



MARINE MAMMAL COMMISSION

26 February 2013

Mr. Jon Kurland
Assistant Regional Administrator for Protected Resources
National Marine Fisheries Service, Alaska Region
P.O. Box 21668
Juneau, AK 99802
Attn: Ellen Sebastian

Re: FDMS Docket numbers NOAA-NMFS-2010-0258 and 0259

Dear Mr. Kurland:

On 28 December 2012 the National Marine Fisheries Service published final rules listing the Beringia and Okhotsk distinct population segments of the bearded seal (*Erignathus barbatus*) as threatened (77 Fed. Reg. 76740); the Arctic (*Phoca hispida hispida*), Okhotsk (*P. b. ochotensis*), and Baltic (*P. b. botnica*) subspecies of the ringed seal as threatened; and the Ladoga (*P. b. ladogensis*) subspecies of ringed seal as endangered—all under the Endangered Species Act (77 Fed. Reg. 76706). Concurrent with those listings, the Service withdrew all proposed protective regulations under section 4(d) of that Act for those subspecies and populations listed as threatened and solicited information that may be relevant to the designation of critical habitat. The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the final rule and provides the following recommendations and rationale.

RECOMMENDATIONS

The Marine Mammal Commission recommends that the National Marine Fisheries Service—

- work with the Fish and Wildlife Service, the Environmental Protection Agency, and other Administration agencies to begin developing a national strategy for addressing the root causes and effects of climate disruption;
- reinitiate rulemaking and adopt protective regulations under section 4(d) of the Endangered Species Act for those populations of ringed and bearded seals listed as threatened;
- consider appropriate combinations of sea-ice cover, water depth, and prey availability as primary constituent elements of ringed seal critical habitat; doing so may require the Service to identify critical habitat on the basis of Arctic conditions that vary seasonally and that are changing over time as a result of climate disruption and Arctic warming;
- consider appropriate combinations of sea-ice cover, water depth, and benthic productivity as primary constituent elements of bearded seal critical habitat; as noted for the ringed seal, doing so may require the Service to identify critical habitat on the basis of Arctic conditions that vary seasonally and that are changing over time as a result of climate disruption and Arctic warming; and
- consult with the Fish and Wildlife Service and the U.S. Geological Survey as they identify critical habitat for ringed and bearded seals to consider the approach those agencies used to

identify critical habitat for the ecologically related polar bear and are considering for identifying critical habitat for walrus.

RATIONALE

The primary issue before the National Marine Fisheries Service

The matters under consideration in the Service's notice and in this letter are central to the purposes of the Endangered Species Act. Section 2(a)(1) of the Act recognizes that various species of fish, wildlife, and plants in the United States are threatened with extinction "as a consequence of economic growth and development untempered by adequate concern and conservation." To address that concern, Congress specified in section 2(b) that the purposes of that Act are "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved [and] to provide a program for the conservation of such endangered species and threatened species." The Endangered Species Act provides for additional protective measures beyond those under the Marine Mammal Protection Act and places more explicit emphasis on the protection of critical habitat.

On matters pertaining to climate disruption, both the Departments of Commerce and the Interior have participated in the development of various strategies (e.g., NOAA's Arctic Vision and Strategy) and plans (e.g., the Interagency Arctic Research Policy Committee Arctic Research Plan: FY2013-2017) pertaining to the conservation of Arctic ecosystems. However, those efforts focus on studying or minimizing the sensitivity of species to climate disruption. Importantly, they do not address the root cause itself. Neither the National Marine Fisheries Service nor the Fish and Wildlife Service has spoken to that point, despite the agencies' critical responsibilities under the Endangered Species Act. Only the Environmental Protection Agency has stepped forward to tackle that responsibility. Thus, it is difficult to have confidence that the strategies put forward by the National Marine Fisheries Service and the Fish and Wildlife Service will, in fact, be sufficient to conserve species determined to be at risk of extinction due to climate disruption.

The most commonly cited explanations for the agencies' approach are that (1) Congress did not envision the profound impacts of climate disruption on wild flora and fauna when it passed the Endangered Species Act and (2) the challenge is too complex. The Commission does not consider those two explanations adequate or convincing. With regard to the first explanation, nowhere in the Endangered Species Act did Congress indicate that the Act should be applied only to circumstances envisioned at the time of enactment. The Act provides procedures to follow for invoking certain exemptions, but those procedures have not been implemented with regard to matters pertaining to climate disruption. As to the second explanation, addressing climate change is indeed a huge challenge and bound to be difficult. But again, nowhere in the Act did Congress limit the Services' responsibilities to dealing only with relatively simple problems facing threatened and endangered species.

Clearly, the National Marine Fisheries Service and the Fish and Wildlife Service will not be able to address singlehandedly the root cause of climate change. However, they could—and in the Commission's view should—engage other federal agencies in discussions aimed at developing strategies to address the conservation-related consequences of climate disruption. Therefore, the

Marine Mammal Commission recommends that the National Marine Fisheries Service work with the Fish and Wildlife Service, the Environmental Protection Agency, and other appropriate agencies to begin developing a national strategy for addressing the root causes and effects of climate disruption.

Protective regulations

Section 4(d) of the Endangered Species Act directs that, when a species is listed as threatened, the Service “shall issue such regulations as [it] deems necessary and advisable to provide for the conservation of the species.” The regulations may include, but are not explicitly limited to, any of the prohibitions applicable under section 9(a)(1) of the Act for species listed as endangered. In the proposed listing rules, the Service indicated that it planned to adopt the full suite of prohibitions applicable under section 9(a)(1) for all subspecies and distinct population segments being considered for listing as threatened. In doing so, the Service stated that—

Based on the status of each of the ringed seal subspecies and their conservation needs, we conclude that the ESA section 9 prohibitions are necessary and advisable to provide for their conservation. We are therefore proposing protective regulations pursuant to section 4(d) for the Arctic, Okhotsk, Baltic, and Ladoga subspecies of ringed seal to include all of the prohibitions in section 9(a)(1). [75 Fed. Reg. 77476].
and

Based on the status of the Beringia DPS and the Okhotsk DPS of the bearded seal and their conservation needs, we conclude that the ESA section 9 prohibitions are necessary and advisable to provide for their conservation. We are therefore proposing protective regulations pursuant to section 4(d) for the Okhotsk DPS and the Beringia DPS of the bearded seal to include all of the prohibitions in section 9(a)(1). [75 Fed. Reg. 77496].

However, in the final listing rules for each species the Service declined to adopt any protective regulations under section 4(d). Based on comments submitted by oil and gas interests and further review by the agency, the Service decided to withdraw the proposed 4(d) regulations because it no longer believed that such regulations were necessary at this time. In this regard, the Service noted that the principal threat to these species is habitat alteration stemming from climate change, which will manifest itself over the next several decades. In the preambles to its final listing rules the Service stated that it had not received any information and was not aware of any information “indicating that the addition of the ESA section 9 prohibitions would apply to any activities that are currently unregulated and are having, or have the potential to have, significant effects on” these species. The Service also explained that these species appeared to be sufficiently abundant “to withstand typical year-to-year variation and natural episodic perturbations in the near term” as further justification for declining to adopt protective regulations now. Finally, the Service observed that these species currently benefit from existing protections under the Marine Mammal Protection Act, and federal activities that may take listed species will still be subject to consultation under section 7(a)(2) of the Endangered Species Act to ensure such actions will not jeopardize the continued existence of the species. In sum, the Service did not believe that “the proposed section 4(d) regulations would provide appreciable conservation benefits.”

The Service's decision not to issue protective regulations under section 4(d) is inconsistent with the statutory provisions and mandates of the Endangered Species Act. Those provisions and mandates are intended to conserve listed species—i.e., to bring them to the point at which the measures provided pursuant to the Act are no longer necessary. In essence, between publication of the proposed and final rules, the Service completely reversed its position. That reversal apparently was based on the assumption that the protections afforded by the Marine Mammal Protection Act and derived through consultations on proposed federal activities will be sufficient to achieve recovery of the species. The existing evidence clearly refutes that assumption. First, the protections afforded ice seals under the Marine Mammal Protection Act have not been sufficient to ensure the availability of essential habitat for the species; hence, their listing under the Endangered Species Act. Thus, the Commission sees no basis for the Service's belief that those protections will be sufficient to prevent the species from declining toward extinction. Second, the Service assumes that consultations under section 7 of the Endangered Species Act will be sufficient to protect the species from new federal activities that may adversely affect the species or its critical habitat. But to date, neither the National Marine Fisheries Service nor the Fish and Wildlife Service has been able or willing to apply these consultations to address and alleviate the factors that are disrupting the earth's climate and degrading Arctic (and other) ecosystems. In addition, for the most part, section 7 consultations will apply only to new federal actions or changes to existing actions, and generally will not address baseline conditions. Thus, the Service's decision not to issue protective regulations effectively ignores the main and any supplemental factors already putting these species at risk and, for all intents and purposes, does nothing to promote their conservation and recovery as required by the Act. It seeks little more than to maintain the status quo—i.e., the continuation of policies and practices that are contributing to climate disruption and degrading sea ice habitat.

Section 4(d) places an affirmative duty on the Service to issue protective regulations concurrent with listing a species as threatened, the only limitation being that such regulations are "necessary and advisable to provide for the conservation of such species." Absent a showing that the existing provisions of the Marine Mammal Protection Act and the other provisions of the Endangered Species Act (e.g., section 7) are sufficient to conserve the species, supplementation under section 4(d) is necessary. Similarly, the adoption of regulations is advisable unless the Service can conserve the species without them. Although the Service indicates that it does not believe that the threats faced by these species of ice seals are immediate, it has not articulated how the eventual loss of essential habitat and declines of the species can be avoided if it continues to rely only on other statutory provisions that, again, have heretofore proven insufficient to conserve the species. Furthermore, if the threats were immediate, then the Service should have listed these species as endangered. The rationale used here by the Service effectively rules out the need to adopt conservation measures for species listed as threatened, which although likely to become endangered within the foreseeable future, are not currently in danger of extinction. The Commission disagrees with this reasoning and believes that the issuance of regulations under section 4(d) is both necessary and advisable and the requirement to do so cannot be dismissed so readily.

Although the Service initially thought that applying the full suite of prohibitions available under section 9(a)(1) was necessary and advisable to provide for the conservation of these species, it concluded in the final rule that those prohibitions would do nothing to promote the conservation of the species. Here, we believe the Service could be making the same mistake that it made with the Cook Inlet beluga whale, which was to assume that the factors causing a species' decline or

preventing recovery were well understood and would remain constant. The protections described in section 9(a)(1) would broaden the definition of “take” applicable to the listed species (by, among other things, including “harm”) and would strengthen prohibitions on importing and exporting these species and their parts. In addition to these measures, the Service should be strengthening its efforts to assess other possible threats to the species. For example, the stock assessment report for the bearded seal (Allen and Angliss 2012) estimates that 6,788 seals are taken for subsistence per year, but that estimate is markedly different from the previous estimate (791) and is based on data that are 15 years old or older. In addition, the Service notes that “[a]t this time, there are no efforts to quantify the total statewide level of harvest of bearded seals by all Alaska communities.” Similarly, the stock assessment report for the ringed seal provides an estimate of 9,567 seals taken for subsistence per year, but that estimate is confounded by the same problems. Based on the existing information, it is simply not possible to provide a science-based description of the current levels of take or the potential effects of that take throughout most of the seals’ ranges, including those portions under U.S. control. Although section 109(i) of the Marine Mammal Protection Act authorizes the Service to prescribe regulations requiring the marking, tagging, and reporting of marine mammals taken for subsistence or for creating and selling handicrafts, the Service has declined to issue such regulations. Establishing improved mechanisms to obtain reliable information concerning take levels for these species is something that also could be achieved by regulations under section 4(d) of the Endangered Species Act.

For the foregoing reasons, the Marine Mammal Commission recommends that the National Marine Fisheries Service reinitiate rulemaking and adopt protective regulations under section 4(d) of the Endangered Species Act for those populations of ringed and bearded seals listed as threatened. If the Service declines to adopt this recommendation the Marine Mammal Commission expects the Service to provide it with a detailed explanation of the reasons for doing so, as required under section 202(d) of the Marine Mammal Protection Act. Such an explanation should address why (1) the Service believes that the currently applicable statutory and regulatory provisions are sufficient to conserve the species, (2) supplemental regulations are not necessary or advisable, and (3) conservation of the species would not be promoted through the issuance of supplemental regulations.

Critical habitat

Section 3(5)(A) of the Endangered Species Act 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.

Section 4(a)(3) of the Endangered Species Act requires that, to the extent prudent and determinable, the Service designate critical habitat at the time that it lists a species. In its listing rules

for ringed and bearded seals the National Marine Fisheries Service indicated that it lacks the data and information necessary to identify and describe the primary constituent elements or essential features of the habitats of the Arctic ringed seal and the Beringia distinct population segment of the bearded seal. Therefore, the Service requested comments and information to help identify those elements or features and to determine the extent to which they may require special management considerations or protection. The Service also requested information regarding potential economic, national security, and other impacts from designating critical habitat for the Arctic ringed seal and Beringia distinct population segment of the bearded seal.

The range of the Arctic ringed seal is circumpolar and the range of the two listed bearded seal population segments includes international waters and the waters of other countries. Applicable regulations (50 C.F.R. § 424.12(h)) limit critical habitat designations to areas subject to U.S. jurisdiction. Therefore, the Service requested information only on potential areas of critical habitat within waters subject to U.S. jurisdiction.

Ringed seals

In its comments on the proposed listing of ringed seals (see the enclosed 23 March 2011 letter), the Commission noted that the Service's review included extensive habitat-related information that supported listing. The Commission concurred with that information, believes that it describes the ringed seal's range and habitat use patterns during its annual cycle, and believes that the information is sufficient to identify the primary constituent elements of that habitat.

The Alaska Marine Mammal Stock Assessments, 2011 (Allen and Angliss 2012) describe the distribution of ringed seals in U.S. waters as follows.

In Alaskan waters, during winter and early spring when sea ice is at its maximal extent, ringed seals are abundant in the northern Bering Sea, Norton and Kotzebue Sounds, and throughout the Chukchi and Beaufort Seas. They occur as far south as Bristol Bay in years of extensive ice coverage but generally are not abundant south of Norton Sound except in nearshore areas (Frost 1985). Although details of their seasonal movements have not been adequately documented, it is generally considered that most ringed seals that winter in the Bering and Chukchi Seas migrate north in spring as the seasonal ice melts and retreats (Burns 1970) and spend summer in the pack ice of the northern Chukchi and Beaufort Seas, as well as in nearshore ice remnants in the Beaufort Sea (Frost 1985). During summer, ringed seals range hundreds to thousands of kilometers to forage along ice edges or in highly productive open-water areas (Freitas et al. 2008, Kelly et al. 2010b). With the onset of freeze-up in the fall, ringed seal movements become increasingly restricted and seals that have summered in the Beaufort Sea are thought to move west and south with the advancing ice pack, with many seals dispersing throughout the Chukchi and Bering Seas while some remain in the Beaufort Sea (Frost and Lowry 1984). Many adult ringed seals return to the same small home ranges they occupied during the previous winter (Kelly et al. 2010b) [internal references in Allen and Angliss 2012].

The ringed seal status review (Kelly et al. 2010) described the threats to ringed seal habitat as follows.

The diminishing quantity and quality of ice and snow cover represent significant changes in the habitats available to Arctic ringed seals. Reduction of ice as a platform for pupping, molting, and resting, as well as reduction in the duration and quality of snow cover, will substantially impact ringed seal habitat. As that habitat deteriorates, Arctic ringed seals initially may be able to compensate by emigrating northward. Within the century, however, snow cover likely will be inadequate for lair use over substantial portions of the subspecies' range, including the highest latitudes.

Arctic ringed seals are found on or around sea ice for their entire annual cycle (Kelly et al. 2010). They den and bask on both shorefast sea ice and moving pack ice and do not come ashore throughout most of their range. Although some researchers report that ringed seals appear to prefer shorefast sea ice, their selection of habitat also may be influenced by distance from shore or water depth—that is, they tend to concentrate near shore in waters of moderate depths. Bengtson et al. (2005) surveyed the entire Chukchi Sea coast during the basking periods of May–June 1999 and 2000 and found “the highest densities of ringed seals were encountered on shorefast ice along the coast and in Kotzebue Sound, as well as in pack ice habitats within 43 km of the shore.” The seals were four to ten times more abundant in nearshore areas than beyond 43 km (Bengtson et al. 2005). Stirling et al. (1982) reported that in June basking ringed seals in the eastern Beaufort Sea were most concentrated over depths of 50 to 100 m with extensive ice cover.

Despite those apparent preferences, ringed seals are not restricted to nearshore habitat (Bengtson et al. 2005). Range maps and descriptions indicate a widespread offshore distribution throughout U.S. waters in the Chukchi and Beaufort Seas and Burns (1970) reported observations of pregnant females far from shore in the northern Chukchi Sea and Arctic Ocean. The above-mentioned surveys reported by Bengtson et al. (2005) extended to between 148 and 185 km offshore of the Alaskan Chukchi Sea coast from the southern end of Kotzebue Sound to northwest of Barrow and resulted in estimated densities between 0.001 and 2 seals/km². Stirling et al. (1982) found seals to be widely distributed in the Canadian Beaufort Sea to as far as 160 km from shore, which was the seaward limit of their surveyed area.

The Arctic ringed seal's annual cycle can be characterized as consisting of three ecological periods: (1) the winter and spring subnivean period when the seals rest and pup in ice- and snow-covered lairs and mate under the ice, (2) the spring “basking period” when they haul out on ice to molt, and (3) the open-water foraging period.

The winter and spring subnivean period is especially important for ringed seals. The seals protect their vulnerable newborn and suckling young from extremely cold temperatures, immersion in cold water, and predation by excavating lairs in shorefast sea ice or moving pack ice after freeze-up in the fall. Those lairs provide necessary shelter during the pupping, nursing, and mating seasons. Both sea ice and snow cover are essential for lair construction. As described in the listing notice, “[s]now drifts to 45 cm or more are needed for excavation and maintenance of simple lairs, and birth lairs require depths of 50 to 65 cm or more....” The notice specifies that such drifts “typically only occur where average snow depths are at least 20–30 cm (on flat ice) and where drifting has

taken place along pressure ridges or ice hummocks.” In addition, the persistence and integrity of lairs may be compromised toward the end of the nursing season by unseasonal thaws and rainfall events that have become more frequent with climate disruption. The ringed seals’ ability to create lairs depends upon climate, ice, snow, and ocean conditions, which also determine whether lairs persist intact throughout the pupping and relatively long nursing periods.

Therefore, during the critical subnivean period, the primary constituent elements of ringed seal critical habitat are—

- 1) the presence of shorefast sea ice or pack ice, especially relatively close to shore (e.g., within 43 km) and over waters of moderate depth (out to 100 m) in the Bering, Chukchi, and Beaufort Seas, and
- 2) the presence of adequate snow cover (i.e., average thickness of at least 20 cm (on flat ice) and where drifting has taken place along pressure ridges or ice hummocks).

Absent these habitat elements, ringed seals may not be able to construct and maintain lairs that provide sufficient shelter to adults and pups during the pupping and nursing periods. Without these lairs, ringed seal reproduction and survival would both be compromised. Thus, these elements are essential for the persistence of ringed seal populations.

Ringed seals also depend on shorefast sea ice or moving pack ice during the late spring–early summer basking period when they molt. Molting is a vital process because the seals require healthy coats to protect them from their harsh environment. The process is energy-intensive and the ice provides a resting platform so that molting seals are not forced to spend inordinate amounts of time in the water, where they would be required to expend more energy to maintain their body temperature, thereby diminishing the fat reserves needed to survive through and beyond the molting period. Thus, the availability of sufficient shorefast sea ice or moving pack ice during the late spring–early summer is critical for molting ringed seals to meet their haul-out and physiological requirements during the basking period.

Ringed seals continue their close association with ice during the open-water foraging period which extends from early summer until freeze-up in late fall. Generally, ringed seals forage near sea ice throughout the year, following the ice as it recedes and advances with the seasons. As the Arctic climate warms, the duration of the annual open-water period will increase and pack ice will retreat more frequently and for longer periods beyond nearshore and continental shelf foraging areas in the Chukchi and Beaufort Seas. These developments may result in significant changes to the Arctic marine food web and affect ringed seal foraging behavior and distribution. For example, both ringed seals and sea birds (thick-billed murre) along the western coast of Hudson Bay have been forced to change their primary diets from Arctic cod to sand lance and capelin because the epontic (under-ice) habitat of the cod has been disappearing earlier with climate warming (Gaston et al. 2003). Whether and to what extent ringed seals will adapt to the changed conditions of more open water, for longer periods, remains to be seen. Some degree of adaptation will be necessary if they are to remain in the productive continental shelf waters rather than following the pack ice offshore into deeper, less productive waters. The significance of changes in sea-ice distribution and prey availability are uncertain but, based on observed historical seasonal distribution and foraging patterns, access to sea

ice over the continental shelf of the Chukchi and Beaufort Seas during the foraging period likely constitutes a primary constituent element of ringed seal habitat.

For all these reasons, the Marine Mammal Commission recommends that the National Marine Fisheries Service consider appropriate combinations of sea-ice cover, water depth, and prey availability as primary constituent elements of Arctic ringed seal critical habitat. Doing so may require the Service to identify critical habitat on the basis of conditions that vary seasonally and that are changing over time as a result of climate disruption and Arctic warming.

Bearded seals

The bearded seal's distribution and habitat-use patterns also reveal the primary constituent elements of its habitat. As Cameron et al. (2010) described in the bearded seal status review, these seals use a variety of different ice types and are closely associated with sea ice during reproduction, molting, and foraging (Fay 1974, Burns and Frost 1979, Burns 1981, Nelson et al. 1984). Their movements indicate a preference for pack ice and appear to be closely linked to seasonal changes in ice conditions. Thus, sea ice—and perhaps pack ice—should be considered a primary constituent element of habitat for the Beringia distinct population segment of bearded seals.

The diet of bearded seals varies with season and throughout their range, but they feed primarily on benthic organisms that are more numerous in shallow water, typically less than 200 m (Finley and Evans 1983, Antonelis et al. 1994). For that reason, they appear to be restricted to areas where seasonal sea ice or land haulouts allow them access to relatively shallow benthic communities (Cameron et al. 2010). Field studies also indicate that these seals dive deeper than 200 m, with the deepest records extending to more than 500 m (Gjertz et al. 2000, Kovacs 2002, Cameron and Boveng 2009). Thus, benthic communities at water depths of less than 500 m also could be considered an important feature of bearded seal critical habitat.

Studies of bearded seals from the Beringia distinct population segment indicate that, during the pupping period, the seals prefer pack ice coverage of 70 to 90 percent near areas of high benthic productivity (Simpkins et al. 2003, Bengtson et al. 2005, Ver Hoef et al. *in revision*). Thus, it is reasonable to assume that survival of the Beringia distinct population segment depends on a combination of adequate prey resources and suitable ice habitat for pupping, nursing, breeding, molting, and resting. Therefore, based on the best available scientific information, the Marine Mammal Commission recommends that the National Marine Fisheries Service consider appropriate combinations of sea-ice cover, water depth, and benthic productivity as primary constituent elements of bearded seal critical habitat. As noted for the ringed seal, doing so may require the Service to identify critical habitat on the basis of conditions that vary seasonally and that are changing over time as a result of climate disruption and Arctic warming.

Consultations on ice seal, polar bear, and walrus critical habitat

The U.S. Fish and Wildlife Service described and considered the distribution and habitat preferences of ringed and bearded seals when it identified critical habitat for their primary predator, the polar bear (*Ursus maritimus*) (75 Fed. Reg. 76086). Specifically, the Service concluded that for the polar bear “accessibility and availability of sufficient food resources is dependent upon availability of

suitable sea-ice habitat over the shallower waters of the Chukchi and Bering Seas and southern Beaufort Sea.” In part, the Service based the definition of one of three polar bear critical habitat units (sea-ice habitat) on the distribution of ringed seals, stating—

[W]e have determined that sea ice that moves or forms over the shallower waters of the continental shelf (300 m (984.2 ft) or less), and that contains adequate prey resources (primarily ringed and bearded seals) to support polar bears, is an essential physical feature for polar bears in the southern Beaufort, Chukchi, and Bering Seas for food and physiological requirements. [75 Fed. Reg. 76112]

The Pacific walrus (*Odobenus rosmarus divergens*), a candidate species, is broadly sympatric with ringed and bearded seals in the Bering and Chukchi Seas and also depends substantially on sea ice. As with ringed seals, the increasingly frequent seasonal retreat of sea ice to beyond the edge of the continental shelf in the Chukchi Sea is affecting walrus foraging distribution, seasonal movements, and calf survival. Consideration of those effects led the Fish and Wildlife Service to conclude that listing the Pacific walrus under the Endangered Species Act was warranted, but such listing is currently precluded by higher-priority listing actions (76 Fed. Reg. 7634).

Given the similarities in distribution, life history characteristics, ecological interactions, and impacts of climate disruption and seasonal sea ice retreat on ice seals (ringed and bearded seals), polar bears, and Pacific walruses, the Marine Mammal Commission recommends that the National Marine Fisheries Service consult with the Fish and Wildlife Service and the U.S. Geological Survey as they identify critical habitat for ringed and bearded seals to consider the approaches those agencies used to identify critical habitat for the ecologically related polar bear and are considering for identifying critical habitat for walrus once a listing proposal is made.

Please contact me if you have questions about these recommendations or wish to discuss them.

Sincerely,



Timothy J. Ragen, Ph.D.
Executive Director

Enclosure

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