



MARINE MAMMAL COMMISSION

8 April 2021

Mr. Jon Kurland
Assistant Regional Administrator
Protected Resources Division, Alaska Region
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99082-1668

Dear Mr. Kurland:

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) 8 January 2021 *Federal Register* notice (86 Fed. Reg. 1433) proposing to designate critical habitat for the Beringia distinct population segment (DPS) of the Pacific bearded seal subspecies (*Erignathus barbatus nauticus*) under the Endangered Species Act (ESA). The Commission offers the following comments and recommendations.

Background

On 28 December 2012, NMFS published a final rule to list the Beringia DPS of the Pacific bearded seal subspecies as threatened under the ESA (77 Fed. Reg. 76740). Section 4(b)(6)(C) of the ESA requires the Secretary to designate critical habitat concurrently with making a determination to list a species as threatened or endangered unless it is not determinable at that time, in which case the Secretary may extend the deadline for this designation by one year. At the time of listing, NMFS announced its intention to designate critical habitat for the Beringia DPS in a separate rulemaking, as it was not then determinable. Concurrently, NMFS solicited information to assist in (1) identifying the physical or biological features essential to the conservation of the Beringia DPS, and (2) assessing the economic consequences of designating critical habitat for this species.

Subsequently, on 25 July 2014, the listing of the Beringia DPS as a threatened species was vacated by the U.S. District Court for the District of Alaska. This decision was reversed by the U.S. Court of Appeals for the Ninth Circuit on 24 October 2016, and the listing was reinstated on 22 February 2017. On 13 June 2019, the Center for Biological Diversity filed a complaint in the U.S. District Court for the District of Alaska alleging that NMFS had failed to designate critical habitat for the Beringia DPS of the bearded seal in a timely manner. Under a settlement agreement between the parties (which was subsequently amended to extend the dates specified in the original order), NMFS agreed to submit a proposed determination concerning designation of critical habitat for the Beringia DPS to the *Federal Register* by 15 March 2021, and a final rule by 15 March 2022.

Proposed critical habitat for the Beringia DPS of Pacific bearded seals

Section 3(5)(A) of the ESA defines “critical habitat” as:

- (i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with section 4 of this Act, 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 4 of this Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.

The phrase “geographical area occupied by the species,” is defined by regulation as an area that may generally be delineated around species’ occurrences as determined by the Secretary (i.e., range) (50 C.F.R. § 424.02). Such areas may include those areas used throughout all or part of the species’ life cycle, even if not used on a regular basis, such as migratory corridors, seasonal habitats, and habitats used periodically, but not solely, by vagrant individuals. Based on existing literature, including available information on sightings and movements of bearded seals of the Beringia DPS, the range of the Beringia DPS was identified in the final 2012 ESA listing rule (77 Fed. Reg. 76740) as the Arctic Ocean and adjacent seas in the Pacific Ocean between 145° E longitude and 130° W longitude, except west of 157° E longitude, or west of the Kamchatka Peninsula, where the Okhotsk DPS of the bearded seal is found. The geographical area under consideration for this designation is limited to areas under the jurisdiction of the United States occupied by the Beringia DPS at the time of listing. This area extends to the outer boundary of the U.S. Exclusive Economic Zone (EEZ) in the Chukchi and Beaufort seas and south over the continental shelf in the Bering Sea (Cameron et al. 2010).

NMFS has identified four physical or biological features essential to the conservation of the Beringia DPS of the bearded seal in U.S. waters—

- (i) Sea ice habitat suitable for whelping and nursing, which is defined as areas with waters 200 m or less in depth containing pack ice of at least 25 percent concentration and providing bearded seals access to those waters from the ice,
- (ii) Sea ice habitat suitable as a platform for molting—defined as areas with waters 200m or less in depth containing pack ice of at least 15 percent concentration and providing bearded seals access to those waters from the ice, containing sea ice of 15 percent or more concentration, excluding any bottom-fast ice extending seaward from the coastline in waters less than 2 m deep,
- (iii) Primary prey resources to support bearded seals in waters 200 m or less in depth: benthic organisms, including epifaunal and infaunal invertebrates, and demersal and schooling pelagic fishes, and
- (iv) Acoustic conditions that allow for effective communication by bearded seals for breeding purposes within waters used by breeding bearded seals.

NMFS specifically requested input on the inclusion of “acoustic conditions that allow for effective communication by bearded seals for breeding purposes” as an essential feature, as well as

additional data that would assist federal action agencies and NMFS in determining characteristics of noise that result in adverse effects on this proposed essential feature. The proposed rule cites several studies that clearly document the vocal behavior of males during the breeding season, including the stability through time and geographic variation in call characteristics and vocalization patterns (e.g. Van Parijs and Clark 2006, Risch et al. 2007). The Commission concurs that acoustic conditions should be included as an essential feature for the Beringia DPS of the bearded seal and recommends that this feature be retained in the final rule. Further, we call your attention to a few recent publications on bearded seal auditory biology and acoustic impacts (Sills et al. 2020a and b, and Fournet et al. 2021) that should assist NMFS in determining characteristics of noise that may result in adverse effects on this proposed essential feature. Crain et al. (2021) and Thometz et al. (2021) may also be informative to the question of impacts of changing ice conditions on bearded seals.

NMFS proposes to designate one specific area as critical habitat in the Bering, Chukchi, and Beaufort seas based on the expected occurrence of the identified essential features. As proposed, the northern boundary extends offshore from the northern limit of the United States-Canada border to the 200-m isobath and then follows this isobath generally westward and northwestward to its intersection with the seaward limit of the U.S. EEZ. The western boundary is the limit of the U.S. EEZ and the southern boundary is simplified, for purposes of plotting on a map, from the estimated position of the 30-year (1990-2019) April median ice edge west of Kuskokwim Bay that intersects the mainland near the west side of the mouth of the Kolovinerak River, about 50 km east of Nunivak Island. The shoreward boundary is proposed as the mean lower low water line to include those areas in which the primary prey essential feature occurs. No currently unoccupied areas have been identified as being essential to the conservation of the Beringia DPS of the bearded seal, and thus no such areas are proposed for designation as critical habitat.

NMFS is not proposing to exclude any areas based on economic impacts, impacts to national security, or other relevant impacts. This final category of “other relevant impacts” is less specific, but presumably would include adverse impacts on the availability of bearded seals to Alaska Natives for subsistence and handicraft purposes. The Commission does not foresee any such impacts. Although, a critical habitat designation is a valuable educational and public outreach tool concerning the habitat needs of the listed species, its only legal implication under the ESA stems from the consultation requirements of section 7(a)(2). This is confined to assessing the impacts of federal actions on listed species and critical habitat. Inasmuch as subsistence hunting is not an activity that is authorized, funded, or carried out by any federal agency, the requirements of section 7 would be inapplicable. There is a widely held perception that listing a species or designating critical habitat under the ESA has adverse consequences for Alaska Natives that hunt marine mammals. This is not the case.¹ The Commission therefore recommends that NMFS discuss and highlight this fact in the final rule and in other appropriate outreach materials and fora.

Although the area being proposed by NMFS as critical habitat for the Beringia DPS of the bearded seal is large, because of the occurrence of bearded seals throughout this area, their

¹ In this regard, we note that both the Marine Mammal Protection Act and the ESA include provisions that allow for the regulation of taking by Alaska Natives when necessary to prevent adverse impacts on depleted or listed species. In the case of the ESA, for example, the regulatory agency would be required to demonstrate that taking is “materially and negatively” affecting the listed species. In addition, both statutes establish heightened procedural and evidentiary requirements for issuing such regulations. In the nearly 50-year history of administering these two statutes, regulations limiting subsistence taking have only been issued once (for Cook Inlet beluga whales).

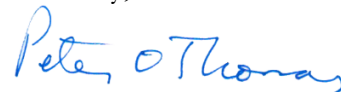
preference for waters less than 200m in depth, and for certain sea ice conditions for whelping, nursing, and molting, the large inter-annual variation in the distribution of different sea ice habitat types, and the large areas that individual bearded seals may use in a given year, the Commission concurs with NMFS's determination that the proposed critical habitat contains physical and biological features essential for the conservation of the DPS and that warrant special protection. Therefore, the Commission recommends that NMFS adopt a final rule designating as critical habitat for the Beringia DPS of bearded seals the entire area identified in the proposed rule.

As sea ice extent continues to decline substantially Arctic-wide, and the timing, rate, and extent of seasonal sea ice loss and formation in the Bering and Chukchi Seas continue to shift, areas currently considered essential for critical habitat may also change (Perovich et al., 2020). Therefore, the Commission recommends that once an initial critical habitat designation is made, NMFS periodically review (e.g., every 5 years or as substantial new information becomes available) Beringia bearded seal habitat use to evaluate whether there is a need to revise the designation.

NMFS cites the principal threat to the persistence of the Beringia DPS of the bearded seal as “the ongoing and anticipated decreases in the extent and timing of sea ice stemming from climate change.” Therefore, the Commission recommends that NMFS work with key federal agencies on a coordinated strategy to address the broader underlying problem—the need to reduce greenhouse gas emissions, thereby mitigating the negative impacts of climate change on Arctic marine mammals, including the Beringia DPS of the bearded seal, and their habitat. This strategy should be supported by work with federal and state agencies, co-management partners, and local communities via existing research partnerships (e.g., Alaska Arctic Observatory and Knowledge Hub, Bering Sea Elders) to foster routine inclusion of indigenous knowledge along with conventional science in assessing and predicting habitat transformation in the Arctic. Finding an effective way of addressing the risks posed by climate change is likely the only way to fulfill the ESA's mandate to conserve bearded seals and the ecosystem on which they depend. As a next step, the Commission hopes to see these efforts reflected in a recovery plan for the DPS.

The Commission would be pleased to address any questions about its recommendations or the rationale for them.

Sincerely,



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

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