



MARINE MAMMAL COMMISSION

2 January 2018

Ms. Susan Pultz, Chief
Conservation Planning and Rulemaking Branch
Protected Resources Division
National Marine Fisheries Service
Pacific Islands Regional Office
1845 Wasp Blvd, Bldg 176
Honolulu, HI 96818

Attn: MHI IFKW Critical Habitat Proposed Rule

Dear Ms. Pultz:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Marine Fisheries Service's (NMFS) 3 November 2017 *Federal Register* notice (82 Fed. Reg. 51186) proposing to designate critical habitat for the Main Hawaiian Islands (MHI) insular false killer whale (*Pseudorca crassidens*)(IFKW) distinct population segment (DPS). The Commission provides the following comments and recommendations based on its review of the proposed rule and associated documents.¹ In general, the Commission supports the designation of IFKW critical habitat and related conservation efforts.

Background

NMFS listed the IFKW DPS as endangered under the Endangered Species Act (ESA) in December 2012 (77 Fed. Reg. 70915). The ESA requires the designation of critical habitat concurrent with a listing, unless NMFS determines that critical habitat was not then determinable due to a lack of necessary information. The agency made such a determination in this case, extending the deadline for designating critical habitat for an additional year. When NMFS missed that deadline and was sued by the Natural Resources Defense Council, it entered into a settlement agreement requiring publication of a proposed rule designating IFKW critical habitat by 31 October 2017.

Critical habitat designation

Section 3(5)(A) of the Endangered Species Act defines critical habitat as (1) areas occupied by the species at the time of listing that include physical or biological features essential for its

¹ "Proposed Designation of Critical Habitat for the Endangered Main Hawaiian Islands Insular False Killer Whale Distinct Population Segment – Draft Biological Report" prepared by the National Marine Fisheries Service, October 2017; "Proposed Designation of Critical Habitat for the Endangered Main Hawaiian Islands Insular False Killer Whale Distinct Population Segment – Draft ESA Section 4(b)(2) Report" prepared by the National Marine Fisheries Service, October 2017; and "Draft Economic Report – MHI Insular False Killer Whale Critical Habitat Designation" prepared by Cardno, Honolulu, HI, 2017.

conservation and that may require special management considerations or protection, and (2) areas outside the species' geographic range at the time of listing that are essential for its conservation. Implementing regulations, 50 C.F.R. § 424.12(b), further define essential physical or biological features as (1) space for individual and population growth, (2) food, water, and other nutritional or physiological requirements, (3) cover or shelter, (4) areas for breeding, reproduction, and rearing offspring, and (5) habitats protected from disturbance or representative of historical and ecological distribution. The proposed rule identifies four essential physical and biological features of critical habitat specific to IFKW's as:

- 1) Island-associated marine habitat;
- 2) Prey species of sufficient quantity, quality, and availability to support individual growth, reproduction, and development, as well as overall population growth;
- 3) Waters free of pollutants of a type and amount harmful to the whales; and
- 4) Habitat free of anthropogenic noise that would significantly impair the value of the habitat for use or occupancy.

Few data exist to define what constitutes "sufficient quantity, quality, and availability" of prey, or what concentrations of pollutants would be harmful, or what levels of anthropogenic noise would impair use or occupancy. For example, diet data indicate that IFKW's feed primarily on large pelagic 'fishes' (e.g., mahi mahi, tunas, and squids) that can be found throughout the MHI. However, little information is available to suggest where and when they feed on different prey species, or which foraging areas are essential and which may be of lesser importance. NMFS summarized its consideration of the information on IFKW diet by stating "it is difficult to determine where prey resources of higher value exist for this DPS"². Thus, NMFS' proposed critical habitat designation for IFKW is based largely on identifying "island-associated marine habitat," which is defined in terms of water depth around the islands. Tracking data obtained from animals tagged with satellite-linked transmitters indicate that IFKW's are found over shelf and slope waters around all of the MHI, primarily at depths of 45 – 3200 meters.³ For example, only 2 percent of all tag locations were obtained from waters less than 45 meters in depth, and those locations were not distributed in a manner that would suggest regular or localized visits to particular sites.

Accordingly, NMFS' proposed critical habitat designation encompasses waters around the MHI between the 45- and 3200-meter depth contours. Such a proposal does not seem unreasonable given the mandate of section 4(b)(6)(C)(ii) to base the designation on the available information and designating critical habitat to the maximum extent prudent. This statutory construction suggests erring on the side of inclusion given uncertainty about exactly what areas meet the definition of critical habitat. Nevertheless, the Commission notes that analyses of the available tracking data identified low-, medium-, and high-use areas within the proposed critical habitat.⁴ High-use areas were associated with higher chlorophyll-A concentrations than low-use areas, suggesting that greater productivity occurs in high-use areas.

² Proposed rule 82 Fed. Reg. at p. 51191.

³ Draft ESA Section 4(b)(2) Report, figure 4, based on data provided by Cascadia Research Collective and Baird et al. 2012.

⁴ Ibid.

The Commission is concerned that an overly broad critical habitat designation could make it more difficult to manage the most acute threats to IFKWs. A more narrowly defined critical habitat area based on better scientific evidence of linkages between specific oceanographic features (e.g. upwelling sites, convergence zones, bathymetry) and the conditions necessary for population growth (e.g., high-value prey, and water quality and anthropogenic noise levels that do not negatively impact the DPS's recovery) would promote more focused, and presumably more effective, conservation of IFKWs. The Commission recognizes such data are largely unavailable, and, therefore, the Commission recommends that, for the time being, NMFS designate as critical habitat the entire proposed area based on the known distribution of IFKWs in waters around the MHI between 45 and 3200 meters deep. Nonetheless, the Commission further recommends that NMFS undertake or support research needed to refine that designation by determining if there are specific areas that are essential to enabling the population to sustain itself in a healthy and productive state, to recover to the point where listing under the ESA is no longer warranted and, ultimately to reach its carrying capacity level.

Special Management Considerations or Protection

One element of the critical habitat definition is that such areas “may require special management considerations or protection.” Federal projects or activities that may affect essential critical habitat features require ESA section 7 consultation and, in some cases, the adoption of measures to prevent destruction or adverse modification of critical habitat, which may be in addition to measures required to avoid jeopardizing the continued existence of the species. Accordingly, NMFS identified several potential, generalized threats to IFKWs created by human activities taking place within the proposed critical habitat area that could require special management consideration, including in-water construction (including dredging), energy development (including wind farms), pollution, mariculture and fishing, environmental restoration (including oil-spill response), and military activities. In addition, NMFS described which types of human activities could be associated with these threats. Each activity/threat may affect one or more of the essential features of IFKW critical habitat. The Commission recognizes, as did NMFS, that this suite of activities is not exhaustive. Rather, it establishes a core set of activities that should be monitored to assess their impacts on IFKW critical habitat and details how such impacts might occur. Again, the Commission points out that a narrower, more focused critical habitat designation might enable NMFS to take a correspondingly more focused approach to its threats analysis, and presumably more efficient and effective approach to managing human activities that have the potential to adversely affect the essential features of critical habitat.

Unoccupied Areas

As stated earlier, critical habitat can be designated outside the area currently occupied by the species, if such areas are judged essential to the conservation and recovery of the species. While it is possible that IFKWs occupied other parts of the Hawaiian Islands when they were more numerous (i.e., the current range may represent core habitat to which the population contracted from more extensive occupancy when the population was larger),⁵ there are no data to suggest if or where such

⁵ See Reeves et al. (2009) for discussion of the historical population size of IFKWs and an apparent recent decline in abundance.

areas might be. In light of the absence of data, the Commission concurs with NMFS' decision not to identify any candidate areas outside of the DPS's current range.

Exclusions Due to Economic Impacts

Section 4(b)(2) of the Endangered Species Act directs NMFS to consider “the economic impact, the impact to national security, and any other relevant impact,” of designating critical habitat and authorizes it to “exclude any particular area from critical habitat if [it] determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat...” However, NMFS may not exclude an area on this basis if, based on the best scientific and commercial data available, it determines that the failure to designate the area as critical habitat will result in the extinction of the species. In the proposed rule and the accompanying Draft ESA Section 4(b)(2) Report, NMFS considered several areas for possible critical habitat exclusion for economic or security reasons.

NMFS' economic impact analysis found that, with one exception, the “incremental economic impacts of designation beyond the impacts that would result from the species' listing and the section 7 jeopardy provision” were minimal and “largely associated with the administrative costs borne by Federal agencies.”⁶ Therefore, NMFS concluded, and the Commission concurs, that those administrative costs should not be considered an economic cost that would warrant the exclusion of any areas from the critical habitat designation. NMFS noted that consultation costs to non-federal entities, which might be saved by excluding areas, should be weighed against the benefit to the whales of the areas' inclusion. The Bureau of Environmental Management (BOEM) identified costs to non-federal entities associated with wind-energy projects in two lease areas around Oahu. Economic impacts were estimated to be up to \$3,000 over the next 10 years, and it was argued by BOEM and the State of Hawaii that designation could discourage companies from investing in offshore energy development, which would impede the State from reaching its renewable energy goals. In addition, NMFS noted that the development of these renewable energy lease sites would contribute to national energy policy goals (Executive Order 13795). The lease areas overlap completely with and make up 3.5 percent of the proposed critical habitat area. NMFS states that IFKW use is low in those areas, and, therefore, concludes that the benefits of exclusion outweigh the benefits of designation, and that they should be excluded from the critical habitat designation.

However, comparing the map of IFKW density with the lease areas indicates that the eastern portion of the BOEM lease area south of Oahu has a moderate level of use by IFKWs. Further, NMFS acknowledges, and recent analyses by the Cascadia Research Collective (Robin Baird, pers. comm.) confirm, that the lease areas are in high-use corridors that IFKWs use to circumnavigate Oahu.

The Commission agrees with NMFS that economic or other impacts of the critical habitat designation should be evaluated in terms of the incremental impact of the designation beyond those that apply by virtue of listing the species, including satisfying the no-jeopardy requirement under section 7. The incremental impact of a critical habitat designation is relatively modest and alone does not support the exclusion of any of the proposed areas based on economic considerations,

⁶ Draft ESA Section 4(b)(2) Report, p. 18.

particularly when weighed against the conservation benefits to IFKWs from such designation inherent in the ESA critical habitat mandates. In addition, such exclusions can be considered by NMFS only in instances when the exclusion would not result in the extinction of the DPS. Because of the precarious status of IFKWs, the apparent importance of its entire range to its continued existence, and NMFS' inability to identify which factor or factors caused the population to decline in the past and may continue to threaten its persistence, the exclusion of any of the areas proposed as critical habitat from the final designation could contribute to the population's eventual extirpation.

In light of the minor or intangible benefits of exclusion, the apparent benefit to IFKWs of designation, and the scientific uncertainty about the effects of exclusion on IFKWs, the Marine Mammal Commission recommends that NMFS adopt a precautionary approach by declining to exercise its discretion to exclude the BOEM lease areas from the proposed critical habitat based on economic considerations.

Section 4(a)(3)(B)(i) of the ESA states that “[NMFS] shall not designate as critical habitat any ... geographical areas owned or controlled by the Department of Defense...that are subject to an integrated natural resources management plan (INRMP) prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if [it] determines...that such plan provides a benefit to the species ...” The Navy identified two areas covered by its Joint Base Pearl Harbor Hickam INRPM that overlap with the proposed critical habitat designation: the Naval Defensive Sea Area (NDSA) and the Ewa Training Minefield (ETM). NMFS reported that the areas of overlap were of low use by IFKWs, and that the Navy claims the INRMP contains conservation measures that would ensure protection of IFKWs. The conservation measures include fishing restrictions, creel surveys, protection of wetland habitat, and restrictions on free-roaming cats and dogs in residential areas, which could reduce exposure of the whales to Toxoplasmosis. NMFS recognized that these measures are not designed or intended to mitigate threats to IFKWs, but accepted the Navy's argument that they could nonetheless provide a benefit, and therefore, proposed that the NDSA and ETM areas be excluded from the proposed critical habitat designation. The Commission does not find this argument convincing because the potential benefits of the INRMP to IFKWs are indirect, unquantified, and not obviously substantial. Conversely, the overlap areas are known to be used by IFKWs. Although, they are low-use areas relative to other areas within the MHI, recent analyses by the Cascadia Research Collective (Robin Baird, pers. comm.) suggest that they intersect important movement corridors used by IFKWs. Therefore, the Commission recommends that NMFS withdraw its proposal to exempt the NDSA and ETM areas from the proposed MHI IFKW critical habitat. If NMFS decides to retain these exclusions notwithstanding the Commission's recommendation, then the Commission recommends that the Navy needs to review and update its INRPM to benefit IFKWs more directly and more significantly to warrant such exclusions.

Exclusions for National Security

The ESA requires NMFS to consider the potential impacts on national security when designating critical habitat, and gives the agency the authority to exclude military areas from the designation if the benefit of exclusion to national security outweighs the benefit of designation to the species. The proposed rule considers 13 areas nominated by the Department of Defense for

exclusion from the critical habitat designation based on national security considerations.⁷ The Navy and Coast Guard requested exclusion of the entire critical habitat area because of the general activities they carry out. NMFS however judged that the benefit of such an exclusion did not exceed the benefit of designation. In addition, the Navy nominated a number of smaller, specific, restricted areas used for military activities (e.g., training or testing ranges). For those areas, NMFS considered the additional ESA section 7 consultation requirements that would result from a critical habitat designation (i.e., those beyond the other section 7 consultation requirements), and how those would impact national security. For most of the areas, NMFS judged that the benefit to national security of exclusion would outweigh the conservation benefit to IFKWs of designation. In some cases, NMFS concluded that the additional section 7 consultation requirements to determine and ensure that activities taking place in those areas would not destroy or adversely modify the essential physical and/or biological features of IFKW critical habitat, would create a significant regulatory compliance burden on the Navy that would impede its ability to carry out activities necessary for national security. In other cases, the potential burden was judged to be minor. Conservation benefits were based on the size of the area and the level of use by IFKWs – the smaller the area and the lower the use, the smaller the benefit.

The Commission recognizes the importance of military readiness and attention to national security needs. At the same time, the Commission is concerned that, without a quantitative analysis of benefits to security or conservation, decisions to designate or exclude an area from the designation based on qualitatively balancing IFKW use with potential regulatory compliance burden, appear to be somewhat arbitrary. For example, for one area (“Water Enroute to PMRF”) NMFS recommends that it not be excluded because, although IFKW use of the area is low, the potential burden of consultation (regulatory compliance) would likely be minor. However, it proposes to exclude two other areas (Kingfisher Range, and Kaula and Warning Area W-187) with essentially the same assessment (low use and minor impact). Therefore, the Commission recommends that NMFS reconsider its benefit analysis, and investigate methods to draw equivalence, ideally quantitative, between conservation benefits inferred from IFKW usage and benefits of relief from potential regulatory compliance impacts.

In addition to the areas just discussed, which the Department of Defense formally identified for exclusion from the critical habitat designation, the Navy subsequently requested exclusion of six other areas due to potential national security impacts.⁸ These additional areas generally cover significant portions of the proposed critical habitat area (e.g., the entire northeastern side of Oahu, and the entire waters of the Kaiwi and Alenuihaha Channels), and in at least two cases, contain areas identified as very important to IFKWs (northeastern side of Oahu and the Kaiwi Channel).⁹ NMFS was unable to analyze these areas in time to meet its publication deadline for releasing the proposed critical habitat designation. NMFS states that it will “reconsider its decision as it pertains to these individual areas consistent with the weighing factors used in the draft 4(b)(2) Report..., and provide exclusion determinations for the requests in the final rule.” NMFS’ proposed action on these requests would preclude the opportunity for public input regarding the pros and cons of excluding these areas from the designation. The Commission therefore recommends that, when completed,

⁷ Draft ESA Section 4(b)(2) Report, table 2.

⁸ Figure 2 in the proposed rule.

⁹ Additional data and analysis provided by the Cascadia Research Collective (Robin Baird, pers. comm.).

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NMFS publish its assessment of these areas and recommendations regarding inclusion or exclusion, and provide the public the opportunity to comment, especially in light of the apparent conservation importance of some of these areas to IFKW's.

Please contact me if you would like to discuss any the Commission's comments and recommendations.

Sincerely,



Peter O. Thomas, Ph.D.
Acting Executive Director

References

- Baird, R.W., M.B. Hanson, G.S. Schorr, D.L. Webster, D.J. McSweeney, A.M. Gorgone, S.D. Mahaffy, D.M. Holzer, E.M. Olsen, and R.D. Andrews. 2012. Range and primary habitats of Hawaiian insular false killer whales: informing determination of critical habitat. *Endangered Species Research* 18: 47-61.
<https://doi.org/10.3354/esr00435>.
- Reeves, R.R., S. Leatherwood, and R.W. Baird. 2009. Evidence of a possible decline since 1989 in false killer whales (*Pseudorca crassidens*) around the main Hawaiian Islands. *Pacific Science* 63: 203-213.
<https://doi.org/10.2984/049.063.0207>.