 4 animals may show preferences for areas near penguin banks, southwest of Lanai or in the channel between Oahu and Molokai. (Baird, pers. communication, August 15, 2017). Although low-use and moderate travel areas, and thus not areas of highest conservation value, these areas may continue to provide opportunities for foraging as oceanic conditions vary seasonally or temporally, and so may have value to the whales.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy undergoes section 7 consultations (under the ESA) to ensure that its activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., the Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible that non-DOD federal actions will be proposed within this site that could affect the essential features, but that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

Recommendation: We recommend that this area not be excluded from the critical habitat designation because the benefits of exclusion do not appear to outweigh the benefits of designation. While we give great deference to the Navy's judgment regarding the importance of military activities in the identified area, this area also has significant conservation value. The extent of the area requested encompasses approximately 1,803 km^2 (~695 mi^2) of the area considered for critical habitat, which includes moderate travel areas that lead directly to high-use areas for MHI IFKWs. Other federal actions may take place in these surrounding areas that may otherwise affect the MHI IFKW essential feature. Therefore, other federal activities subject to ESA section 7 may occur in these waters that may affect essential features of critical habitat.

Kaiwi Channel

This area and the activities described are a subset of the Navy's request for the much larger "Entire Area" and a portion of the four islands region submitted on June 22, 2017. We have reevaluated this geographically limited portion of the initial request in response to information submitted by the Navy on October 10, 2017. Although the June 22, 2017 request provided a full description of the defense activities in this area, the Navy's supplemental submission in October 2017 helped improve our understanding of the geographic scope of the particular impacts to national security. For example, the supplemental request clarified that this channel plays an important role in supporting surface, submarine, and aircraft training (DON 2017b, DON 2018); this information improved our understanding of the geographic scope of particular impacts to areas between Oahu and Molokai. The area shown in Figure 8 overlaps with approximately 2,355 km^2 (909 mi^2) or approximately 4 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential feature, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). The Kaiwi Channel is primarily used by Helicopter Maritime Strike Squadron (HSM-37) as a transit lane between Oahu Operating areas and Molokai. These aircraft rarely conduct anti-submarine warfare operations in these waters unless required for specific exercises or tasking; however, they conduct search and training in these areas. The Kaiwi Channel (as well as the Pailolo and Kalohi Channels) are also used to simulate strait transits and provide realistic shallow water restricted area environments similar to those submarines and surface ships would experience while deployed. This area provides for opportunistic training within a channel environment for Navy ships stationed in Pearl Harbor. The Kaiwi Channel also overlaps partially with the Aloha submarine transit lane where some opportunistic mid-frequency active sonar and anti-submarine warfare training occurs when ships and submarines are present in this area. Surface vessels and air assets work with submarines in this area while conducting submarine Commanding Officer's training scenarios that include extended shallow water operations at periscope depth, general surveillance missions in shallow water, shallow water weapons employment, close to shore navigation, shallow water minefield operations, and shallow water ship control (DON 2018).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, Navy training and testing activities are covered under biological opinions through 2018. The Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential features of critical habitat within this consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification

or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity or apply mitigation in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be readily addressed through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs.

Uniqueness of DOD Activities at the Site: This area is described as particularly important to providing choke-point transit training for submarines; this type of training can only be simulated in areas where distance between two landmasses is short enough to meet the criteria of a strait. The Navy notes that training in actual shallow water conditions is necessary to develop proper crew coordination and tactics, techniques and procedures to ensure mission success. The Navy also noted that pushing training and testing further from land increases the difficulty in air control reporting and coordination required to conduct integrated readiness activities (DON 2018).

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range supports mostly high to medium-use areas. Additionally, this areas supports mostly high to moderate travel areas for MHI IFKWs. High-use areas likely indicate areas of higher conservation value where greater foraging and/or reproductive opportunities exist. High to moderate travel areas provide further understanding about areas that may more frequently support travel. High use areas within this region include waters extending through the channel and heading north towards Molokai.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy undergoes section 7 consultations (under the ESA) to ensure that its activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and

environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., the Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible that non-DOD federal actions will be proposed within this site that could affect the essential features, but that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

Recommendation: We recommend that this area not be excluded from the critical habitat designation because the benefits of exclusion do not appear to outweigh the benefits of designation. While we give great deference to the Navy's judgment regarding the importance of military activities in the identified area, this area also has significant conservation value. The area requested encompasses a large area of high-use for MHI IFKWs and supports important travel area. Other federal actions may take place in these surrounding areas. Therefore, other federal activities subject to ESA section 7 may occur in these waters that may affect essential features of critical habitat. Although the DOD consultation process and potential activities may change as a result of designating this area, understanding the impacts that these activities may have on the MHI IFKW essential feature is important to support the conservation of this DPS.

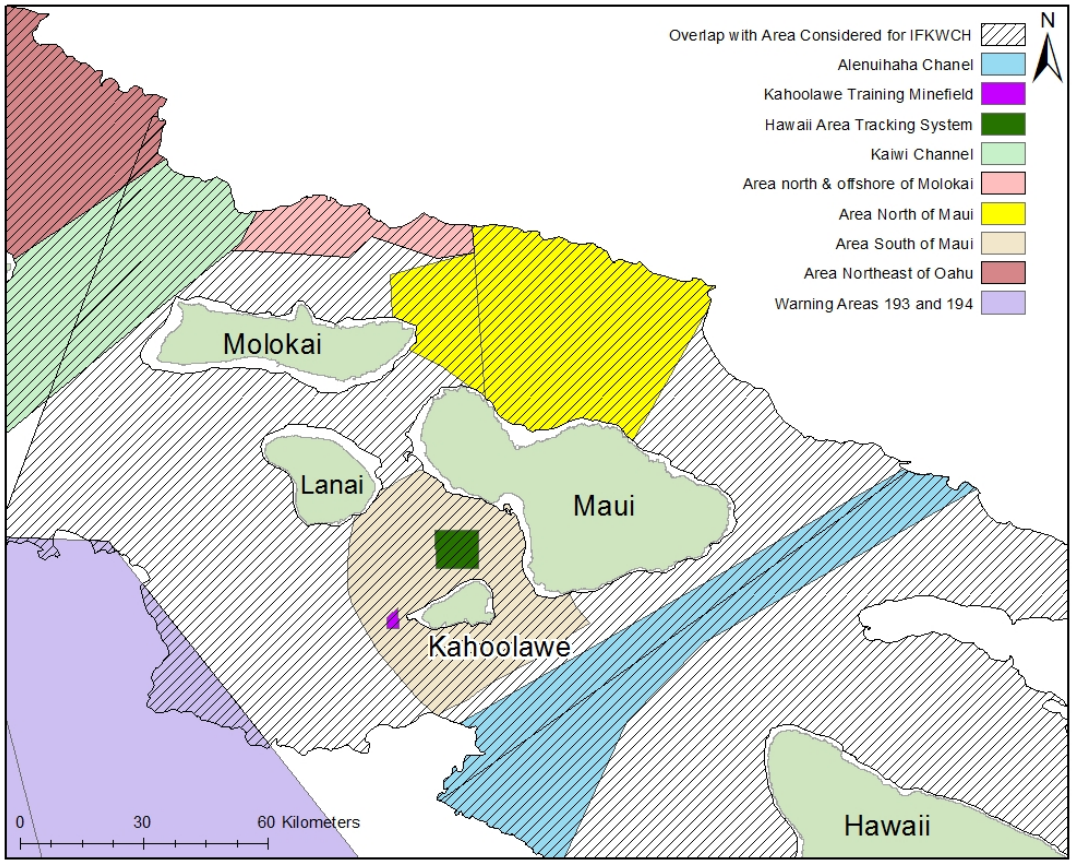

Figure 11. Request for exclusions in Maui nui and Hawaii Island Area.

Area North and Offshore of Molokai

This area and the activities described are a subset of the Navy's request for the much larger "Entire Area" and a portion of the four islands region submitted on June 22, 2017. We have reevaluated this geographically limited portion of the initial request in response to information submitted by the Navy on October 10, 2017. Although the June 22, 2017 request provided a full description of the defense activities in this area, the Navy's supplemental submission in October 2017 helped improve our understanding of the geographic scope of the particular impacts to national security. For example, the supplemental request clarified that this area plays an important role in supporting submarine training (DON 2017b, DON 2018); this information improved our understanding of the geographic scope of particular impacts to areas north of Molokai. The area shown in Figure 11 overlaps with approximately 596 km^2 (230 mi^2) or approximately 1 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential feature, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). This

area is used by submarines and surface ships during training events involving the use of mid-frequency active sonar such as the Submarine Command Course. Submarine and surface ship crews utilize this region for training and deployment certifications in a variety of warfare mission areas including undersea warfare, anti-submarine warfare, mine countermeasure, shallow water operations and ship control, shallow water navigation, and shallow water weapons employment. (DON 2018).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, Navy training and testing activities are covered under biological opinions through 2018. The Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential features of critical habitat within this consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity or apply mitigation in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be readily addressed through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs

Uniqueness of DOD Activities at the Site: The Navy noted that the training value within the 4-Islands Region is much higher compared to other nearshore environments within the Hawaii Range Complex, including the ranges at the PMRF, due to the challenging bathymetry, the large expanse of shallow areas, and the network of interconnected channels. Shifting the location for Submarine Command Course would result in a loss of shallow water operating experience for prospective submarine Commanding Officers, which is a vital skill for these commanders to master. Such a shift in location would result in a loss of shallow water operating experience and would compromise a submarine crew's ability to maintain operational proficiency. The bathymetry in this area is similar to the bathymetry in the western Pacific where ships and submarines are likely to encounter enemy combatants (DON 2018).

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range supports mostly low-use areas, but is located adjacent to high-

use areas. Additionally, this area supports mostly low travel areas, but a small portion of moderate travel areas may be included and some high travel areas lie directly adjacent to this area. High-use areas likely indicate areas of higher conservation value where greater foraging and/or reproductive opportunities exist. High to moderate travel areas provide further understanding about areas that may more frequently support travel.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy undergoes section 7 consultations (under the ESA) to ensure that its activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., the Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible that non-DOD federal actions will be proposed within this site that could affect the essential features, but that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation. However, we note that non-DOD federal consultations in deeper waters along this remote coastline may be less likely to occur.

Recommendation: We conclude that the benefit to national security of excluding this area outweighs the conservation benefit of designation, and recommend that the area north and offshore of Molokai be excluded from the areas considered for critical habitat designation. Several factors support this exclusion. This area is a unique and important place for DOD activities and potential impacts from those activities will result in modifications to the DOD consultation process and potential modifications to the DOD activities. The benefits of designating this largely low-use and low-travel area with small portions of moderate travel area is reduced somewhat by the protections already afforded to some of the characteristics of the essential feature. While DOD must still insure that activities in this area are not likely to jeopardize the continued existence of the MHI IFKW, the exclusion of this area means DOD will not be required to consult to insure that its activities are not likely to adversely modify habitat or essential features within this area. Based on our best scientific judgment and acknowledging the small size of this area (approximately 1 percent of the area considered for designation), and other safeguards

that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanism), we conclude that exclusion of this area will not result in the extinction of the species.

Alenuihaha Channel

This area and the activities described are a subset of the Navy's request for the much larger "Entire Area" and a portion of the Island of Hawaii request submitted on June 22, 2017. We reevaluated this geographically limited portion of the initial request in response to information submitted by the Navy on October 10, 2017 and, subsequent to the proposed rule being published, were provided supplemental information from the Navy limiting the geographic scope of their request to exclude the deeper areas of the Channel that support Undersea Warfare training. Although the June 22, 2017 request provided a full description of the defense activities in this area, the Navy's supplemental information helped improve our understanding of the geographic scope of the particular impacts to national security. For example, the supplemental requests clarified that this channel plays an important role in supporting sea, air, and land-based units to train in conjunction (DON 2017b, DON 2018); this information improved our understanding of the geographic scope of particular impacts to areas west of Hawaii. The area shown in Figure 11 overlaps with approximately 2,609 km^2 (1,007 mi^2) km^2 (mi^2) or approximately 5 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential feature, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). Training in the Alenuihaha Channel, as well as the waters west of Hawaii Island, allows for the integration of carrier strike group operations during simulated strait transits and amphibious landings. Carrier strike group training can include a full spectrum of various ships, submarines, aircraft, and Marine Corps forces training in the complex command, control, tactical, operational, and logistics functions necessary to prepare forces for deployment (DON 2018). Active sonar is used to support strike maneuver and protect high value units (e.g., aircraft carriers) as aircraft go to strike at Pohakaloa Training Area (PTA) live fire range ashore, and most often occurs during RIMPAC. The Alenuihaha Channel allows sea, air, and land-based units to work in conjunction with one another in controlled airspace in close proximity to the PTA. The area around Hawaii Island is used by surface ships with anti-submarine warfare capability to train to clear the sea space for any submarine threat before Marines go ashore at Kawaihae Harbor or during amphibious movements into the PTA. The Alenuihaha Channel is one of the best locations for integrated air to ground marine operations. The approaches to the beaches are near large open water areas for strike group maneuvering and submarine activities, and are under controlled airspace and military warning areas, so multiple aircraft can be safely de-conflicted from civilian air traffic. Other waters around Hawaii are occasionally used for unit level training. Additionally, testing events may occur around Hawaii. Specifically, Intelligence, Surveillance and Reconnaissance (ISR) testing involving active sonar is used in waters west of Hawaii (off Kona) (DoN 2017a).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, Navy training and testing activities are covered under biological opinions through 2018. The Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential features of critical habitat within this consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity or apply mitigation in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be readily addressed through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs.

Uniqueness of DOD Activities at the Site: The Alenuihaha Channel provides a unique training capability that does not exist elsewhere in the Hawaii Range Complex and this area provides a space where the Navy can conduct vital training that does not conflict with other civilian (commercial aircraft) or military activities (other planned trainings) (DON 2017a and 2018). Hawaii Island is unique in that it is the only capable air to ground range able to support carrier strike group activities near a channel. These areas provide a unique and irreplaceable capability within the Hawaii Range Complex that replicates strait environments that allow naval forces to conduct realistic, integrated training in an environment that replicates the actual areas where they will be called to serve (DoN 2017a, DON 2018). The geographic uniqueness of this area allows the Navy to train to meet its requirement to deploy Naval forces that can ensure the free flow of commerce and freedom of navigation by combatting piracy or mine threats (DON 2018). Without this critical skills training, military personnel will not be adequately trained for deployment in support of National Command Authority and Combatant Commander tasking (DoN 2017a).

Limiting or restricting mid-frequency active sonar training in the Alenuihaha Channel would force the relocation of portions of Undersea Warfare training, Independent Deployer Certification training, Rim of the Pacific, and unit level training exercises to other channels in the Hawaiian OPAREAs farther from the Pohakuloa Training Area. Segmenting these training events over time and space could result in an unacceptable loss of realism, could result in increased safety risks, and erode readiness. The ability of a strike group to defend itself from submarine attack while transiting a strait (i.e., restricted waters) is critical to its survival in forward operating areas. Further, the use of this channel allows the Navy the ability to schedule training that is not in conflict with other military activities on the PMRF Ranges or civilian air traffic. The channel is located

outside most of the civilian air traffic corridors approaching the Honolulu International Airport, which is necessary to safely de-conflict with civilian air traffic (DON 2018).

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range supports low-use and low-travel areas for MHI IFKWs. As noted at the beginning of this section, satellite-tracking information does not offer a full understanding of spatial habitat use, because it is limited in certain months of the year and data from social clusters 4 and 2 are limited. Although largely underrepresented in tracking-data, observational data indicate that Cluster 2 animals are more commonly found off the Island of Hawaii.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy undergoes section 7 consultations (under the ESA) to ensure that its activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment. Additionally, in the HSTT DEIS/OEIS (www.hstteis.com), the Navy has proposed geographic mitigation measures based upon NMFS designated Biologically Important Areas for false killer whales and beaked whales (van Parijs 2015). Specifically, the Navy has proposed a new area encircling Hawaii Island and a second new area in the 4-Islands region (Maui Nui) both of which are designed to provide additional protection for MHI IFKW (among other species) (DoN 2017b, and HSTT Proposed Rule). Mitigation measures include the following: limiting the amount of use of surface ship hull-mounted mid-frequency active sonar (300 hours annually) and dipping sonar (20 hours annually); prohibiting explosives during training and testing off of Hawaii Island; and prohibiting surface ship hull-mounted mid-frequency active sonar from November 15 through April 15 in an area that surrounds portion of the Maui Nui area. More detail on these proposed measures can be found at the following website: www.hstteis.com and www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and

environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., the Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible that non-DOD federal actions will be proposed within this site that could affect the essential features, but that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

Recommendation: We conclude that the benefit to national security of excluding this area outweighs the conservation benefit of designation, and recommend that Alenuihaha Channel (as reduced in geographic scope by the Navy) be excluded from the areas considered for critical habitat designation. Several factors support this exclusion. This area is a unique and important place for DOD activities, particularly integrated land and sea training, and potential impacts from those activities will result in modifications to the DOD consultation process and potential modifications to the DOD activities. The benefits of designating this low-use and low-travel area is reduced somewhat by the protections already afforded to some of the characteristics of the essential feature. While DOD must still insure that activities in this area are not likely to jeopardize the continued existence of the MHI IFKW, the exclusion of this area means DOD will not be required to consult to insure that its activities are not likely to adversely modify habitat or essential features within this area. Based on our best scientific judgment and acknowledging the relatively small size of this area (approximately 4 percent of the area considered for designation) and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanism), we conclude that exclusion of this area will not result in the extinction of the species.

Area North of Maui

This area and the activities described are a subset of the Navy's request for the much larger "Entire Area" and a portion of the Four Island Region request submitted on June 22, 2017. We have reevaluated this geographically limited portion of the initial request in response to information submitted by the Navy on February 8, 2018. Although the June 22, 2017 request provided a full description of the defense activities in this area, the Navy's supplemental submission in February 2018 helped improve our understanding of the geographic scope of the particular impacts to national security. For example, the supplemental request highlighted how this area plays an important role in submarine training (DON 2018); this information improved our understanding of the geographic scope of particular impacts to areas north of Maui. The area shown in Figure 11 overlaps with approximately 2,590 km^2 (~1,000 mi^2) or approximately 5 percent of the area considered for designation (DoN 2018).

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). Submarine crews utilize this area for training and deployment certifications in a variety of warfare mission areas (Undersea warfare; Antisubmarine warfare; Intelligence, Surveillance and Reconnaissance; and Mine Countermeasure), shallow water operations and ship control, shallow water navigation, and shallow water weapons employment. Submarine training and certification activities can include participation by surface ASW forces and maritime patrol and reconnaissance aircraft, which may employ active mid-frequency and high-frequency sonar. These training and testing activities may produce in-water noise (e.g., active sonar, vessel movement, and impulsive sounds generated in close vicinity to or at the water surface from weapons firing, and inert impact of non-explosive munitions) in proposed critical habitat (DoN 2018).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, the Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential features of critical habitat within these documents and within this upcoming consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity or apply mitigation in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be readily addressed through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs.

Uniqueness of DOD Activities at the Site: The Navy stated that this area is crucial to retaining the ability to train submarine crews year round in the unique bathymetry of the Four-Island Region. This area provides unique environmental characteristics that allow for training in waters that are shallow and navigationally constrained. This network of shallow water inter-island channels is unique within the Eastern/Mid Pacific training range complexes, and it provides an unmatched opportunity to train on searching for submarines in shallow water and avoiding active sonar searches.

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range supports a relatively large portion of high-use areas for MHI IFKWs. Additionally, this area supports high and moderate-travel areas. High-use areas likely indicate areas of higher conservation value where greater foraging and/or reproductive opportunities exist. High to moderate travel areas provide further understanding about areas that may more frequently support travel. Cluster 2 animals are observed more near the island of Hawaii and information suggests that this cluster may show preferences for the north Maui area (Baird, pers. Communication, August 15, 2017).
High use areas within this region include waters extending from north of Maui to northwest of Molokai and extending west towards Oahu and south into the channel between Molokai and Oahu; additionally, small areas are found to the west and southwest of Lanai.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy undergoes section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment. Additionally, in the HSTT DEIS/OEIS (www.hstteis.com), the Navy has proposed geographic mitigation measures based upon NMFS designated Biologically Important Areas for false killer whales and beaked whales (van Parijs 2015). Specifically, the Navy has proposed a new area encircling Hawaii Island and a second new area in the 4-Islands region (Maui Nui) both of which are designed to provide additional protection for MHI IFKW (among other species) (DoN 2017b, and HSTT Proposed Rule). Mitigation measures include the following: limiting the amount of use of surface ship hull-mounted mid-frequency active sonar (300 hours annually) and dipping sonar (20 hours annually); prohibiting explosives during training and testing off of Hawaii Island; and prohibiting surface ship hull-mounted mid-frequency active sonar from November 15 through April 15 in an area that surrounds portion of the Maui Nui area. More detail on these proposed measures can be found at the following website: www.hstteis.com and www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with

ensuring water quality and sustainable fish resources (e.g., the Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible that non-DOD federal actions will be proposed within this site that could affect the essential features, but that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

Recommendation: We recommend that this area not be excluded from the critical habitat designation because the benefits of exclusion do not appear to outweigh the benefits of designation. While we give great deference to the Navy's judgment regarding the importance of military activities in the identified area, this area also has significant conservation value. The extent of the area requested encompasses a medium sized area (approximately 5 percent of the area considered for designation) that includes several areas that are high-use and high-travel for MHI IFKWs. Other federal actions may take place in these surrounding areas. Therefore, other federal activities subject to ESA section 7 may occur in these waters that may affect essential features of critical habitat. Although the DOD consultation process and potential activities may change as a result of designating this area, understanding the impacts that these activities may have on the MHI IFKW essential feature is important to support the conservation of this DPS.

Area South of Maui

This area and the activities described are a subset of the Navy's request for the much larger "Entire Area" and a portion of the Four Island Region request submitted on June 22, 2017. We have reevaluated this geographically limited portion of the initial request in response to information submitted by the Navy on February 8, 2018. Although the June 22, 2017 request provided a full description of the defense activities in this area, the Navy's supplemental submission in February 2018 helped improve our understanding of the geographic scope of the particular impacts to national security. For example, the supplemental request highlighted how this area plays an important role in submarine training (DON 2018); this information improved our understanding of the geographic scope of particular impacts to areas south of Maui and around Kahoolawe. The area shown in Figure 11 overlaps with approximately 1,899 km^2 (~733 mi^2) or approximately 3 percent of the area considered for designation (DoN 2018).

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). Submarine crews utilize this area for training and deployment certifications in a variety of warfare mission areas (Undersea warfare; Antisubmarine warfare; Intelligence, Surveillance and Reconnaissance; and Mine Countermeasure), shallow water operations and ship control, shallow water navigation, and shallow water weapons employment. Submarine training and certification activities can include participation by surface ASW forces and maritime patrol and reconnaissance aircraft, which may employ active mid-

frequency and high-frequency sonar. These training and testing activities may produce in-water noise (e.g., active sonar, vessel movement, and impulsive sounds generated in close vicinity to or at the water surface from weapons firing, and inert impact of non-explosive munitions) in proposed critical habitat (DoN 2018). Kahoolawe Training Minefield and the shallow water to the east are utilized by submarine crews and during Submarine Command Course for mine countermeasure training and certification. Mine countermeasure training is typically less than one day and does not involve the use of mid-frequency active sonar by the submarine. The mine warfare range contains multiple bottom and tethered mine shapes in shallow water. Instrumentation provides submerged submarine positioning with Submerged Acoustic Navigation System buoys (DON 2018).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, the Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may affect the essential features of critical habitat within these documents and within this upcoming consultation. In particular, activities which introduce long-lasting noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat. If activities may result in adverse effects, this process may also include requirements to modify the activity or apply mitigation in order to minimize effects to MHI IFKW critical habitat. However, some of the activities identified may be readily addressed through this consultation because the cumulative duration of temporary changes to the habitat would be unlikely to alter the overall conservation value of that habitat for MHI IFKWs.

Uniqueness of DOD Activities at the Site: The Navy stated that this area is crucial to retaining the ability to train submarine crews year-round in the unique bathymetry of the Four-Island Region. This area provides unique environmental characteristics that allow for training in waters that are shallow and navigationally constrained. This network of shallow water inter-island channels is unique within the Eastern/Mid-Pacific training range complexes, and it provides an unmatched opportunity to train on searching for submarines in shallow water and avoiding active sonar searches. This is the only training minefield optimized for submarines in Hawaii and it is required to support several certifications necessary to achieve military preparedness. Further, the Navy noted that Kahoolawe Training Minefield is the only training minefield optimized for submarines in Hawaii and is required for certification (DON 2018).

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed in the first place. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range supports mostly lower-use areas for MHI IFKWs. Additionally, this area supports lower-travel areas. Although little satellite-tag information is available from Cluster 2 and 4 animals, both show preferences for areas near this site. Observation data and the newest tracking information suggests that Cluster 4 animals may show preferences for areas near Penguin Bank and southwest of Lanai (Baird, pers. Communication, August 15, 2017). Cluster 2 animals are observed more near the island of Hawaii and information suggests that this cluster may show preferences for the north Maui area (Baird, pers. Communication, August 15, 2017). Located among islands in Maui nui, this area provides contiguous habitat connection between three high-use areas including an area found south of Lanai, north of Maui, and west of Hawaii Island. High-use areas likely indicate areas of higher conservation value where greater foraging and/or reproductive opportunities exist. High to moderate travel areas provide further understanding about areas that may more frequently support travel.

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy undergoes section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment. Additionally, in the HSTT DEIS/OEIS (www.hstteis.com), the Navy has proposed geographic mitigation measures based upon NMFS designated Biologically Important Areas for false killer whales and beaked whales (van Parijs 2015). Specifically, the Navy has proposed a new area encircling Hawaii Island and a second new area in the 4-Islands region (Maui Nui) both of which are designed to provide additional protection for MHI IFKW (among other species) (DoN 2017b, and HSTT Proposed Rule). Mitigation measures include the following: limiting the amount of use of surface ship hull-mounted mid-frequency active sonar (300 hours annually) and dipping sonar (20 hours annually); prohibiting explosives during training and testing off of Hawaii Island; and prohibiting surface ship hull-mounted mid-frequency active sonar from November 15 through April 15 in an area that surrounds portion of the Maui Nui area. More detail on these proposed measures can be found at the following website: www.hstteis.com and www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with

ensuring water quality and sustainable fish resources (e.g., the Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: It is possible that non-DOD federal actions will be proposed within this site that could affect the essential features, but that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

Recommendation: We recommend that this area not be excluded from the critical habitat designation because the benefits of exclusion do not appear to outweigh the benefits of designation. While we give great deference to the Navy's judgment regarding the importance of military activities in the identified area, this area also has significant conservation value. The extent of the area requested encompasses approximately 1,899 km^2 (~733 mi^2) of the area considered for critical habitat. Although satellite tracking information indicates lower-use and lower-travel, this area is located between three high-use areas of the designation and allows for contiguous travel between those areas. Further, this area is adjacent to habitat known to be used by Cluster 2 and 4 animals for which there is limited satellite tracking information. Additionally, other federal actions may take place in these surrounding areas that may otherwise affect the MHI IFKW essential feature. Therefore, other federal activities subject to ESA section 7 may occur in these waters that may affect essential features of critical habitat.

Hawaii Area Tracking System

This area and the activities described are a subset of the Navy's requests for the much larger "Entire Area" and a portion of the Four Island Region request submitted on June 22, 2017. We have reevaluated this geographically limited portion of the initial request in response to information submitted by the Navy. This area is located between the islands of Maui, Lanai, and Kahoolawe and is used by submarine crews. The Hawai'i Area Tracking area shown in Figure 11 overlaps with approximately 96 km^2 (~37 mi^2) or approximately 0.2 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from designation of critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). The Hawaii Area Tracking System is used by submarine crews and the Submarine Command Course for training and certification for war time anti-submarine warfare and anti-submarine torpedo warfare missions involving the employment of advanced capability (ADCAP) torpedoes (inert exercise torpedoes) in a challenging shallow water and bottom type environment. (DoN 2017a).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, the Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet

obligations under the ESA and MMPA. Designation of critical habitat throughout these areas will require that the Navy consider how these activities may impact the essential features of critical habitat. In particular, activities that introduce noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas, and which occurs for longer periods may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat.

Uniqueness of DOD Activities at the Site: The Navy notes that the Hawaii Area Tracking System is unique because it is the most challenging ADCAP exercise area where crews train to prosecute the torpedo to its final demise, in a very fast paced scenario. The Hawaii Area Tracking System is also the only shallow water area in the Pacific between Southern California and China with bathymetry that replicates the conditions needed to train crews and commanding officers on realistic scenarios for both peacetime and wartime operations in the Pacific theater. Restrictions on training in this area would result in a serious loss of shallow water training experience for submarine crews and prospective submarine Commanding Officers and Executive Officers before they deploy.

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range supports mostly lower-use areas for MHI IFKWs. Additionally, this area supports lower-travel areas. Although little satellite-tag information is available from Cluster 2 and 4 animals, both show preferences for areas outside of this site. Observation data and the newest tracking information suggests that Cluster 4 animals may show preferences for areas near Penguin bank and southwest of Lanai (Baird, pers. Communication, August 15, 2017). Cluster 2 animals are observed more near the island of Hawaii and information suggests that this cluster may show preferences for the north Maui area (Baird, pers. Communication, August 15, 2017).

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy undergoes section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by

activities that create noise and/or pollution in the marine environment. Additionally, in the HSTT DEIS/OEIS (www.hstteis.com), the Navy has proposed geographic mitigation measures based upon NMFS designated Biologically Important Areas for false killer whales and beaked whales (van Parijs 2015). Specifically, the Navy has proposed a new area encircling Hawaii Island and a second new area in the 4-Islands region (Maui Nui) both of which are designed to provide additional protection for MHI IFKW (among other species) (DoN 2017b, and HSTT Proposed Rule). Mitigation measures include the following: limiting the amount of use of surface ship hull-mounted mid-frequency active sonar (300 hours annually) and dipping sonar (20 hours annually); prohibiting explosives during training and testing off of Hawaii Island; and prohibiting surface ship hull-mounted mid-frequency active sonar from November 15 through April 15 in an area that surrounds portion of the Maui Nui area. More detail on these proposed measures can be found at the following website: www.hstteis.com and www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., the Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: DOD use of this area is likely to discourage additional activities that would otherwise be subject to section 7 consultation. For this reason, there is low likelihood of federal actions being proposed by non-DOD agencies that would affect MHI IFKW critical habitat at this site.

Recommendation: We conclude that the benefit to national security of excluding this area outweighs the conservation benefit of designation, and recommend that Hawaii Area Tracking System be excluded from the areas considered for critical habitat designation. Several factors support this exclusion. This area is a unique and important place for DOD activities in the Pacific and potential impacts from those activities will result in modifications to the DOD consultation process. The benefits of designating this small and low-use and low-travel area are reduced somewhat by the protections already afforded to some of the characteristics of the essential feature, and because DOD use of this area is likely to discourage other federal activities that may otherwise require consultation. While DOD must still insure that activities in this area are not likely to jeopardize the continued existence of the MHI IFKW, the exclusion of this area means DOD will not be required to consult to insure that its activities are not likely to adversely modify habitat or essential features within this area. Based on our best scientific judgment and acknowledging the small size of this area (approximately X percent of the area considered for designation), and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanism), we conclude that exclusion of this area will not result in the extinction of the species.

Kahoolawe Training Minefield

This area and the activities described are a subset of the Navy's request for the much larger "Entire Area" and a portion of the Four Island Region request submitted on June 22, 2017. We have reevaluated this geographically limited portion of the initial request in response to supplemental information submitted by the Navy. This underwater training area is located off the west coast of Kahoolawe. It is a simulated underwater minefield that is used by submarine crews. This area, shown in Figure 11, overlaps with approximately 12 km^2 (~5 mi^2) or approximately 0.02 percent of the area considered for designation.

National Security Impacts: National security impacts depend on the effects of DOD activities on the site's essential features, and subsequent additional section 7 consultation requirements resulting from critical habitat (i.e., above and beyond what would already be required by the fact that MHI IFKWs are listed as endangered under the ESA). The Kahoolawe Training Minefield provides a simulated underwater minefield that is used by submarine crews and during Submarine Command Course for mine countermeasure training and certification. Mine countermeasure training is typically less than one day and does not involve the use of mid-frequency active sonar by the submarine. The mine warfare range contains multiple bottom and tethered mine shapes in shallow water. Instrumentation provides submerged submarine positioning with Submerged Acoustic Navigation System buoys. While submarines are not typically using active sonar during some training in the Maui Basin, surface vessels may employ active sonar to search for and challenge submarines. These training and testing activities may produce in-water noise (i.e., active sonar and vessel movement) in areas considered for critical habitat (DoN 2017a).

The Type and Frequency of Additional Consultation: As noted under the exclusion request for the entire area, the Navy has released a draft EIS describing activities proposed after 2018 and has initiated consultation to ensure that these activities meet obligations under the ESA and MMPA.Designation of critical habitat throughout these areas will require that the Navy consider how these activities may impact the essential features of critical habitat. In particular, activities that introduce noise that inhibits MHI IFKW's communication or foraging or results in abandonment of areas, and which occurs for longer periods may result in additional analyses under this formal consultation to ensure that these activities are not likely to result in adverse modification or destruction of critical habitat.

Uniqueness of DOD Activities at the Site: The Navy notes that the Kahoolawe Training Minefield is unique because it is the only training minefield optimized for submarines in Hawaii and is required for certification. Additionally, Littoral Combat Ship training and certification of the anit-submarine and mine warfare mission modules may require use of the Kahoolawe minefield and shallow water in this area. Discontinuing that activity would cause a loss of training realism for submarine crews during extended operations at periscope depth in shallow water, monitoring of commercial shipping and general surveillance missions in shallow water, shallow water weapons employment, close to

shore navigation, shallow water minefield operations, and shallow water ship control. This training could not be shifted to another location and not completing it could result in a complete loss of any shallow water operating experience for prospective submarine Commanding Officers when Submarine Command Course convenes in Pearl Harbor (DoN 2017a).

Conservation Benefits: Benefits to the conservation of MHI IFKWs depend on whether designation of critical habitat at a site leads to additional conservation of the species above what is already provided by being listed. The potential for additional conservation at the site is a function of MHI IKFW use of the area, the level of protection already provided by management, and the likelihood of non-DOD actions subject to critical habitat.

MHI IKFW Use of the Area: Density analysis of satellite-tracking information indicates that this area of the range supports mostly lower-use areas for MHI IFKWs. Additionally, this area supports lower-travel areas. Although little satellite-tag information is available from Cluster 2 and 4 animals, both show preferences for areas near this site. Observation data and the newest tracking information suggests that Cluster 4 animals may show preferences for areas near Penguin bank and southwest of Lanai (Baird, pers. Communication, August 15, 2017). Cluster 2 animals are observed more near the island of Hawaii and information suggests that this cluster may show preferences for the north Maui area (Baird, pers. Communication, August 15, 2017).

Level of Protection Already Provided by Management: Chapter 3 of the Economic report provides information about baseline protections that support the conservation of MHI IFKWs (Cardno 2018); these include provisions under the ESA and MMPA that protect this DPS from activities that may adversely affect the health of the population. As noted above, the Navy undergoes section 7 consultations (under the ESA) to ensure that their activities are not likely to jeopardize MHI IFKWs, as well as MMPA review and authorization for activities that may result in "take" of marine mammals. These reviews take into consideration how activities as a whole may affect MHI IFKWs, among other species, and address concerns associated with how these animals may be affected by activities that create noise and/or pollution in the marine environment. Additionally, in the HSTT DEIS/OEIS (www.hstteis.com), the Navy has proposed geographic mitigation measures based upon NMFS designated Biologically Important Areas for false killer whales and beaked whales (van Parijs 2015). Specifically, the Navy has proposed a new area encircling Hawaii Island and a second new area in the 4-Islands region (Maui Nui) both of which are designed to provide additional protection for MHI IFKW (among other species) (DoN 2017b, and HSTT Proposed Rule). Mitigation measures include the following: limiting the amount of use of surface ship hull-mounted mid-frequency active sonar (300 hours annually) and dipping sonar (20 hours annually); prohibiting explosives during training and testing off of Hawaii Island; and prohibiting surface ship hull-mounted mid-frequency active sonar from November 15 through April 15 in an area that surrounds portion of the Maui Nui area. More detail on these proposed measures can be found at the following website: www.hstteis.com and

www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities.

Additional protections for the MHI IFKW essential feature may be achieved by other regulatory efforts that are aimed at protecting Hawaii's marine resources and environment and may provide ancillary protections for the MHI IFKW essential feature. Most of these protections include broad regulations or restrictions associated with ensuring water quality and sustainable fish resources (e.g., the Clean Water Act and the Magnuson-Stevens Fishery Conservation and Management Act) (see Cardno 2018).

Likelihood of Non-DOD Actions Subject to Critical Habitat: DOD use of this area is likely to discourage additional activities that would otherwise be subject to section 7 consultation. For this reason, there is low likelihood of federal actions being proposed by non-DOD agencies that would affect MHI IFKW critical habitat at this site.

Recommendation: We conclude that the benefit to national security of excluding this area outweighs the conservation benefit of designation, and recommend that Kahoolawe Training Minefield be excluded from the areas considered for critical habitat designation. Several factors support this exclusion. This area is a unique and important place for DOD activities and potential impacts from those activities will result in modifications to the DOD consultation process. The benefits of designating this small and low-use and low-travel area are reduced somewhat by the protections already afforded to some of the characteristics of the essential feature, and because DOD use of this area is likely to discourage other federal activities that may otherwise require consultation. While DOD must still insure that activities in this area are not likely to jeopardize the continued existence of the MHI IFKW, the exclusion of this area means DOD will not be required to consult to insure that its activities are not likely to adversely modify habitat or essential features within this area. Based on our best scientific judgment and acknowledging the small size of this area (approximately X percent of the area considered for designation), and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanism), we conclude that exclusion of this area will not result in the extinction of the species.

Total Impact of National Security Exclusions

In Tables 2 and 3, we considered the individual impacts vs. benefits of excluding each of the 23 national security sites identified by the DOD and Coast Guard. We also considered the aggregate impact of our exclusion of 13 of 23 requested national security sites. From approximately 56,821 km^2 (21,933 mi^2) of the area considered, we are recommending approximately 11,317 km^2 (4,369 mi^2) be excluded from designation because the benefits of excluding these areas outweigh the benefits of designation. The total area recommended for exclusion represents approximately 20% of the total area considered for designation, and consists mostly of areas of low IFKW use. Considering the size of the total area excluded relative to the area proposed for designation, its low use, and other safeguards that are in place (including protections already afforded MHI IFKWs under its

listing and other regulatory mechanism), we conclude that exclusion of this total area will not result in the extinction of the species.

Consideration of Exclusion for Other Relevant Impacts

Section 4(b)(2) of the ESA also allows for the consideration of other relevant impacts associated with the designation of critical habitat. We did not identify other relevant impacts that would require exclusion consideration for this proposed designation, and we will solicit additional information through the proposed rule public comment process.

Designation Maps

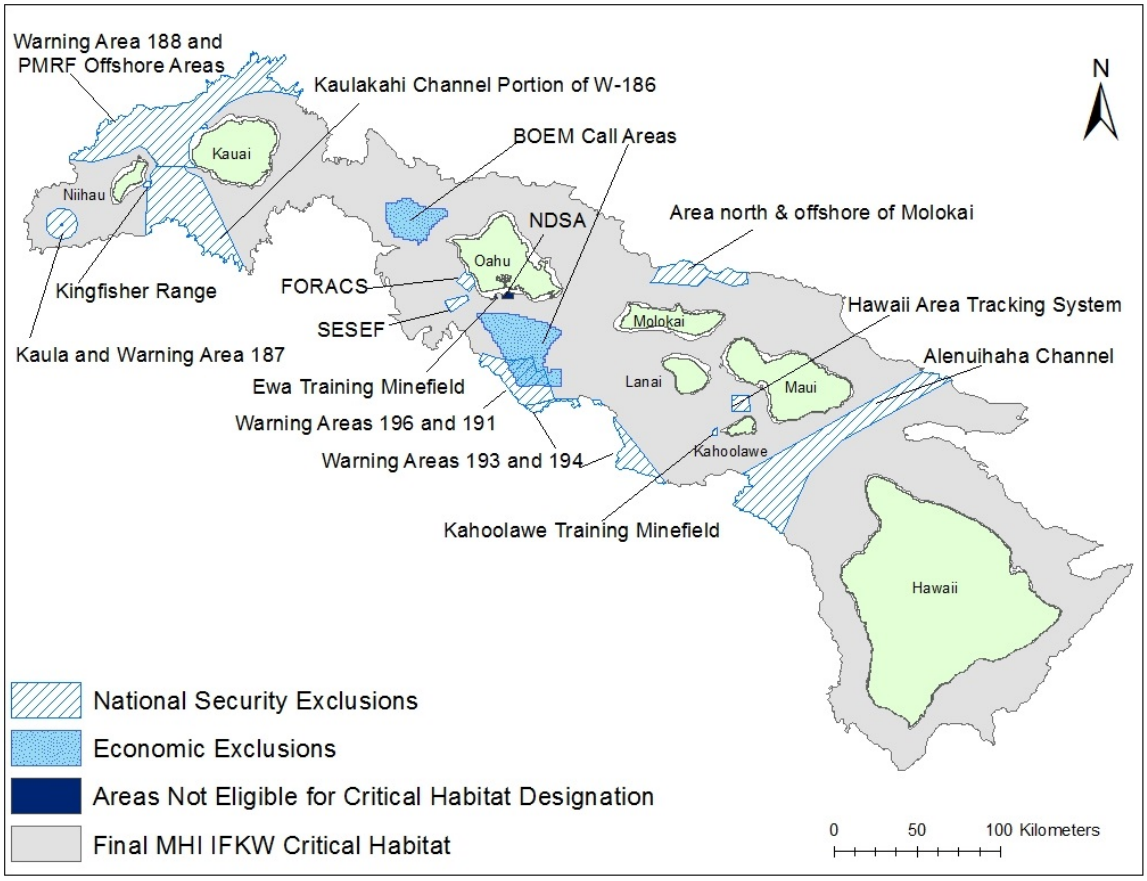

Figure 12. Area proposed for MHI IFKW critical habitat.

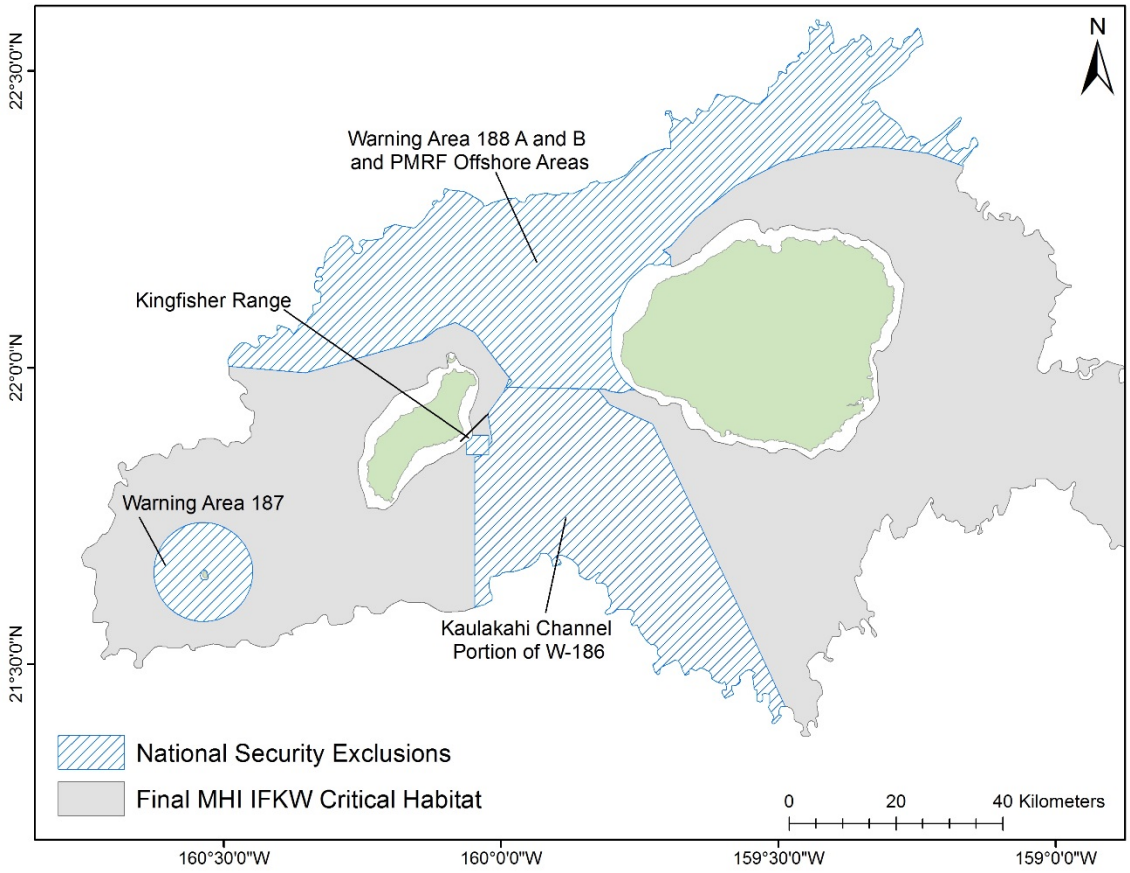

Figure 13. Areas proposed for MHI IFKW critical habitat near Niihau and Kauai.

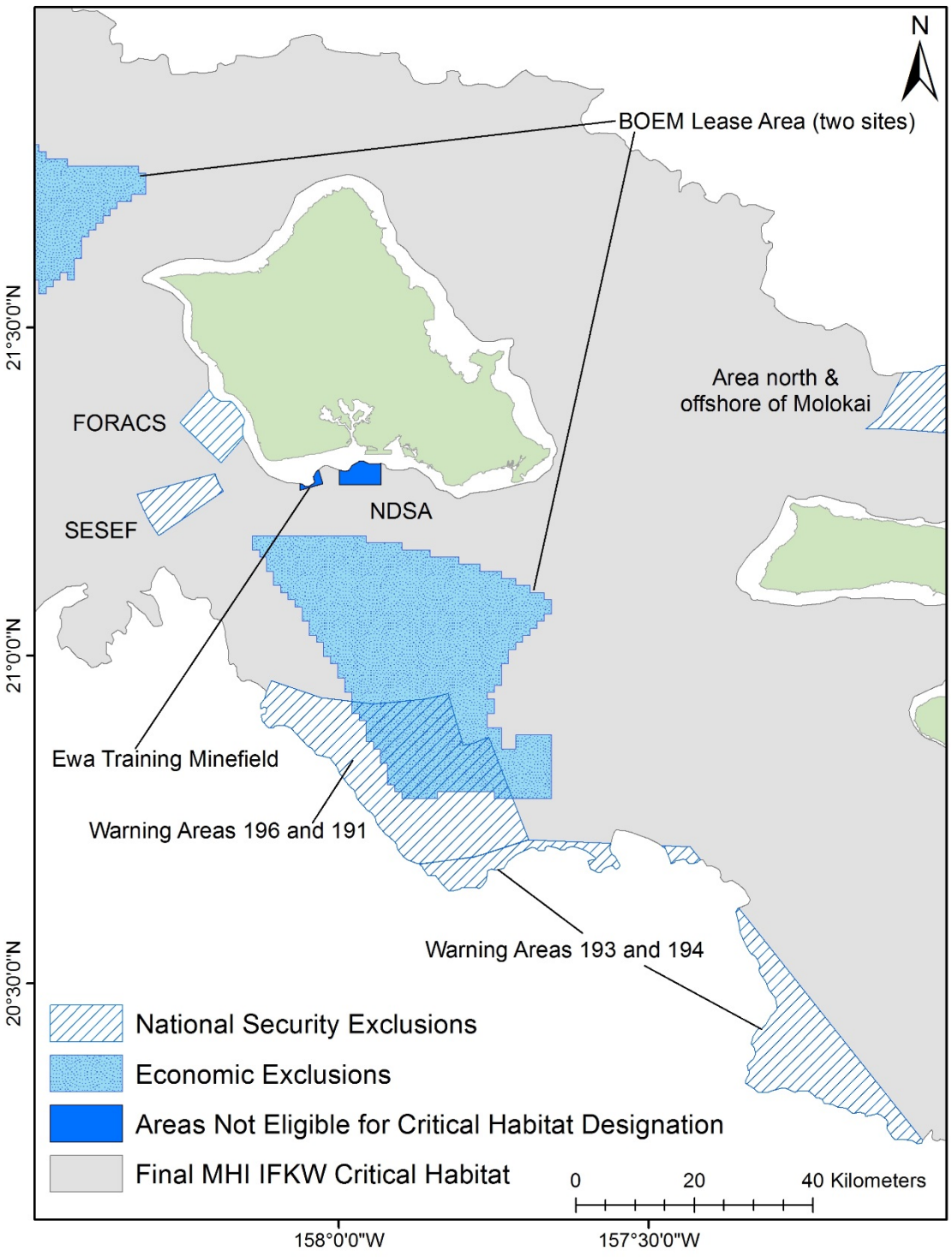

Figure 13. Areas proposed for MHI IFKW critical habitat near Oahu.

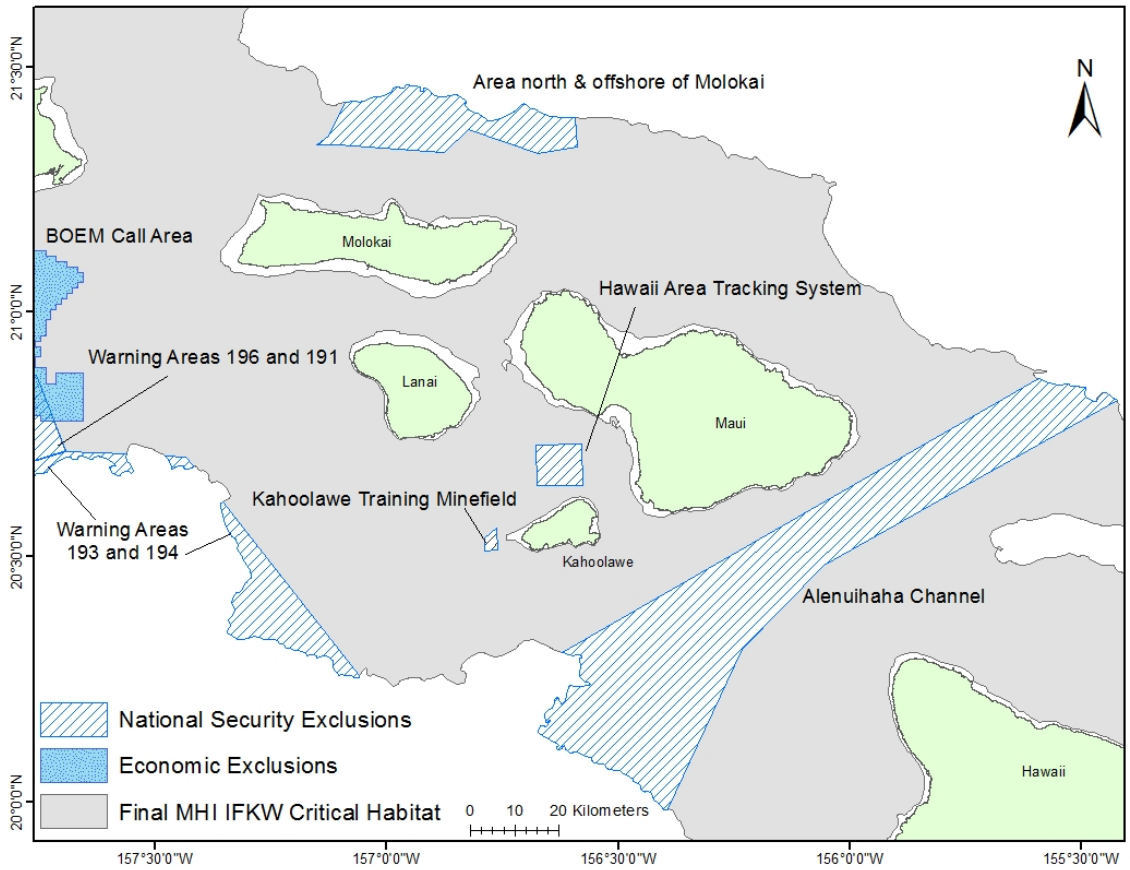

Figure 15. Areas proposed for MHI IFKW critical habitat around the four islands of Molokai, Lanai, Kahoolawe, and Maui.

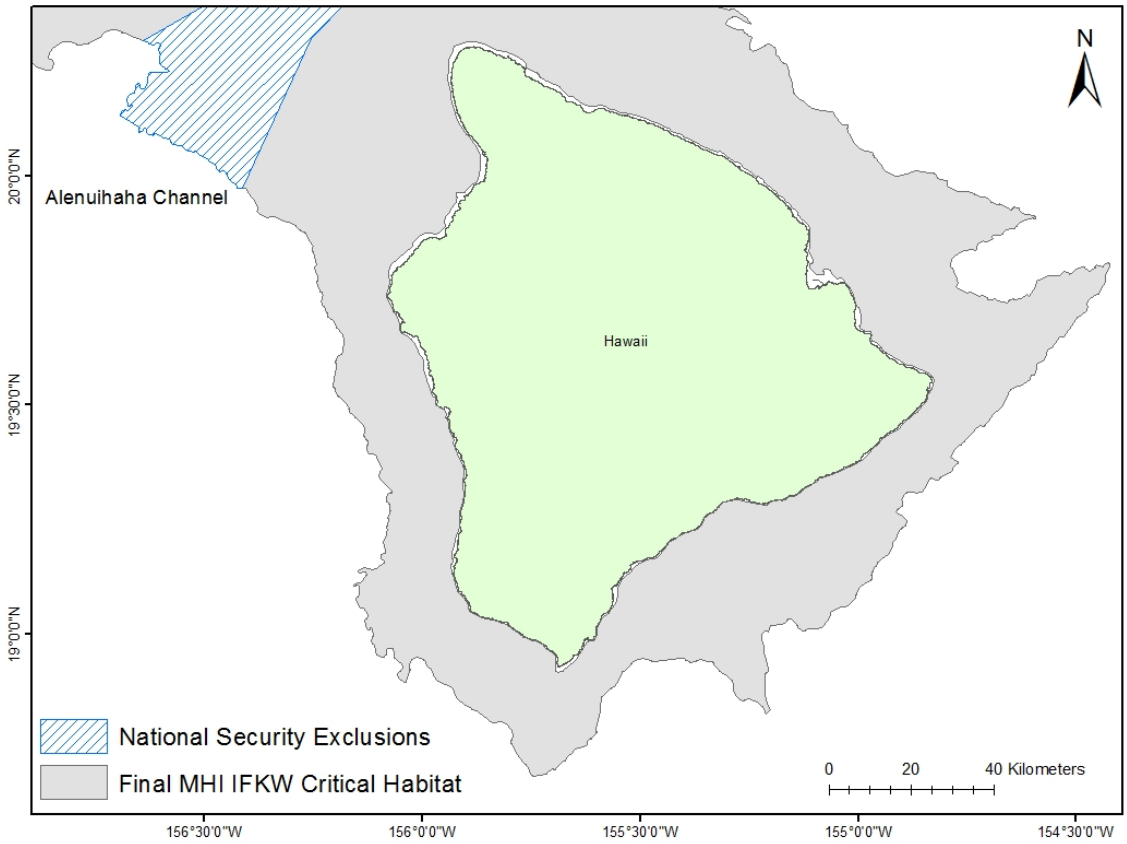

Figure 16. Areas proposed for MHI IFKW critical habitat near Hawaii.

References

Baird, R. W. June (2017). Phone call with Jean Higgins to discuss the potential expansion of any high-use areas surrounding the main Hawaiian Islands. NMFS, Pacific Islands Regional Office.

Baird, R. W. August (2017). Phone call with Jean Higgins to discuss Cluster 2 observations and habitat use in the main Hawaiian Islands. NMFS, Pacific Islands Regional Office.

Baird, R. W. January (2018). Email: Updates to IFKW data. E. S. B. Jean Higgins. NMFS, Pacific Islands Regional Office.

Baird, R. W., et al. (2012). Range and primary habitats of Hawaiian insular false killer whales: informing determination of critical habitat, DTIC Document.

Bradford, A. L., et al. (2015). "Revised stock boundaries for false killer whales (Pseudorca crassidens) in Hawaiian waters." NOAA Tech. Memo. NMFS-PIFSC-47.

Cardno (2018). Final Economic Report MHI Insular False Killer Whale Critical Habitat Designation. Cardno 737 Bishop St, Suite 3050 Honolulu, HI.

Carretta, J. V., K. Forney, et al. (2016). U.S. Pacific Marine Mammal Stock Assessments: 2015 NOAA. U.S. Department of Commerce, National Marine Fisheries Service. Southwest Fisheries Science Center.

Carretta, et al. (2013). U.S. Pacific Marine Mammal Stock Assessments: 2012. NOAA U.S. Department of Commerce, National Marine Fisheries Service Southwest Fisheries Science Center.

DoAF Department of Air Force, U. S. (2017). Letter Re: Response to request for information for main Hawaiian Islands Insular False Killer Whale Critical Habitat. N. P. R. D. A. R. A. Ann Garrett. Eglin AFB, FL, Department of the Air Force.

DON, U. S. (2018). February 08, 2018. Letter Addendum to NMFS re: Areas Under Consideration for Main Hawaiian Islands Insular False Killer Whale Critical Habitat. N. P. R. D. A. R. A. Ann Garrett. Pearl Harbor, Hawaii, Department of the Navy.

DON, U. S. (2017a). June 22, 2017. Letter to NMFS re: Areas Under Consideration for Main Hawaiian Islands Insular False Killer Whale Critical Habitat. NMFS, PRD, ARA, Ann Garrett. Pearl Harbor, Hawaii, Department of the Navy.

DON, U. S. (2017b). October 10, 2017. Letter Addendum to NMFS re: Areas Under Consideration for Main Hawaiian Islands Insular False Killer Whale Critical Habitat. N. P. R. D. A. R. A. Ann Garrett. Pearl Harbor, Hawaii, Department of the Navy.

DON, U. S. (2017c). Department of Navy (DON) Draft Environmental Impact Statement/Overseas Environmental Impact Statement for Hawaii-Southern California Training and Testing. Available (October 2017): https://hstteis.com/Documents/2017-Hawaii-Southern-California-Training-and-Testing-Draft-EIS-OEIS/Draft-EIS-OEIS

DON, U. S. (2016). Department of Navy (DON) Mission Compatibility Assessment Oahu Outer Continental Shelf Wind. N. U. W. C. Division. Newport, RI, Assistant Secretary of the Navy. Available (March 13, 2018):

http://greenfleet.dodlive.mil/rsc/department-of-the-navy-hawaii-offshore-wind-compatibility/
DON (2013). "Hawaii and Southern California Training and Testing Final Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS)".
DON (2008). "Hawaii Range Complex Final Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS)."
NMFS (2017). Biological Opinion on the U.S. Air Force's 2017-2021 Long Range Strike Weapons Systems Evaluation Program offshore of Kauai, Hawaii, Pursuant to Section 7 of the Endangered Species Act of 1973. NFMS No.: FPR-201609160.
NMFS (2018). Designation of Critical Habitat the for the Endangered Main Hawaiian Islands Insular False Killer Whale Distinct Population Segment Final Biological Report NMFS Pacific Islands Regional Office.
Oleson, et al. (2010). Status review of Hawaiian insular false killer whales (Pseudorca crassidens) under the Endangered Species Act.

Federal Register Notices:

75 FR 70169, November 17, 2010 – Proposed Endangered Status for the Main Hawaiian Islands Insular False Killer Whale Distinct Population Segment (https://www.federalregister.gov/documents/2010/11/17/2010-28843/endangered-and-threatened-wildlife-and-plants-proposed-endangered-status-for-the-hawaiian-insular)
77 FR 70915; November 28, 2012 – Endangered Status for the Main Hawaiian Islands Insular False Killer Whale Distinct Population Segment (https://www.federalregister.gov/documents/2012/11/28/2012-28766/endangered-and-threatened-wildlife-and-plants-endangered-status-for-the-main-hawaiian-islands)
81 FR 41335; June 24, 2016 – Commercial Leasing for Wind Power on the Outer Continental Shelf Offshore the Island of Oahu, Hawaii-Call for Information and Nominations (https://www.federalregister.gov/documents/2016/06/24/2016-14830/commercial-leasing-for-wind-power-on-the-outer-continental-shelf-offshore-the-island-of-oahu)
E.O. 13795 of Apr 28, 2017 – Implementing an America-First Offshore Energy Strategy (https://www.federalregister.gov/documents/2017/05/03/2017-09087/implementing-an-america-first-offshore-energy-strategy)82 FR 51186; November 3, 2017 - Proposed Rulemaking to Designate Critical Habitat (https://www.federalregister.gov/documents/2017/11/03/2017-23978/endangered-and-threatened-wildlife-and-plants-proposed-rulemaking-to-designate-critical-habitat-for)

82 FR 40998; August 29, 2017 – Notice of issuance of Letter of Authorization. (https://www.federalregister.gov/documents/2017/08/29/2017-18260/taking-marine-mammals-incidental-to-the-us-air-force-86-fighter-weapons-squadron-conducting-long)

Hyperlinks:

"OMB's 2003 Guidelines" Budget, O. o. M. a. (2017). "Circular A-4 TO THE HEADS OF EXECUTIVE AGENCIES AND ESTABLISHMENTS. Subject: Regulartory

Analysis." Retrieved June 2017, 2017, from https://obamawhitehouse.archives.gov/omb/circulars_a004_a-4/.

"Main Hawaiian Islands Insular False Killer Whale Recovery Planning Workshop." Retrieved June 2017, 2017, from http://www.fpir.noaa.gov/Library/PRD/False%20Killer%20Whale/IFKW_Recovery_Planning_Workshop_Summary.pdf.

“Department Organization Order 10-15 (5/24/04)” Commerce, D. o. (2017). "UNDER SECRETARY OF COMMERCE FOR OCEANS AND ATMOSPHERE AND ADMINISTRATOR OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION Number DOO 10-15." Retrieved June 2017, 2017, from http://www.osec.doc.gov/opog/dmp/doos/doo10_15.html.

Navy Assessment of areas around Oahu: http://greenfleet.dodlive.mil/rsc/department-of-the-navy-hawaii-offshore-wind-compatibility/