8 April 2021

Mr. Jon Kurland
Assistant Regional Administrator
Protected Resources Division, Alaska Region
National Marine Fisheries Service
P.O. Box 21668
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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. 1452) revising its proposed designation of critical habitat for Arctic ringed seals (*Phoca hispida hispida*)[1] and reopening the comment period on that proposal. The Commission offers the following comments and recommendations.

Background

On 28 December 2012, NMFS published a final rule listing the Arctic ringed seal as threatened under the Endangered Species Act (ESA) (77 Fed. Reg. 76706) and requesting information on physical and biological features essential to the conservation of Arctic ringed seals and on economic consequences of designating critical habitat for this species.

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
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> (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.

In a 3 December 2014 *Federal Register* notice, later revised on 9 December 2014, NMFS proposed to designate critical habitat for Arctic ringed seals in the Bering, Chukchi, and Beaufort Seas. The boundary of the proposed critical habitat in the north, west, and east extended to the limit of the U.S. Exclusive Economic Zone (EEZ) and in the south was set using a simplified estimation

[1] The Society for Marine Mammalogy Committee on Taxonomy periodically updates the taxonomy and nomenclature of marine mammal species and subspecies. On the current list, this species and the four subspecies are included in the genus *Pusa* rather than *Phoca*.

of the median position of the sea ice edge in April, with a shoreward boundary extending to the coastline. The Commission commented on the original proposal on 31 March 2015, concurring with NMFS that the entire area proposed as critical habitat contained physical and biological features essential for the conservation of Arctic ringed seals and recommending that NMFS designate that area in the final rule.

Before the final critical habitat rule was published, the threatened species listing was vacated by a 17 March 2016 ruling of the U.S. District Court for Alaska. However, the Ninth Circuit Court of Appeals reversed the District Court ruling on 12 February 2018, reinstating the threatened species listing for the Arctic ringed seal.

Proposed critical habitat for Arctic ringed seals

NMFS published a revised proposed rule to designate critical habitat for Arctic ringed seals on 8 January 2021. Similar to the original proposal, NMFS again identified three physical or biological features essential to the conservation of Arctic ringed seals in U.S. waters—

(i) Snow-covered sea ice habitat suitable for the formation and maintenance of subnivean birth lairs used for sheltering pups during whelping and nursing—defined as areas of seasonal landfast (shorefast) ice and dense, stable pack ice, excluding any bottom-fast ice extending seaward from the coastline in waters less than 2 m deep, that have undergone deformation and contain snowdrifts of sufficient depth, typically at least 54 cm deep,

(ii) Sea ice habitat suitable as a platform for basking and molting—defined as areas 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, and

(iii) Primary prey resources to support Arctic ringed seals—identified as Arctic cod, saffron cod, shrimps, and amphipods.

Proposed critical habitat was then identified based on the presence of one or more of these essential features.

Arctic ringed seals are circumpolar, widespread, and wide-ranging throughout the Arctic Ocean Basin, including in the Bering, Chukchi, and Beaufort Seas. They use a variety of habitat types throughout the year. Many Arctic ringed seals move south with the advancing ice in the fall, with adults exhibiting site fidelity to breeding areas (Kelly et al. 2010) and subadults ranging further south to the Bering Sea ice edge (Crawford et al. 2012). They migrate north in the spring as the ice edge recedes, and spend the summer open-water period in continental shelf waters (Crawford et al. 2012; Von Duyke et al. 2020). Off-shelf travel to the deep Arctic Basin has also been documented and is associated with hauling out on retreating pack ice (Von Duyke et al. 2020). To accommodate the species' broad distribution, as well as the requirement that critical habitat include only areas subject to U.S. jurisdiction (50 C.F.R. § 424.12(g)), the western, northern, and eastern boundaries of the proposed critical habitat area extend seaward to the limit of the U.S. EEZ; this extensive area has not changed from the 2014 proposed rule. The Commission concurs with NMFS's proposed determination that the proposed critical habitat contains the physical and biological features essential for the conservation of the species and that warrant special protection.

The 2021 proposed rule differs from the 2014 proposal in three major ways. First, the original proposal would have set the shoreward boundary of critical habitat as the "coastline" excluding small bays and shallow nearshore waters. In the revised proposal, NMFS recognized that these nearshore areas constitute essential habitat for Arctic and saffron cod, and areas in which some Arctic ringed seals forage. Therefore, NMFS proposed changing the shoreward boundary to the line that marks mean lower low water. The Commission concurs with this boundary change but recommends that further research be conducted in nearshore and inshore habitats to better assess ringed seal use of these areas, particularly considering that this is where most human activity occurs.

Second, the southern boundary of the proposed critical habitat was altered to reflect a simplified estimation of the median sea ice edge in May, rather than April. As previously mentioned, two of the three essential features rely on seals having access to sea ice: snow-covered sea ice suitable for the construction of subnivean birth lairs and areas of at least 15 percent sea ice for basking and molting. Although April is the peak month for pupping, Arctic ringed seals nurse their pups for an average of 39 days (Hammill et al. 1991). As such, NMFS believes that the sea ice extent in May better reflects habitat in which birth lairs can persist until pups have weaned. Sea ice conditions are dynamic and can vary greatly between years, so, to account for annual sea ice variation, the median ice edge in May over a 30-year time series (1990-2019) was used to delineate the southern boundary for the proposed critical habitat area. NMFS also reported more recent aerial survey data from 2012 and 2013 that documented only a few pup sightings south of St. Matthew and Nunivak Islands. The revised southern boundary ranges from 125 to 325 km further north than originally proposed in 2014, with the greatest change in the eastern portion. The Commission concurs with NMFS's determination that this marks an appropriate approximation of the southern extent of sea ice suitable both for birth lairs, which must persist through the lactation period, and for basking and molting.

The third and final revision to the proposed critical habitat designation stems from section 4(b)(2) of the ESA, which requires NMFS to consider economic, national security, and other relevant impacts when designating critical habitat. If the agency finds that the benefits of excluding particular areas outweigh the benefits of designation, those areas may be excluded, as long as the exclusion will not result in the extinction of the species. NMFS did not propose any exclusions based on economic impacts of the designation, but it is possible that commenters will raise specific concerns that will need to be assessed on a case-by-case basis. As discussed below, NMFS is proposing an exclusion based on national security concerns. The final basis for exclusions, "other relevant impacts," is less specific, but presumably would include adverse impacts on the availability of ringed 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.[2] The Commission therefore recommends that NMFS discuss and highlight this fact in the final rule and in other appropriate outreach materials and fora.

After consulting with the Department of Defense, NMFS proposes to exclude an area north of Prudhoe Bay and east to the Canadian border, from 100 nm offshore to the outer limit of the U.S. EEZ, from the designation due to impacts on national security. This area, which encompasses 12 percent of the marine habitat that otherwise would be included in the revised proposal, is used by the U.S. Navy for training and testing exercises. Data on ringed seal use of this area are limited, as aerial surveys during reproduction and molting periods typically occur closer to shore. Given that the Navy is required to consult with NMFS under section 7(a)(2) of the Endangered Species Act to ensure that its activities do not jeopardize the continued existence of the Arctic ringed seal independent of any critical habitat designations, NMFS concluded that the benefits of excluding this portion of the Beaufort Sea outweigh the benefits of designation. Tagged seals have been detected in parts of this proposed exclusion zone (Crawford et al. 2019; Von Duyke et al. 2020), however NMFS does not believe that failure to designate this area as critical habitat will result in extinction or that this area is more valuable to the species than those areas included in the proposed designation.

The proposed rule discusses ESA section 4(a)(3)(B)(i) and its applicability to the designation of critical habitat in areas owned or controlled by the Department of Defense (DOD) or designated for DOD's use. NMFS indicated that it consulted with the Air Force and the Navy and concluded "that there are no properties owned, controlled, or designated for use by DOD that are subject to ESA section 4(a)(3)(B)(i) for this revised proposed critical habitat designation." It is unclear whether NMFS determined that the area used by the Navy and proposed for exclusion is not subject to that provision because it is not owned, controlled, or designated for use by the Navy, or for some other reason. The Commission recommends that the basis for excluding Navy properties be clarified. The thrust of this statutory provision seems to be that designation of areas used by DOD as critical habitat is not necessary because other mechanisms exist to protect the value of that habitat to listed species. As such, the Commission recommends that NMFS also clarify whether there is an Integrated Natural Resources Management Plan or similar plan in place that addresses potential impacts on ringed seals or other ESA-listed species in the area proposed to be excluded.

As noted above, the use of certain areas within the proposed critical habitat and the importance of those areas to Arctic ringed seals may vary considerably by season. For example, snow-covered sea ice suitable for the formation of subnivean lairs is essential to the conservation of ringed seals during the breeding season, but may be of little value to them at other times of the year. As discussed in the Commission's March 2015 letter commenting on the original critical habitat proposal, this may prompt some to argue that critical habitat should be designated only on a seasonal basis or should be dynamic to reflect changing snow and ice patterns throughout the year or on an inter-annual basis. Such an approach, however, seems at odds with the structure and mandates of the Endangered Species Act, which specifies that critical habitat should include all areas that are essential to the conservation of a listed species during any part of the year and that federal

[2] 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).

agencies are under a continuing obligation to consult with NMFS if any action it authorizes, funds, or carries out may affect critical habitat. That is, the temporal aspect of critical habitat should be considered as part of the consultation, but not for determining whether consultation should be initiated. If an action would affect critical habitat only during a time of the year when it is not serving an essential function for the species, it presumably would not constitute adverse modification of that habitat.

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; Von Duyke 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) ringed seal habitat use to evaluate whether there is a need to revise the designation.

NMFS cites the principal threat to the persistence of the Arctic ringed seal as "loss of sea ice and reduced on-ice snow depths 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 Arctic ringed seals, 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 Arctic ringed 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 species.

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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