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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Parts 223 and 226

[Docket No.: 201228-0358]

RIN 0648-BJ65

Endangered and Threatened Species; Designation of Critical Habitat for the Beringia Distinct Population Segment of the Bearded Seal

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: We, the National Marine Fisheries Service (NMFS), propose 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 proposed designation comprises an area of marine habitat in the Bering, Chukchi, and Beaufort seas. We seek comments on all aspects of the proposed critical habitat designation and will consider information received before issuing a final designation.

DATES: Comments must be received by [*INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER*]. Public hearings on the proposed rule will be held in Alaska. The dates and times of these hearings will be provided in a subsequent **Federal Register** notice.

ADDRESSES: You may submit data, information, or comments on this document, identified by NOAA-NMFS-2020-0029, and on the associated Draft Impact Analysis Report (*i.e.*, report titled "Draft RIR/ESA Section 4(b)(2) Preparatory Assessment/IRFA of Critical Habitat Designation for the Beringia Distinct Population Segment of the Bearded Seal") by either of the following methods:

- *Electronic Submission*: Submit all electronic comments via the Federal eRulemaking Portal. Go to *www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2020-0029*, click the "Comment Now!" icon, complete the required fields, and enter or attach your comments.

- *Mail:* Submit written comments to Jon Kurland, Assistant Regional Administrator for Protected Resources, Alaska Region NMFS, Attn: James Bruschi, P.O. Box 21668, Juneau, AK 99082-1668.

Instructions: NMFS may not consider comments sent by any other method, to any other address or individual, or received after the end of the comment period. All comments received are a part of the public record and will generally be posted for public viewing on *www.regulations.gov* without change. All personal identifying information (*e.g.*, name, address), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous).

Electronic copies of the Draft Impact Analysis Report for this proposed rule and a complete list of references cited in this proposed rule are available on the Federal eRulemaking Portal at *www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2020-0029*.

FOR FURTHER INFORMATION CONTACT: Tammy Olson, NMFS Alaska Region, (907) 271-5006; Jon Kurland, NMFS Alaska Region, (907) 586-7638; or Heather Austin, NMFS Office of Protected Resources, (301) 427-8422.

SUPPLEMENTARY INFORMATION: Section 3(5)(A) of the ESA defines critical habitat as (1) the specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features essential to the conservation of the species and which may require special management

considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary of Commerce (Secretary) that such areas are essential for the conservation of the species (16 U.S.C. 1532(5)(A)). Conservation is defined in section 3(3) of the ESA as 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 Act are no longer necessary (16 U.S.C. 1532(3)). Section 3(5)(C) of the ESA provides that, 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. Also, by regulation, critical habitat shall not be designated within foreign countries or in other areas outside U.S. jurisdiction (50 CFR 424.12(g)).

Section 4(b)(2) of the ESA requires the Secretary to designate critical habitat for threatened and endangered species on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impact of specifying any particular area as critical habitat. This section also grants the Secretary discretion to exclude any area from critical habitat if he determines the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat. However, the Secretary may not exclude areas if such exclusion will result in the extinction of the species (16 U.S.C. 1533(b)(2)).

Once critical habitat is designated, section 7(a)(2) of the ESA requires Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to destroy or adversely modify that habitat (16 U.S.C. 1536(a)(2)). This requirement is additional to the section 7(a)(2) requirement that Federal agencies ensure that their actions are not likely to jeopardize the continued existence of ESA-listed species. Specifying the geographic location of critical habitat also facilitates implementation of section 7(a)(1) of the ESA by identifying areas where Federal agencies can focus their conservation

programs and use their authorities to further the purposes of the ESA. *See* 16 U.S.C. 1536(a)(1). Critical habitat requirements do not apply to citizens engaged in actions on private land that do not involve a Federal agency.

This proposed rule describes our proposed designation of critical habitat for the Beringia distinct population segment (DPS) of the Pacific bearded seal subspecies *Erignathus barbatus nauticus*, including supporting information on the distribution and habitat use of the Beringia DPS, and the methods used to develop the proposed designation.

Background

On December 28, 2012, we published a final rule to list the Beringia DPS of the Pacific bearded seal subspecies as threatened under the ESA (77 FR 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, we announced our intention to designate critical habitat for the Beringia DPS in a separate rulemaking, as it was not then determinable. Concurrently, we solicited information to assist us 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 July 25, 2014, the listing of the Beringia DPS as a threatened species was vacated by the U.S. District Court for the District of Alaska (*Alaska Oil & Gas Ass'n v. Pritzker*, Case Nos. 4:13-cv-18-RRB, 4:13-cv-21-RRB, 4:13-cv-22-RRB, 2014 WL 3726121 (D. Alaska July 25, 2014)). This decision was reversed by the U.S. Court of Appeals for the Ninth Circuit on October 24, 2016 (*Alaska Oil & Gas Ass'n v. Ross*, 840 F.3d 671 (9th Cir. 2016), *cert. denied*, 138 S. Ct. 924 (2018)), and the listing was reinstated on February 22, 2017. On June 13, 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 timely designate critical habitat for the Beringia DPS of the bearded seal. Under a court-approved stipulated 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 the designation of critical habitat for the Beringia DPS to the **Federal Register** by March 15, 2021, and (to the extent a proposed rule has been published) a final rule by March 15, 2022.

Description and Natural History

The bearded seal is the largest of the northern ice-associated seals. Adults average 2.1 to 2.4 meters (m) in length and weigh up to 360 kilograms (Chapskii 1938, McLaren 1958, Johnson *et al.* 1966, Burns 1967, Benjaminsen 1973, Burns 1981). In general, bearded seals reach sexual maturity at ages 5 to 6 for females and 6 to 7 for males (McLaren 1958, Tikhomirov 1966, Burns 1967, Burns and Frost 1979, Smith 1981, Andersen *et al.* 1999). The life span of bearded seals is about 20 to 25 years (Kovacs 2002).

General Seasonal Distribution and Habitat Use

Bearded seals of the Beringia DPS inhabit seasonally ice-covered waters of the Bering, Chukchi, Beaufort, and East Siberian seas. They primarily feed on organisms on or near the seafloor (benthic) that are more numerous in shallow water where light can reach the sea bottom. Thus, their effective habitat is generally restricted to areas where seasonal ice occurs over relatively shallow waters, typically less than 200 meters (m), where they can reach the ocean floor to forage (Burns and Frost 1979, Burns 1981, Nelson *et al.* 1984, Fedoseev 2000). Still, bearded seal dive depths have been recorded to greater than 488 m (Gjertz *et al.* 2000). Cameron *et al.* (2010) defined the core distribution of the bearded seal as those areas of known extent that are in water less than 500 m deep.

Sea ice provides bearded seals some protection from predators and serves as a platform out of the water for whelping and nursing of pups, pup maturation, and molting (shedding and regrowing hair and outer skin layers), as well as for resting (Cameron *et al.* 2010). Bearded seals can be found in a broad range of different ice types (Fay 1974, Burns and Frost 1979, Burns 1981, Nelson *et al.* 1984), but they favor drifting pack ice with natural openings and areas of open water, such as leads, fractures, and polynyas, for breathing, hauling out on the ice, and access to the water for foraging (Heptner *et al.* 1976, Burns and Frost 1979, Nelson *et al.* 1984, Kingsley *et al.* 1985, Cleator and Stirling 1990). Although bearded seals prefer sea ice with natural access to the water, observations indicate the seals are able to make breathing holes in thinner ice (Burns 1967, Burns and Frost 1979, Burns 1981, Nelson *et al.* 1984). They tend to avoid areas of continuous, thick, landfast (shorefast) ice and are rarely seen in the vicinity of unbroken, heavy, drifting ice or large areas of multi-year ice (Heptner *et al.* 1976, Burns and Frost 1979, Nelson *et al.* 1984, Kingsley *et al.* 1985, Cleator and Stirling 1990).

Adult bearded seals have rarely been seen hauled out on land in Alaska (Burns 1981, Nelson 1981, Smith 1981). However, juvenile bearded seals have been observed hauled out on land along lagoons and rivers in some areas of Alaska, including at Nunivak Island (Huntington *et al.* 2017c), in Norton Bay (Huntington 2000, Huntington *et al.* 2015b, 2015a), on the Chukchi Sea coast near Shishmaref and Wainwright (Nelson 1981, Huntington *et al.* 2016a), and on sandy islands near Utqiaġvik (Cameron *et al.* 2010). Satellite tracking data also indicate that during the open-water period (July to October), tagged juvenile bearded seals sometimes hauled out on land in Kotzebue Sound and Norton Sound (Quakenbush *et al.* 2019). There is some evidence that bearded seals might not require the presence of sea ice for hauling out other than during the critical life history periods related to reproduction and molting. Some bearded seals tagged in Alaska have remained in the water for weeks or months at a time during the open-water period

and into early winter (Frost *et al.* 2008, Boveng and Cameron 2013, Quakenbush *et al.* 2019).

The region that includes the Bering and Chukchi seas is the largest area of continuous habitat for bearded seals (Burns 1981, Nelson *et al.* 1984). The Bering-Chukchi Platform is a shallow intercontinental shelf that encompasses about half of the Bering Sea, spans the Bering Strait, and covers nearly all of the Chukchi Sea. Bearded seals can reach the bottom everywhere along the shallow shelf, so it provides them favorable foraging habitat (Burns 1967). The Bering and Chukchi seas are generally covered by sea ice in late winter and spring and are then mostly ice-free in late summer and fall, a process that helps to drive a seasonal pattern in the movements and distribution of bearded seals in this region (Johnson *et al.* 1966, Burns 1967, Heptner *et al.* 1976, Burns and Frost 1979, Burns 1981, Nelson *et al.* 1984). In spring, as the sea ice begins to melt, many of the bearded seals that overwintered in the Bering Sea migrate northward with the receding ice through the Bering Strait and into the Chukchi and Beaufort seas and spend the summer and early fall foraging in these waters, while an unknown proportion of these seals, in particular juveniles, may remain in the Bering Sea. Some bearded seals (largely juveniles), have been observed in small coastal bays, lagoons, and estuaries, near river mouths, and up some rivers, in particular during late summer and fall (Burns 1981, Nelson 1981, Huntington *et al.* 2015b, 2015c, 2015a, 2016a, 2016b, 2016c, Northwest Arctic Borough 2016, Huntington *et al.* 2017a, 2017c, 2017b, Quakenbush *et al.* 2019). As the ice forms in the fall and winter, many bearded seals move south with the advancing ice edge through the Bering Strait into the Bering Sea where they spend the winter (Burns 1967, Heptner *et al.* 1976, Burns and Frost 1979, Burns 1981). Bearded seal vocalizations were recorded throughout winter and spring in the northeastern Chukchi Sea and western Beaufort Sea, indicating that some bearded seals overwinter in these seas (Hannay *et al.* 2013, MacIntyre *et al.* 2013, Jones *et al.* 2014, MacIntyre *et al.*

2015, Frouin-Mouy *et al.* 2016). Intermittent coastal leads deep in the ice pack of these seas provide at least marginal habitat for low densities of females to whelp in the spring (Burns and Frost 1979, Cameron *et al.* 2010).

Of the bearded seals tagged in Alaska to date, few have been adults, and the majority were tagged in Norton Sound and Kotzebue Sound. Tracking data for most tagged seals have shown an overall pattern of movement northward in summer with receding sea ice and southward in fall as sea ice advances (Frost *et al.* 2008, Boveng and Cameron 2013, Breed *et al.* 2018, Cameron *et al.* 2018, Quakenbush *et al.* 2019). Quakenbush *et al.* (2019) found that the extent of these movements for seals tracked during their study depended on where the seals were tagged. Two juveniles tagged in the western Beaufort Sea did not travel south of ~70° N (in the Chukchi Sea), whereas juveniles tagged in Norton Sound made more extensive latitudinal movements (Quakenbush *et al.* 2019). Similarly, an adult male tagged in the western Beaufort Sea in the fall of 2019 remained there over winter (Alaska Department of Fish and Game and North Slope Borough, 2020, unpublished data).

Reproduction

During the winter and spring, pregnant female bearded seals find broken pack ice over shallow areas on which to whelp, nurse pups, and molt (Fay 1974, Heptner *et al.* 1976, Burns 1981, Lydersen and Kovacs 1999, Kovacs 2002). Females with pups are generally solitary, tending not to aggregate (Heptner *et al.* 1976, Kovacs *et al.* 1996). After giving birth on the ice, female bearded seals feed throughout the lactation period of about 24 days, continuously replenishing fat reserves lost while nursing pups (Holsvik 1998, Lydersen and Kovacs 1999, Krafft *et al.* 2000). Pups nurse on the ice (Lydersen *et al.* 1994, Lydersen and Kovacs 1999, Kovacs *et al.* 2019), and by the time they are a few days old, they spend half their time in the water (Lydersen *et al.* 1994, Gjertz *et al.* 2000, Watanabe *et al.* 2009). Pups develop diving, swimming, and foraging skills over the

nursing period and beyond (Lydersen *et al.* 1994, Gjertz *et al.* 2000, Watanabe *et al.* 2009, Hamilton *et al.* 2019). In the Bering Sea, newborn pups have been observed from mid-March to early May (Cameron *et al.* 2010). A peak in births in the Bering Strait and central Chukchi Sea is estimated to occur in late April (Johnson *et al.* 1966, Tikhomirov 1966, Heptner *et al.* 1976, Burns 1981, Cameron *et al.* 2010).

Bearded seals vocalize intensively during the breeding season, which Cameron *et al.* (2010) estimated extends from April into June (Cameron *et al.* 2010). Passive acoustic monitoring studies in the northern Bering, Chukchi, and Beaufort seas off Alaska have recorded a variable progressive increase in bearded seal call activity over winter, with peak rates occurring from about mid-March or April to late June in the Chukchi and Beaufort seas (Hannay *et al.* 2013, MacIntyre *et al.* 2013, Jones *et al.* 2014, MacIntyre *et al.* 2015, Frouin-Mouy *et al.* 2016), and from about mid-March to the middle or end of May in the northern Bering Sea (MacIntyre *et al.* 2015, Chou *et al.* 2019). In general, the predominant calls produced by males during the breeding season are frequency-modulated vocalizations termed trills, which range from approximately 0.1 kHz to 11.3 kHz (Stirling *et al.* 1983, Cleator *et al.* 1989, Budelsky 1992, Van Parijs *et al.* 2001, Risch *et al.* 2007, Jones *et al.* 2014, Frouin-Mouy *et al.* 2016, Parisi *et al.* 2017). Trills are typically long in duration, can propagate over large distances, and show marked individual and geographic variation (Cleator *et al.* 1989, Van Parijs *et al.* 2001, Van Parijs 2003, Van Parijs *et al.* 2003, 2004, Van Parijs and Clark 2006). Some male bearded seals maintain a single small aquatic territory during the breeding season, while others roam across larger areas (Van Parijs *et al.* 2003, 2004, Van Parijs and Clark 2006). It was estimated that bearded seals produce sound pressure levels of up to 178 dB_{rms} re 1 μPa (Cummings *et al.* 1983 cited in Richardson *et al.* 1995). Male vocalizations during the breeding season function to maintain aquatic territories and/or advertise breeding condition (Ray *et al.* 1969, Cleator *et al.* 1989, Van Parijs *et al.* 2003, Van Parijs and

Clark 2006, Risch *et al.* 2007).

Surveys indicate that in the Bering Sea during spring, bearded seals use nearly the entire extent of pack ice over the continental shelf. The highest densities of bearded seals in early spring have typically been observed between St. Lawrence and St. Matthew Islands, with lower densities reported southeast of St. Matthew Island and in the southern Gulf of Anadyr (Krylov *et al.* 1964, Kosygin 1966b, Braham *et al.* 1981, Cameron and Boveng 2007, Cameron *et al.* 2008). In early spring of some years, high densities of bearded seals have also been observed north and west of St. Lawrence Island (Braham *et al.* 1977, Fedoseev *et al.* 1988, Cameron *et al.* 2008). The age-sex composition of these aggregations was not documented, so it is not known if these are whelping areas. However, spring aerial surveys of the Bering Sea conducted in 2012 and 2013 documented numerous bearded seals, including pups, in Norton Sound and the Chirikov Basin north of St. Lawrence Island, extending to well south of St. Matthew and Nunivak Islands (NMFS Marine Mammal Laboratory, unpublished data). The subsistence harvest of bearded seal pups by hunters in Quinhagak also suggests that some bearded seals may whelp south of Nunivak Island (Coffing *et al.* 1998). Existing information on the spring distribution of bearded seals is otherwise limited. Aerial surveys conducted in parts of the Chukchi Sea during April and May of 2016 documented numerous bearded seals, including some pups, in the Hope Basin south of Point Hope, and less frequent sightings of bearded seals (which included a few pups) north of Point Hope (NMFS Marine Mammal Laboratory, unpublished data). Bearded seals were also more commonly observed south of Point Hope during aerial surveys flown primarily along the coast of the northeastern Chukchi Sea in late May to early June of 1999 and 2000 (Bengtson *et al.* 2005). However, the age-sex composition of bearded seals observed was not reported and this survey was timed toward the molting period.

Molting

Adult and juvenile bearded seals molt annually, a process that for adults typically begins shortly after mating, as it does with other mature phocid or "true" seals (Chapskii 1938, Ling 1970, Ling 1972, King 1983, Yochem and Stewart 2002). Juvenile bearded seals have been reported to molt earlier than adults (Krylov *et al.* 1964, Heptner *et al.* 1976, Fedoseev 2000). Bearded seals haul out of the water onto the ice more frequently during molting (Burns 1981, Fedoseev 2000), a behavior that facilitates higher skin temperatures and may accelerate shedding and regrowth of hair and epidermis (Héroux 1960, Feltz and Fay 1966, Fay 1982). The molting period of bearded seals in the Bering, Chukchi, and Beaufort seas off Alaska has not been specifically investigated, but has been described as protracted, occurring between April and August with a peak in May and June (Tikhomirov 1964, Kosygin 1966a, Burns 1981). This observed timing of molting coincides with the period in which bearded seals that overwintered in the Bering Sea migrate long distances to summering grounds in the Chukchi and Beaufort seas. Measures of body condition and blubber thickness are at their annual minimums following the molt (Burns and Frost 1979, Smith 1981, Andersen *et al.* 1999).

Diet

Bearded seals feed primarily on benthic organisms, including a variety of invertebrates dwelling on the surface of the seabed (epifauna) and in the seabed substrate (infauna), and some fishes found on or near the sea bottom (demersal). They are also able to switch their diet to include schooling pelagic (non-demersal) fishes when advantageous (Finley and Evans 1983, Antonelis *et al.* 1994). A wide variety of prey species have been reported for bearded seals of the Beringia DPS, though the bulk of their diet appears to consist of relatively few major prey types. Bearded seals primarily feed on bivalve mollusks and crustaceans like crabs and shrimps, while fishes such as sculpins, cods, and flatfishes can also be a significant component of their diet (Kenyon 1962, Johnson *et al.* 1966, Burns 1967, Kosygin 1971, Burns and Frost 1979, Lowry *et*

al. 1979, 1980, Antonelis *et al.* 1994, Hjelset *et al.* 1999, Fedoseev 2000, Dehn *et al.* 2007, Quakenbush *et al.* 2011, Crawford *et al.* 2015, Bryan 2017).

Specific bearded seal prey species differ somewhat between geographic locations. This variability is likely a result of differences in prey assemblages in each region (Burns and Frost 1979, Lowry *et al.* 1980, Dehn *et al.* 2007). Diet composition of bearded seals has been observed to change seasonally (Johnson *et al.* 1966, Burns and Frost 1979, Quakenbush *et al.* 2011), and has also been reported to vary interannually as well as longer-term (Lowry *et al.* 1980, Quakenbush *et al.* 2011, Carroll *et al.* 2013, Crawford *et al.* 2015). No differences have been shown in the feeding habitats of male and female bearded seals (Kelly 1988); however, prey composition of the bearded seal's diet has shown some variation with age (Burns and Frost 1979, Lowry *et al.* 1980, Quakenbush *et al.* 2011, Crawford *et al.* 2015).

Critical Habitat Identification

In the following sections, we describe the relevant definitions and requirements in the ESA and implementing regulations at 50 CFR part 424, and the key information and criteria used to prepare this proposed critical habitat designation. In accordance with section 4(b)(2) of the ESA, this proposed critical habitat designation is based on the best scientific data available. Our primary sources of information include the status review report for the bearded seal (Cameron *et al.* 2010), our proposed and final rules to list the Beringia and Okhotsk DPSs of the bearded seal as threatened under the ESA (75 FR 77496, December 10, 2010; 77 FR 76740, December 28, 2012), articles in peer-reviewed journals, other scientific reports, and relevant Geographic Information System (GIS) and satellite data (*e.g.*, shoreline data, U.S. maritime limits and boundaries data, sea ice extent) for geographic area calculations and mapping.

To identify specific areas that may qualify as critical habitat for bearded seals of the Beringia DPS, in accordance with 50 CFR 424.12(b), we followed a five-step

process: (1) identify the geographical area occupied by the species at the time of listing; (2) identify physical or biological habitat features essential to the conservation of the species; (3) determine the specific areas within the geographical area occupied by the species that contain one or more of the physical or biological features essential to the conservation of the species; (4) determine which of these essential features may require special management considerations or protection; and (5) determine whether a critical habitat designation limited to geographical areas occupied would be inadequate to ensure the conservation of the species. Our evaluation and conclusions are described in detail in the following sections.

Geographical Area Occupied by the Species

The phrase "geographical areas occupied by the species," which appears in the statutory definition of critical habitat, is defined by regulation as an area that may generally be delineated around species' occurrences as determined by the Secretary (*i.e.*, range) (50 CFR 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 (*Id.*).

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 ESA listing rule (77 FR 76740; December 28, 2012) as the Arctic Ocean and adjacent seas in the Pacific Ocean between 145° E long. and 130° W long., except west of 157° E long., or west of the Kamchatka Peninsula, where the Okhotsk DPS of the bearded seal is found. As noted previously, we cannot designate areas outside U.S. jurisdiction as critical habitat. Thus, the geographical area under consideration for this designation is limited to areas under the jurisdiction of the United States that the Beringia DPS occupied 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).

Physical and Biological Features Essential to the Conservation of the Species

The statutory definition of occupied critical habitat refers to "physical or biological features essential to the conservation of the species," but the ESA does not specifically define or further describe these features. Implementing regulations at 50 CFR 424.02, however, define such features as those that occur in specific areas and that are essential to support the life-history needs of the species. The regulations provide additional details and examples of such features.

Based on the best scientific information available regarding the natural history of bearded seals and the habitat features that are essential to support the species' life-history needs, we have identified the following physical or biological features that are essential to the conservation of the Beringia DPS of the bearded seal within U.S. waters occupied by the species.

(1) *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.*

Sea ice habitat suitable for bearded seal whelping and nursing is essential to the conservation of the Beringia DPS because the seals rely on sea ice as a dry platform for whelping, nursing, and rearing pups in proximity to benthic foraging habitats. Further, hauling out on the ice reduces thermoregulatory demands, and is thus especially important for growing pups, which have a disproportionately large skin surface and rate of heat loss in the water (Harding *et al.* 2005, Jansen *et al.* 2010). If suitable ice cover is absent from shallow-water feeding areas during whelping and nursing, maternal females would be forced to seek sea ice over deeper waters, with less access to benthic food, or may haul out on shore, with potential increased risk of disturbance, predation, intra- and

interspecific competition, and disease transmission. However, we are not aware of any occurrence of bearded seals whelping or nursing pups on land. Rearing pups in poorer foraging grounds would also require mothers to forage for longer periods to replenish energy reserves lost while nursing and/or compromise their own body condition, both of which could impact the transfer of energy to offspring and the survival of pups, mothers, or both. In addition, learning to forage in sub-optimal habitat could impair a pup's ability to learn effective foraging skills, and hence, impact its long-term survival.

To identify ice concentrations (percentage of ocean surface covered by sea ice) that we consider essential for bearded seal whelping and nursing, we relied upon three studies in the Bering Sea that estimated ice concentrations selected by bearded seals in the spring, based on aerial survey observations of bearded seals hauled out on ice. Simpkins *et al.* (2003) found that between St. Lawrence and St. Mathew Islands in March, bearded seals selected areas with ice concentrations of 70 to 90 percent. Another study conducted in a broader area of the Bering Sea south of St. Lawrence Island in April and May found the highest probability of bearded seal occurrence was in ice concentrations of 75 to 100 percent, but only the 0 to 25 percent ice class had substantially lower probability of occurrence (Ver Hoef *et al.* 2014). Informed by these two studies, Cameron *et al.* (2010) defined the minimum ice concentration sufficient for bearded seal whelping and nursing as 25 percent. Subsequently, a third paper by Conn *et al.* (2014), which established analytical methods to estimate the abundance of ice-associated seals from survey data collected across the U.S. Bering Sea in April and May, showed that in April bearded seals occupied ice concentrations exceeding 95 percent. Bearded seal abundance peaked in ice concentrations between about 50 and 75 percent, and abundance was lowest in ice concentrations largely below 25 percent. Based on the information from these studies, we concluded that sea ice habitat suitable for bearded seal whelping and nursing is of at least 25 percent ice concentration.

Cameron *et al.* (2010) defined the core distribution of bearded seals as those areas of the known extent of the species' distribution that are in waters less than 500 m deep. However, as discussed above, the bearded seals' effective habitat is generally restricted to areas where seasonal sea ice occurs over relatively shallow waters, typically less than 200 m. Moreover, in the U.S. portion of its range, the Beringia DPS occurs largely in waters less than 200 m deep. Also, bearded seals favor ice with access to the water, and tend to avoid continuous areas of landfast ice and unbroken drifting ice. Therefore, we conclude that sea ice habitat essential for bearded seal whelping and nursing occurs in areas with waters 200 m or less in depth containing pack ice (*i.e.*, sea ice other than fast ice; pack ice is also termed drift ice) of at least 25 percent concentration and providing bearded seals access to those waters from the ice.

(2) *Sea ice habitat suitable as a platform for molting, which is defined as areas with waters 200 m or less in depth containing pack ice of at least 15 percent concentration and providing bearded seals access to those waters from the ice.*

Sea ice habitat suitable for molting is essential to the conservation of the Beringia DPS because molting is a biologically important, energy-intensive process that could incur increased energetic costs if it occurs in water or could involve increased risk of predation (due to the absence of readily accessible escape routes to avoid predators, *i.e.*, natural opening in the sea ice), intra- and inter-specific competition, and the potential for disease transmission if it occurs on land. In light of the studies referenced above by Simpkins *et al.* (2003) and Ver Hoef *et al.* (2014) documenting spring ice concentrations selected by bearded seals, and based on the assumption that sea ice requirements for molting in May and June are less stringent than those for whelping and nursing pups, Cameron *et al.* (2010) concluded that 15 percent ice concentration would be minimally sufficient for molting. As discussed above, the U.S. range of the Beringia DPS is largely in waters 200 m or less in depth, and the preferred depth range of bearded seals is less

than 200 m. Further, bearded seals favor ice with access to the water, and tend to avoid continuous areas of landfast ice and unbroken drifting ice. Therefore, we conclude that sea ice essential for molting occurs in areas with waters 200 m or less in depth containing pack ice of at least 15 percent concentration and providing bearded seals access to those waters from the ice.

(3) *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.*

Primary prey resources are essential to the conservation of the Beringia DPS because bearded seals likely rely on these resources the most to meet their annual energy budgets. As discussed above, bearded seals have a diverse diet with a large variety of prey items throughout their range, and are considered benthic specialists. Quakenbush *et al.* (2011) found that a diverse assemblage of invertebrates (63 taxa) and fish (20 taxa), associated with both benthic and pelagic habitats, was consumed by bearded seals in the Bering and Chukchi seas. The broad number of prey species consumed by these seals makes specification of particular essential prey species impracticable. Major prey types reported for bearded seals in the Bering, Chukchi, and western Beaufort seas include epifaunal crustaceans like crabs and shrimps as well as infaunal invertebrates like clams and marine worms, but fishes such as sculpins, Arctic cod (*Boreogadus saida*), and saffron cod (*Eleginus gracilis*) can also be a significant component (Johnson *et al.* 1966, Burns 1967, Kosygin 1971, Burns and Frost 1979, Lowry *et al.* 1979, 1980, Antonelis *et al.* 1994, Dehn *et al.* 2007, Quakenbush *et al.* 2011, Crawford *et al.* 2015). For example, near St. Matthew Island, Antonelis *et al.* (1994) found capelin (*Mallotus villosus*) was the most frequently consumed prey species during early spring (identified in more than 80 percent of bearded seal stomachs examined). Quakenbush *et al.* (2011) reported that in the Bering and Chukchi seas, the diet of bearded seals shifted toward an increased

proportion and diversity of fish between the 1961 to 1979 period and the 2000s (1998 to 2009). In the 2000s, frequently consumed fish prey (considered here to be fish prey identified in at least 25 percent of bearded seal stomachs examined) included sculpin (Cottidae), cod (primarily Arctic cod and saffron cod), and flatfish (primarily yellowfin sole (*Limanda aspera*), longhead dab (*Limanda proboscidea*), and Alaska plaice (*Pleuronectes quadrituberculatus*)), with the frequency of occurrence of particular species differing between the two seas (Quakenbush *et al.* 2011; Table 3). As discussed above, the U.S. range of the Beringia DPS is largely in waters 200 m or less in depth and the preferred depth range of bearded seals is less than 200 m. Therefore, we conclude that the primary resources essential to the conservation of the Beringia DPS are benthic organisms, including epifaunal and infaunal invertebrates, and demersal and schooling pelagic fishes found in water depths of 200 m or less.

(4) *Acoustic conditions that allow for effective communication by bearded seals for breeding purposes within waters used by breeding bearded seals.*

Acoustic conditions that allow for effective bearded seal communications for breeding purposes are essential to the conservation of the Beringia DPS because underwater acoustic communication plays an important role in bearded seal reproductive behavior. Male bearded seals vocalize intensively during the breeding season to advertise breeding condition and/or proclaim a territory (Ray *et al.* 1969, Cleator *et al.* 1989, Van Parijs *et al.* 2003, Van Parijs and Clark 2006, Risch *et al.* 2007). Waters with acoustic conditions that interfere with or disrupt bearded seal acoustic communication during the spring breeding season could compromise the effectiveness of these communications and potentially impair the life history functions they support. The studies cited above document the vocal activity of bearded seals during the breeding season, including bearded seal call characteristics and spatial and temporal patterns of vocalizations (see **Description and Natural History** section). We recognize the limited nature of these

data, but they represent the best scientific information available, and we are not aware of any other data that would allow us to describe in greater detail the acoustic conditions necessary to avoid impairing effective bearded seal communication for breeding purposes. We therefore specifically seek additional data and comments concerning the proposed inclusion of this proposed essential feature, as well as the proposed regulatory text describing this essential feature (see **Public Comments Solicited** section). We also solicit 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, such as interference with bearded seal detection of acoustic communications for breeding purposes (*i.e.*, acoustic masking). In developing the final critical designation, we will re-evaluate the proposed acoustic essential feature based on the best scientific data available at that time, and will consider all public comments, as well as information from ongoing interagency discussions concerning this proposed essential feature.

Specific Areas Containing the Essential Features

To determine which areas qualify as critical habitat within the geographical area occupied by the species, we are required to identify "specific areas" that contain one or more of the physical or biological features essential to the conservation of the species (and that may require special management considerations or protection, as described below) (50 CFR 424.12(b)(1)(iii)). Delineation of the specific areas is done at a scale determined by the Secretary to be appropriate (50 CFR 424.12(b)(1)). Regulations at 50 CFR 424.12(c) also require that each critical habitat area be shown on a map.

In determining the scale and boundaries for the specific areas, we considered, among other things, the scales at which biological data are available and the availability of standardized geographical data necessary to map boundaries. Because the ESA implementing regulations allow for discretion in determining the appropriate scale at which specific areas are drawn (50 CFR 424.12(b)(1)), we are not required, nor was it

possible, to determine that each square inch, acre, or even square mile independently meets the definition of "critical habitat." A main goal in determining and mapping the boundaries of the specific areas is to provide a clear description and documentation of the areas containing the identified essential features. This is ultimately fundamental to ensuring that Federal action agencies are able to determine whether their particular actions may affect the critical habitat.

As we explain below, the essential features of bearded seal critical habitat, in particular the sea ice essential features, are dynamic and variable on both spatial and temporal scales. As climatic conditions change there may be increased variability in sea ice characteristics and spatial/temporal coverage, including with respect to the southern extent of sea ice in the spring and the timing and rate of the retreat of sea ice during spring and early summer. Bearded seal movements and habitat use are strongly influenced by the seasonality of sea ice and the seals can range widely in response to the specific locations of the most suitable habitat conditions. We have therefore identified one specific area to propose as critical habitat in the Bering, Chukchi, and Beaufort seas based on the expected occurrence of the identified essential features.

We first focused on identifying where the essential features that support the species' life history functions of whelping, nursing, and molting (*i.e.*, specific areas that contain the sea ice essential features) occur. As discussed above, bearded seals generally maintain an association with drifting sea ice, and many seals migrate seasonally to maintain access to this ice. Bearded seal whelping and nursing take place in the Bering Sea while ice cover is at or near its peak extent. Bearded seal molting overlaps with the periods of whelping, nursing, pup maturation, and breeding, and continues into early summer as the pack ice retreats north through the Bering Strait and into the Chukchi and Beaufort seas. Therefore, we considered where the sea ice essential features occur in all three seas.

The dynamic nature of sea ice and the spatial and temporal variations in sea ice cover constrain our ability to map with precision the specific geographic locations where the sea ice essential features will occur. The specific geographic locations of essential sea ice habitat used by bearded seals vary from year to year, or even day to day, depending on many factors, including time of year, local weather, and oceanographic conditions (*e.g.*, Burns and Frost 1979, Frey *et al.* 2015, Gadamus *et al.* 2015). In addition, the duration that sea ice habitat essential for whelping and nursing, or for molting, is present in any given location can vary annually depending on the rate of ice melt and other factors. The temporal overlap of bearded seal molting with whelping and nursing, combined with the dynamic nature of sea ice, also makes it impracticable to separately identify specific areas where each of these essential features occur. However, it is unnecessary to distinguish between specific areas containing each sea ice essential feature because the ESA permits the designation of critical habitat where one or more essential features occur.

Bearded seals of the Beringia DPS can range widely, which, combined with the dynamic variations in sea ice conditions, results in individuals distributing broadly and using sea ice habitats within a range of suitable conditions. We integrated these physical and biological factors into our identification of specific areas where one or both sea ice essential features occur based on the information currently available on the seasonal distribution and movements of bearded seals during the annual period of reproduction and molting, the maximum depth where the sea ice essential features occur, and satellite-derived estimates of the position of the sea ice edge over time. Although this approach allowed us to identify specific areas that contain one or both of the sea ice essential features at certain times, the available data supported delineation of specific areas only at a coarse scale. Consequently, we delineated a single specific area that contains the sea ice features essential to the conservation of the Beringia DPS, as follows.

We first identified the southern boundary of this specific area. The information discussed above regarding the seasonal distribution and movements of bearded seals in the Bering Sea suggests that sea ice essential for whelping and nursing (and potentially for molting) extends south of St. Matthew and Nunivak Islands. But a more precise southern boundary for this habitat is unavailable because existing information is limited on the spatial distribution and whelping locations of bearded seals in the Bering Sea during spring, and the temporal and spatial distribution of sea ice cover, which influences bearded seal distributions, is variable between years.

We therefore turned to Sea Ice Index data maintained by the National Snow and Ice Data Center (NSIDC) for information on the estimated median position of the ice edge in the Bering Sea during April (Fetterer *et al.* 2017, Version 3.0; accessed November 2019), which is the peak month for bearded seal whelping activity (peak molting for adults occurs later in the spring). This estimated median ice edge is derived by the NSIDC from a time series of satellite records for the 30-year reference period from 1981 to 2010. To further inform our evaluation, we also examined the position of the median ice edge in April for the more recent 30-year period from 1990 to 2019, which was estimated using methods and data types similar to those used for the Sea Ice Index. We note that the two most recent years included in this 30-year period had record low ice extent in the Bering Sea (Stabeno and Bell 2019).

The April median ice edge for the 1981 to 2010 reference period from the Sea Ice Index is located approximately 170 kilometers (km) southwest of St. Matthew Island and 175 km south of Nunivak Island, and it extends eastward across lower Kuskokwim Bay to near Cape Newenham, a headland between Kuskokwim Bay and Bristol Bay. Because bearded seals use nearly the entire extent of pack ice over the Bering Sea shelf in spring, depending upon ice conditions in a given year, some bearded seals may use sea ice for whelping south of this median ice edge. But we concluded that the variability in the

annual extent and timing of sea ice in this southernmost portion of the bearded seal's range in the Bering Sea (*e.g.*, Boveng *et al.* 2009, Stabeno *et al.* 2012, Frey *et al.* 2015) renders these waters unlikely to contain the sea ice essential features on a consistent basis in more than limited areas. The position of the April median ice edge for the more recent 1990 to 2019 period is generally similar to that of the Sea Ice Index, except that the ice edge has a wide inverted U-shape in Kuskokwim Bay, and as a result, there is roughly half as much area with sea ice there. Given the reduction in sea ice in Kuskokwim Bay between the reference period used for the Sea Ice Index and the more recent period, we also concluded that these waters appear unlikely to contain the sea ice essential features on a consistent basis in more than limited areas.

As such, we delineated the southern boundary to reflect the estimated position of the April median ice edge west of Kuskokwim Bay. To simplify the southern boundary for purposes of delineation on maps, we modified the ice edge contour line for the 1990 to 2019 period as follows: (1) intermediate points along the contour line between its intersection point with the seaward limit of the U.S. EEZ (60°32´26´´ N/179°9´53´´ W) and the point where the contour line turns eastward (57°58´ N/170°25´ W) were removed to form the segment of the southern boundary that extends from the seaward limit of the U.S. EEZ southeastward approximately 575 km; (2) intermediate points along the contour line between the point where the contour line turns eastward and the approximate point on the west side of Kuskokwim Bay where the contour line turns northeastward (58°29´ N/164°46´ W) were removed to form a second segment of the southern boundary that extends eastward approximately 335 km; and (3) these two line segments were connected to the mainland by an approximately 200-km line segment that follows 164°46´ W longitude to near the west side of the mouth of the Kolovinerak River, about 50 km east of Nunivak Island. This editing produced a simplified southern boundary that retains the general shape of the original ice edge contour line west of Kuskokwim Bay.

We then identified the northern boundary of the specific area that contains one or both of the sea ice essential features. As discussed above (see **Description and Natural History** section), limited spring aerial survey information, satellite tracking data for tagged bearded seals, and year-round passive acoustic recordings of bearded seal vocalizations suggest that some portion of the Beringia DPS overwinters in the Chukchi and Beaufort seas. In addition, many of the bearded seals that overwinter in the Bering Sea migrate northward with the receding ice edge in the spring and early summer into the Chukchi and Beaufort seas, coincident with the timing of molting. Therefore, consistent with the maximum depth identified for the sea ice essential features, we defined the northern boundary of the specific area containing the sea ice essential features as the 200-m isobath over the continental shelf break in the Chukchi and Beaufort seas (*i.e.*, the northern extent of waters 200 m or less in these seas), and the boundaries to the east and west as the outer extent of the U.S. EEZ. Sea ice concentrations suitable for whelping, nursing, and molting occur over waters extending up to and beyond these boundaries (see, *e.g.*, Fetterer *et al.* 2017, Sea Ice Index Version 3.0, accessed November 2019). The 200-m isobath portion of this boundary line abuts the United States-Canada border in the eastern Beaufort Sea. We note that Canada contests the limits of the U.S. EEZ in the eastern Beaufort Sea, asserting that the line delimiting the two countries' EEZs should follow the 141st meridian out to a distance of 200 nautical miles (as opposed to an equidistant line that extends seaward perpendicular to the coast at the U.S.-Canada land border). Given the overlap in the annual timing of the bearded seal breeding season with bearded seal whelping, nursing, and molting (see **Description and Natural History** section), we concluded that the specific area identified for the sea ice essential features also defines the specific area containing acoustic conditions that allow for effective communications by bearded seals for breeding purposes.

The shallow seasonally ice-covered waters of the Bering, Chukchi, and Beaufort

seas support a high abundance of bearded seal benthic prey resources (*e.g.*, Grebmeier *et al.* 2006, *e.g.*, review of abundance and distribution of Beringia DPS prey in Cameron *et al.* 2010, Logerwell *et al.* 2011, McCormick-Ray *et al.* 2011, Rand and Logerwell 2011, Stevenson and Lauth 2012, Blanchard *et al.* 2013, Konar and Ravelo 2013, Grebmeier *et al.* 2015, Ravelo *et al.* 2015, Sigler *et al.* 2017, Grebmeier *et al.* 2018, Divine *et al.* 2019, Lauth *et al.* 2019). Studies that have inferred locations of foraging activity for bearded seals tagged in Alaska based on movement and dive data (Boveng and Cameron 2013, Gryba *et al.* 2019, Quakenbush *et al.* 2019) show some overlap in the areas used extensively by individual seals, but the spatial patterns of habitat use and locations of intensive use can also vary substantially among individuals (*e.g.*, Quakenbush *et al.* 2019). This information represents habitat use by primarily juvenile tagged bearded seals, and it is unknown how representative it is for older animals. The movements of bearded seals and their use of habitat for foraging are influenced by a variety of factors, including the seasonality of ice cover (McClintock *et al.* 2017, Breed *et al.* 2018, Cameron *et al.* 2018), the fact that seals forage throughout the year, and the fact that they are broadly distributed and can range widely. In addition, bearded seals have a diverse diet that can vary seasonally and geographically. We therefore concluded that the boundaries delineated above for the sea ice essential features are also appropriate for defining the specific area where the primary prey essential feature occurs, apart from the shoreward boundary as described below.

Satellite tracking information suggests that juvenile bearded seals may forage in the Bering Sea near the shelf break south of the southern boundary of the specific area identified above. In addition, Breed *et al.* (2018) and Cameron *et al.* (2018) found that from late fall to early spring, tagged juvenile bearded seals selected habitat at the southern ice edge, which depending on ice conditions may extend to near the shelf break during late winter and early spring. However, other tagged juveniles have frequently been

observed to use ice far north of the ice edge during winter, and some individuals overwintered in the Chukchi and Beaufort seas (Quakenbush *et al.* 2019). In addition, Quakenbush *et al.* (2019) identified the ~100 m isobath in the Bering Sea as a notable high-use area for juvenile bearded seals during July to November based on satellite telemetry data (a portion of this habitat is located north of the proposed southern boundary), although the authors found that the specific locations used by tagged seals were highly individualistic. We therefore concluded that it is appropriate to delineate the southern boundary as described above.

Finally, we considered the shoreward extent of the essential features. Satellite tracking data indicate that some tagged juvenile bearded seals used shallow nearshore waters during the open-water period (Quakenbush *et al.* 2019), and as discussed above (see *General Seasonal Distribution and Habitat Use* section), bearded seals (primarily juveniles) have been observed feeding in small bays, lagoons, estuaries, and near river mouths during the open-water period, in particular during late summer and fall. Further, shallow nearshore waters provide habitat for primary prey resources essential to conservation of the Beringia DPS, such as saffron cod and Arctic cod (Barton 1978, Craig *et al.* 1982, Underwood *et al.* 1995, Wiswar *et al.* 1995, North Pacific Fishery Management Council 2009, Johnson *et al.* 2010, Logerwell *et al.* 2015, 83 FR 31340, July 5, 2018). We are therefore proposing to define the shoreward boundary of critical habitat as the line that marks mean lower low water (MLLW) based on occurrence of the primary prey essential feature. This specific area does not extend into tidally-influenced channels of tributary waters of the Bering, Chukchi, or Beaufort seas.

Data to determine the boundaries of the specific area containing the essential features are limited. We specifically seek additional data and comments on our proposed delineation of these boundaries (see **Public Comments Solicited** section).

Special Management Considerations or Protection

A specific area within the geographic area occupied by a species may only be designated as critical habitat if the area contains one or more essential physical or biological feature that may require special management considerations or protection (16 U.S.C. 1532(5)(A)(ii); 50 CFR 424.12(b)(iv)). "Special management considerations or protection" is defined as methods or procedures useful in protecting the physical or biological features essential to the conservation of listed species (50 CFR 424.02). Courts have indicated that the "may require" standard requires that NMFS determine that special management considerations or protection of the essential features might be required either now or in the future (*i.e.*, such considerations or protection need not be immediately required). *See Cape Hatteras Access Pres. Alliance* v. *U.S. Dep't of Interior*, 344 F. Supp. 2d 108, 123–24 (D.D.C. 2004)*; Home Builders Ass'n of N. Cal.* v. *U.S. Fish & Wildlife Serv.*, 268 F. Supp. 2d 1197, 1218 (E.D. Cal. 2003). The relevant management need may be "in the future based on possibility." *See Bear Valley Mut. Water Co.* v. *Salazar*, No. SACV 11–01263–JVS, 2012 WL 5353353, at *25 (C.D. Cal. Oct. 17, 2012); *see also Ctr. for Biological Diversity* v. *Norton*, 240 F. Supp. 2d 1090, 1098–99 (D. Ariz. 2003) (noting that the "may require" phrase can be rephrased and understood as "can require" or "possibly requires").

We have identified four primary sources of potential threats to each of the habitat features identified above as essential to the conservation of the Beringia DPS of the bearded seal: climate change; oil and gas exploration, development, and production; marine shipping and transportation; and commercial fisheries. As further detailed below, both sea ice essential features, the primary prey essential feature, and the essential feature of acoustic conditions that allow for effective communications by bearded seals for breeding purposes may require special management considerations or protection as a result of impacts (either independently or in combination) from these sources. We note that our evaluation does not consider an exhaustive list of threats that could have impacts

on the essential features, but rather considers the primary potential threats that we are aware of at this time that support our conclusion that special management considerations or protection of each of the essential features may be required. Further, we highlight particular threats associated with each source of impacts while recognizing that certain threats are associated with more than one source (*e.g.*, marine pollution and noise).

Climate Change

The principal threat to the persistence of the Beringia DPS of the bearded seal is the ongoing and anticipated decreases in the extent and timing of sea ice stemming from climate change. Climate-change-related threats to the Beringia DPS's habitat are discussed in detail in the bearded seal status review report (Cameron *et al.* 2010), as well as in our proposed and final rules to list the Beringia DPS of the bearded seal as threatened. Total Arctic sea ice extent has been showing a decline through all months of the satellite record since 1979 (Meier *et al.* 2014). Although there will continue to be considerable annual variability in the rate and timing of the breakup and retreat of sea ice, trends in climate change are moving toward ice that is more susceptible to melt (Markus *et al.* 2009), and areas of earlier spring ice retreat (Stammerjohn *et al.* 2012, Frey *et al.* 2015). Notably, February and March ice extent in the Bering Sea in 2018 and 2019 were the lowest on record (Stabeno and Bell 2019), and in the spring of 2019, melt onset in the Chukchi Sea occurred 20 to 35 days earlier than the 1981 to 2010 average (Perovich *et al.* 2019). Activities that release carbon dioxide and other heat-trapping greenhouse gases (GHGs) into the atmosphere, most notably those that involve fossil fuel combustion, are a major contributing factor to climate change and loss of sea ice (Intergovernmental Panel on Climate Change 2013, U.S. Global Climate Change Research Program 2017). Such activities may adversely affect the essential features of the habitat of the Beringia DPS by diminishing sea ice suitable for whelping, nursing, and molting, and by causing changes in the distribution, abundance, and/or species composition of prey resources (including

the primary prey resources of the Beringia DPS). Declines in the extent and timing of sea ice cover may also lead to increased shipping activity (discussed below) and other changes in anthropogenic activities, with the potential for increased risks to the habitat features essential to the Beringia DPS. The best scientific data available do not allow us to identify a causal linkage between any particular single source of GHG emissions and identifiable effects on the physical and biological features essential to the conservation of the Beringia DPS (Cameron *et al.* 2010). Regardless, given that the quality and quantity of these essential features, in particular sea ice, may be diminished by the effects of climate change, we conclude that special management considerations or protection may be necessary, either now or in the future, although the exact focus and nature of that management is presently undeterminable.

Oil and Gas Activity

Oil and gas exploration, development, and production activities in the U.S. Arctic may include: seismic surveys; exploratory, delineation, and production drilling operations; construction of artificial islands, causeways, shore-based facilities, and pipelines; and vessel and aircraft operations. These activities have the potential to affect the essential features of Beringia DPS critical habitat, primarily through pollution (particularly in the event of a large oil spill), noise, and physical alteration of the species' habitat.

Large oil spills (considered in this section to be spills of relatively great size, consistent with common usage of the term) are generally considered to be the greatest threat associated with oil and gas activities in the Arctic marine environment (Arctic Monitoring and Assessment Programme (AMAP) 2007). In contrast to spills on land, large spills at sea, especially when ice is present, are difficult to contain or clean up, and may spread over hundreds or thousands of square kilometers. Responding to a sizeable spill in the Arctic environment would be particularly challenging. Reaching a spill site

and responding effectively would be especially difficult, if not impossible, in winter when weather can be severe and daylight extremely limited. Oil spills under ice or in ice-covered waters are the most challenging to deal with due to, among other factors, limitations on the effectiveness of current containment and recovery technologies when sea ice is present. The extreme depth and the pressure that oil was under during the 2010 oil blowout at the Deepwater Horizon well in the Gulf of Mexico may not exist in the shallow continental shelf waters of the Beaufort and Chukchi seas. Nevertheless, the difficulties experienced in stopping and containing the Deepwater Horizon blowout, where environmental conditions, available infrastructure, and response preparedness were comparatively good, point toward even greater challenges in containing and cleaning a large spill in a much more environmentally severe and geographically remote Arctic location.

Although planning, management, and use of best practices can help reduce risks and impacts, the history of oil and gas activities indicates that accidents cannot be eliminated (AMAP 2007). Data on large spills (*e.g.*, operational discharges, spills from pipelines, blowouts) in Arctic waters are limited because oil exploration and production there has been limited. The Bureau of Ocean Energy Management (BOEM) (BOEM 2011) estimated the chance of one or more oil spills greater than or equal to 1,000 barrels occurring if development were to take place in the Beaufort Sea or Chukchi Sea Planning Areas as 26 percent for the Beaufort Sea over the estimated 20 years of production and development, and 40 percent for the Chukchi Sea over the estimated 25 years of production and development.

Icebreaking vessels, which may be used for in-ice seismic surveys or to manage ice near exploratory drilling ships, also have the potential to affect the sea ice essential features of bearded seal habitat through physical alteration of the sea ice (also see *Marine Shipping and Transportation* section). Other examples of activities associated with oil

and gas exploration and development that may physically alter the essential sea ice features offshore through-ice activities such as trenching and installation of pipelines. Activities such as icebreaking, which can cause substantial increases in noise levels (Richardson *et al.* 1995), also have the potential to affect acoustic conditions that allow for effective communication by bearded seals for breeding purposes, although the extent to which such activities are localized near areas where bearded seal breeding is occurring and the acoustic characteristics of the area are among the factors that would determine the level of such effects. In addition, there is evidence that noise associated with activities such as seismic surveys can result in behavioral and other effects on fishes and invertebrate species (Carroll *et al.* 2017, Slabbekoorn *et al.* 2019), although the available data on such effects are currently limited, in particular for invertebrates (Hawkins *et al.* 2015, Hawkins and Popper 2017), and the nature of potential effects specifically on the primary prey resources of the Beringia DPS are unclear.

In summary, a large oil spill could render areas containing the identified essential features unsuitable for use by bearded seals of the Beringia DPS. In such an event, sea ice habitat suitable for whelping, nursing, and/or for basking and molting could be oiled. The primary prey resources could also become contaminated, experience mortality, or be otherwise adversely affected by spilled oil. In addition, disturbance effects (both physical disturbance and acoustic effects) could alter the quality of the essential features of bearded seal critical habitat, or render habitat unsuitable. We conclude that the essential features of the habitat of the Beringia DPS may require special management considerations or protection in the future to minimize the risks posed to these features by oil and gas exploration, development, and production.

Marine Shipping and Transportation

The reduction in Arctic sea ice that has occurred in recent years has renewed interest in using the Arctic Ocean as a potential waterway for coastal, regional, and trans-

Arctic marine operations and in extension of the navigation season in surrounding seas (Brigham and Ellis 2004, Arctic Council 2009). Marine traffic along the western and northern coasts of Alaska includes tug, towing, and cargo vessels, tankers, research and government vessels, vessels associated with oil and gas exploration and development, fishing vessels, and cruise ships (Adams and Silber 2017, U.S. Committee on the Marine Transportation System 2019). Automatic Identification System data indicate that the number of unique vessels operating annually in U.S. waters north of the Bering Sea in 2015 to 2017 increased 128 percent over the number recorded in 2008 (U.S. Committee on the Marine Transportation System 2019). Climate models predict that the warming trend in the Arctic will accelerate, causing the ice to begin melting earlier in the spring and resume freezing later in the fall, resulting in an expansion of potential transit routes and a lengthening of the potential navigation season, and a continuing increase in vessel traffic (Khon *et al.* 2010, Smith and Stephenson 2013, Stephenson *et al.* 2013, Huntington *et al.* 2015d, Melia *et al.* 2016, Aksenov *et al.* 2017, Khon *et al.* 2017). For instance, analysis of four potential growth scenarios (ranging from reduced activity to accelerated growth) suggests from 2008 to 2030, the number of unique vessels operating in U.S. waters north of 60° N (*i.e.*, northern Bering sea and northward) may increase by 136 to 346 percent (U.S. Committee on the Marine Transportation System 2019).

The fact that nearly all vessel traffic in the Arctic, with the exception of icebreakers, purposefully avoids areas of ice, and primarily occurs during the ice-free or low-ice seasons, helps to mitigate the risks of shipping to the essential habitat features identified for bearded seals of the Beringia DPS. However, icebreakers pose greater risks to these features since they are capable of operating year-round in all but the heaviest ice conditions and are often used to escort other types of vessels (*e.g.*, tankers and bulk carriers) through ice-covered areas. Furthermore, new classes of ships are being designed that serve the dual roles of both tanker/carrier and icebreaker (Arctic Council 2009).

Therefore, if icebreaking activities increase in the Arctic in the future, as expected, the likelihood of negative impacts (*e.g.*, habitat alteration and risk of oil spills) occurring in ice-covered areas where bearded seals reside will likely also increase. We are not aware of any data currently available on the effects of icebreaking on the habitat of bearded seals during the reproductive and molting periods. Although impacts of icebreaking are likely to vary between species depending on a variety of factors, we note that Wilson *et al.* (2017) demonstrated the potential for impacts of icebreaking on Caspian seal (*Pusa caspica*) mothers and pups including displacement, break-up of whelping and nursing habitat, and vessel collisions with mothers or pups. The authors noted that while pre-existing shipping channels were used by seals as artificial leads, which expanded access to whelping habitat, seals that whelp on the edge of such leads are vulnerable to vessel collision and repeated disturbance. As discussed above, in addition to physical effects on sea ice, icebreaking can cause substantial increases in noise levels, and thus has the potential to affect acoustic conditions that allow for effective communication by bearded seals during the breeding season.

In addition to the potential effects of icebreaking on the essential features, the maritime shipping industry transports various types of petroleum products, both as fuel and cargo. In particular, if increased shipping involves the tanker transport of crude oil or oil products, there would be an increased risk of spills (Arctic Climate Impact Assessment 2005, U.S. Arctic Research Commission 2012). Similar to oil and gas activities, the most significant threat posed by shipping activities is considered to be the accidental or illegal discharge of oil or other toxic substances carried by ships (Arctic Council 2009).

Vessel discharges associated with normal operations, including sewage, grey water, and oily wastes are expected to increase as a result of increasing marine shipping and transportation in Arctic waters (Arctic Council 2009, Parks *et al.* 2019), which could

affect the primary prey of the Beringia DPS. Increases in marine shipping and transportation and other vessel traffic is also introducing greater levels of underwater noise (Arctic Council 2009, Moore *et al.* 2012), with the potential for behavioral and other effects in fishes and invertebrates (Slabbekoorn *et al.* 2010, Hawkins and Popper 2017, Popper and Hawkins 2019), although there are substantial gaps in the understanding of such effects, in particular for invertebrates (Hawkins *et al.* 2015, Hawkins and Popper 2017), and the nature of potential effects specifically on the primary prey of the Beringia DPS are unclear.

We conclude that the essential features of the habitat of the Beringia DPS may require special management considerations or protection in the future to minimize the risks posed by potential shipping and transportation activities because: (1) physical alteration of sea ice by icebreaking activities could reduce the quantity and/or quality of the sea ice essential features; (2) in the event of an oil spill, sea ice essential for whelping, nursing, and molting could become oiled; (3) the quantity and/or quality of the primary prey resources could be diminished as a result of spills, vessel discharges, and noise associated with shipping, transportation, and ice-breaking activities; and (4) acoustic conditions that allow for effective communication by bearded seals during the breeding season could be affected by noise associated with increases in shipping and transportation activities.

Commercial Fisheries

The specific area identified in this proposed rule as meeting the definition of critical habitat for the Beringia DPS overlaps with the Arctic Management Area and the Bering Sea and Aleutian Islands Management Area identified by the North Pacific Fishery Management Council. No commercial fishing is permitted within the Arctic Management Area due to insufficient data to support the sustainable management of a commercial fishery there. However, as additional information becomes available,

commercial fishing may be allowed in this management area. For example, two bearded seal prey species—Arctic cod and saffron cod—have been identified as likely initial target species for commercial fishing in the Arctic Management Area in the future (North Pacific Fishery Management Council 2009).

In the northern portion of the Bering Sea and Aleutian Islands Management Area, commercial fisheries overlap with the southernmost portion of the proposed critical habitat. Portions of the proposed critical habitat also overlap with certain state commercial fisheries management areas. Commercial catches from waters in the proposed critical habitat area primarily include: Pacific halibut (*Hippoglossus stenolepis*), several other flatfish species, Pacific cod (*Gadus macrocephalus*), several crab species, walleye pollock (*Theragra chalcogramma*), and several salmon species.

Commercial fisheries may affect the primary prey resources identified as essential to the conservation of the Beringia DPS, through removal of prey biomass and potentially through modification of benthic habitat by fishing gear that contacts the seafloor. Given the potential changes in commercial fishing that may occur with the expected increasing length of the open-water season and range expansion of some economically valuable species responding to climate change (*e.g.*, Stevenson and Lauth 2019, Thorson *et al.* 2019, Spies *et al.* 2020), we conclude that the primary prey resources essential feature may require special management considerations or protection in the future to address potential adverse effects of commercial fishing on this feature.

Unoccupied Areas

Section 3(5)(A)(ii) of the ESA authorizes the designation of specific areas outside the geographical area occupied by the species, if those areas are determined to be essential for the conservation of the species. Our regulations at 50 CFR 424.12(b)(2) require that we first evaluate areas occupied by the species, and only consider unoccupied areas to be essential where a critical habitat designation limited to geographical areas

occupied would be inadequate to ensure the conservation of the species. Because bearded seals of the Beringia DPS are considered to occupy their entire historical range that falls within U.S. jurisdiction, we find that there are no unoccupied areas within U.S. jurisdiction that are essential to their conservation.

Application of ESA Section 4(a)(3)(B)(i)

Section 4(a)(3)(B)(i) of the ESA precludes designating as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense (DOD), or designated for its use, 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 the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation. *See* 16 U.S.C. 1533(a)(3)(B)(i); 50 CFR 424.12(h). Where these standards are met, the relevant area is ineligible for consideration as potential critical habitat. The regulations implementing the ESA set forth a number of factors to guide consideration of whether this standard is met, including the degree to which the plan will protect the habitat of the species (50 CFR 424.12(h)(4)). This process is separate and distinct from the analysis governed by section 4(b)(2) of the ESA, which directs us to consider the economic impact, the impact on national security, and any other relevant impact of designation, and affords the Secretary discretion to exclude particular areas if the benefits of exclusion outweigh the benefits of inclusion of such areas. *See* 16 U.S.C. 1533(b)(2).

Before publication of this proposed rule, we contacted DOD (Air Force and Navy) and requested information on any facilities or managed areas that are subject to an INRMP and are located within areas that could potentially be designated as critical habitat for the Beringia DPS. In response to our request, the Air Force provided information regarding twelve radar sites with an INRMP in place, 10 of which (7 active and 3 inactive) are located adjacent to the area under consideration for designation as

critical habitat: Barter Island Long Range Radar Site (LRRS), Cape Lisburne LRRS, Cape Romanzof LRRS, Kotzebue LRRS, Oliktok LRRS, Point Barrow LRRS, Tin City LRRS, Bullen Point Short Range Radar Site (SRRS), Point Lay LRRS, and Point Lonely LRRS. The Air Force requested exemption of these radar sites pursuant to section 4(a)(3)(B)(i) of the ESA. Based on our review of the INRMP (draft 2020 update), the area being considered for designation as critical habitat, all of which occurs seaward of the MLLW line, does not overlap with DOD lands. Therefore, we conclude 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 proposed critical habitat designation, and thus the exemptions requested by the Air Force are not necessary because no critical habitat would be designated in those radar sites.

Analysis of Impacts Under Section 4(b)(2) of the ESA

Section 4(b)(2) of the ESA requires the Secretary to designate critical habitat for threatened and endangered species on the basis of the best scientific data available after taking into consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat. Regulations at 50 CFR 424.19(b) also specify that the Secretary will consider the probable impacts of the designation at a scale that the Secretary determines to be appropriate, and that such impacts may be qualitatively or quantitatively described. The Secretary is also required to compare impacts with and without the designation (50 CFR 424.19(b)). In other words, we are required to assess the incremental impacts attributable to the critical habitat designation relative to a baseline that reflects existing regulatory impacts in the absence of the critical habitat.

Section 4(b)(2) also describes an optional process by which the Secretary may go beyond the mandatory consideration of impacts and weigh the benefits of excluding any particular area (that is, avoiding the economic, national security, or other relevant

impacts) against the benefits of designating it (primarily, the conservation value of the area). If the Secretary concludes that the benefits of excluding particular areas outweigh the benefits of designation, the Secretary may exclude the particular area(s) so long as the Secretary concludes on the basis of the best available scientific and commercial information that the exclusion will not result in extinction of the species (16 U.S.C. 1533(b)(2)). NMFS and the U.S. Fish and Wildlife Service have adopted a joint policy setting out non-binding guidance explaining generally how we exercise our discretion under 4(b)(2). *See* Policy Regarding Implementation of Section 4(b)(2) of the Endangered Species Act ("4(b)(2) policy," 81 FR 7226, February 11, 2016).

While section 3(5) of the ESA defines critical habitat as "specific areas," section 4(b)(2) requires the agency to consider the impacts of designating any "particular area." Depending on the biology of the species, the characteristics of its habitat, and the nature of the impacts of designation, "particular" areas may be -- but need not necessarily be -- delineated so that they are the same as the already identified "specific" areas of potential critical habitat. For the reasons set forth below, we are not proposing to exercise the discretion delegated to us by the Secretary to exclude any particular areas from the proposed critical habitat designation.

The primary impacts of a critical habitat designation arise from the ESA section 7(a)(2) requirement that Federal agencies ensure that their actions are not likely to result in the destruction or adverse modification of critical habitat (*i.e.*, adverse modification standard). Determining these impacts is complicated by the fact that section 7(a)(2) contains the overlapping requirement that Federal agencies ensure that their actions are not likely to jeopardize the species' continued existence. One incremental impact of critical habitat designation is the extent to which Federal agencies change their proposed actions to ensure they are not likely to adversely modify critical habitat, beyond any changes they would make to ensure actions are not likely to jeopardize the continued

existence of the species. Additional impacts of critical habitat designation include any state and/or local protection that may be triggered as a direct result of designation (we did not identify any such impacts for this proposed designation), and benefits that may arise from education of the public to the importance of an area for species conservation.

In determining the impacts of designation, we focused on the incremental change in Federal agency actions as a result of critical habitat designation and the adverse modification standard (see *Ariz. Cattle Growers' Ass'n* v. *Salazar*, 606 F.3d 1160, 1172–74 (9th Cir. 2010) (holding that the U.S. Fish and Wildlife Service permissibly attributed the economic impacts of protecting the northern spotted owl as part of the baseline and was not required to factor those impacts into the economic analysis of the effects of the critical habitat designation)). We analyzed the impacts of this designation based on a comparison of conditions with and without the designation of critical habitat for the Beringia DPS. The "without critical habitat" scenario represents the baseline for the analysis. It includes process requirements and habitat protections already extended to bearded seals of the Beringia DPS under its ESA listing and under other Federal, state, and local regulations. The "with critical habitat" scenario describes the incremental impacts associated specifically with the designation of critical habitat for the Beringia DPS.

Our analysis for this proposed rule is described in detail in the associated Draft Impact Analysis Report that is available for public review and comment (see **Public Comments Solicited**). This analysis assesses the incremental costs and benefits that may arise due to the critical habitat designation, with economic costs estimated over the next 10 years. We chose the 10-year timeframe because it is lengthy enough to reflect the planning horizon for reasonably predicting future human activities, yet it is short enough to allow reasonable projections of changes in use patterns in an area, as well as of exogenous factors (*e.g.*, world supply and demand for petroleum, U.S. inflation rate

trends) that may be influential. This timeframe is consistent with guidance provided in Office of Management and Budget (OMB) Circular A-4 (OMB 2003, 2011). We recognize that economic costs of the designation are likely to extend beyond the 10-year timeframe of the analysis, though we have no information indicating that such costs in subsequent years would be different from those projected for the first 10-year period. Although not quantified or analyzed in detail due to the high level of uncertainty regarding longer-term effects, the Draft Impact Analysis Report includes a discussion of the potential types of costs and benefits that may accrue beyond the 10-year time window of the analysis.

Below, we summarize our analysis of the impacts of designating the specific area identified in this proposed rule as meeting the definition of critical habitat for the Beringia DPS. Additional detail is provided in the Draft Impact Analysis Report prepared for this proposed rule.

Benefits of Designation

We expect that the Beringia DPS will increasingly experience the ongoing loss of sea ice and changes in ocean conditions associated with climate change, and the significance of other habitat threats will likely increase as a result. As noted above, the primary benefit of a critical habitat designation—and the only regulatory consequence—stems from the ESA section 7(a)(2) requirement that all Federal agencies ensure that their actions are not likely to destroy or adversely modify the designated habitat. This benefit is in addition to the section 7(a)(2) requirement that all Federal agencies ensure that their actions are not likely to jeopardize listed species' continued existence. Another benefit of critical habitat designation is that it provides specific notice of the areas and features essential to the conservation of the Beringia DPS. This information will focus future ESA section 7 consultations on key habitat attributes. By identifying the specific areas where the features essential to the conservation of the Beringia DPS occur, there may also be

enhanced awareness by Federal agencies and the general public of activities that might affect those essential features. The designation of critical habitat can also inform Federal agencies regarding the habitat needs of the Beringia DPS, which may facilitate using their authorities to support the conservation of this species pursuant to ESA section 7(a)(1), including to design proposed projects in ways that minimize adverse effects to critical habitat.

In addition, the critical habitat designation may result in indirect benefits, as discussed in detail in the Draft Impact Analysis Report, including education and enhanced public awareness, which may help focus and contribute to conservation efforts for bearded seals of the Beringia DPS and their habitat. For example, by identifying areas and features essential to the conservation of the Beringia DPS, complementary protections may be developed under state or local regulations or voluntary conservation plans. These other forms of benefits may be economic in nature (whether market or non-market, consumptive, non-consumptive, or passive), educational, cultural, or sociological, or they may be expressed through beneficial changes in the ecological functioning of the species' habitat, which itself yields ancillary welfare benefits (*e.g.*, improved quality of life) to the region's human population. For example, because the critical habitat designation is expected to result in enhanced conservation of the Beringia DPS over time, residents of the region who value these seals, such as subsistence users, are expected to experience indirect benefits. As another example, the geographic area identified in this proposed rule as meeting the definition of critical habitat for the Beringia DPS overlaps substantially with the range of the polar bear (*Ursus maritimus*) in the United States, and the bearded seal is a prey species of the polar bear, so the designation may also provide indirect conservation benefits to the polar bear. Indirect conservation benefits may also extend to other co-occurring species, such as the Pacific walrus (*Odobenus rosmarus divergens*), the Arctic ringed seal (*Pusa hispida hispida*),

and other seal species.

It is not presently feasible to monetize, or even quantify, each component part of the benefits accruing from the designation of critical habitat for the Beringia DPS. Therefore, we augmented the quantitative measurements that are summarized here and discussed in detail in the Draft Impact Analysis Report with qualitative and descriptive assessments, as provided for under 50 CFR 424.19(b) and in guidance set out in OMB Circular A–4. Although we cannot monetize or quantify all of the incremental benefits of the critical habitat designation, we conclude that they are not inconsequential.

Economic Impacts

Direct economic costs of the critical habitat designation accrue primarily through implementation of section 7(a)(2) of the ESA in consultations with Federal agencies to ensure that their proposed actions are not likely to destroy or adversely modify critical habitat. Those economic impacts may include both administrative costs and costs associated with project modifications. At this time, on the basis of how protections are currently implemented for bearded seals of the Beringia DPS under the Marine Mammal Protection Act (MMPA) and as a threatened species under the ESA, we do not anticipate that additional requests for project modifications will result specifically from this designation of critical habitat. In other words, the critical habitat designation is not likely to result in more requested project modifications because our section 7 consultations on potential effects to bearded seals and our incidental take authorizations for Arctic activities under section 101(a) of the MMPA both typically address habitat-associated effects to the seals even in the absence of a critical habitat designation. As a result, the direct incremental costs of this critical habitat designation are expected to be limited to the additional administrative costs of considering Beringia DPS critical habitat in future section 7 consultations.

To identify the types of Federal activities that may affect critical habitat for the

Beringia DPS, and therefore would be subject to the ESA section 7 adverse modification standard, we examined the record of section 7 consultations for 2013 to 2019 to identify Federal activities that occur within the specific area being considered as critical habitat for the Beringia DPS and that may affect the essential features of the critical habitat. These activities include oil and gas related activities, dredge mining, navigation dredging, in-water construction, commercial fishing, oil spill response, and certain military activities. We projected the occurrence of these activities over the timeframe of the analysis (the next 10 years) using the best available information on planned activities and the frequency of recent consultations for particular activity types. Notably, all of the projected future Federal actions that may trigger an ESA section 7 consultation due to the potential to affect one or more of the essential habitat features also have the potential to affect bearded seals of the Beringia DPS. In other words, none of the activities we identified would trigger a consultation solely on the basis of the critical habitat designation. We recognize there is inherent uncertainty involved in predicting future Federal actions that may affect the essential features of critical habitat for the Beringia DPS. We specifically seek comments and information regarding the types of activities that are likely be subject to section 7 consultation as a result of the proposed designation, and we will consider any relevant information received during the comment period in developing the economic analysis supporting the final rule (see **Public Comment Solicited** section).

We expect that the majority of future ESA section 7 consultations analyzing potential effects on the proposed essential habitat features will involve NMFS and BOEM authorizations and permitting of oil and gas related activities. In assessing costs associated with these consultations, we took a conservative approach b**y estimating that future** formal and informal consultations addressing these activities would be more complex than for other activities, and would therefore incur higher third party (*i.e.*,

applicant/permittee) incremental administrative costs per consultation to consider effects to Beringia DPS bearded seal critical habitat (see Draft Impact Analysis Report). These higher third party costs may not be realized in all cases because the administrative effort required for a specific consultation depends on factors such as the location, timing, nature, and scope of the potential effects of the proposed action on the essential features. There is also considerable uncertainty regarding the timing and extent of future oil and gas exploration and development in Alaska's Outer Continental Shelf (OCS) waters, as indicated by Shell's 2015 withdrawal from exploratory drilling in the Chukchi Sea and BOEM's 2017-2022 OCS Oil and Gas Leasing Program. Although NMFS completed formal consultations for oil and gas exploration activities in the Chukchi Sea in all but two years between 2006 and 2015, no such activities or related consultations with NMFS have occurred since that time.

As detailed in the Draft Impact Analysis Report, the total incremental costs associated with this critical habitat designation over the next 10 years, in discounted present value terms, are estimated to be $786,000 (discounted at 7 percent). In annual terms, the estimated range of discounted incremental costs is $57,000 to $105,000. About 80 percent of the incremental costs attributed to the critical habitat designation are expected to accrue from ESA section 7 consultations associated with oil and gas related activities in the Chukchi and Beaufort seas and adjacent onshore areas. Although not quantifiable at this time, the Draft Impact Analysis Report acknowledges that the oil and gas industry may also incur indirect costs associated with the critical habitat designation if future third-party litigation over specific consultations creates delays or other sources of regulatory uncertainty.

We have preliminarily concluded that the potential economic impacts associated with the critical habitat designation are modest both in absolute terms and relative to the level of economic activity expected to occur in the affected area, which is primarily

associated with oil and gas activities that may occur in the Beaufort and Chukchi seas. As a result, and in light of the benefits of critical habitat designation discussed above and in the Draft Impact Analysis Report, we are not proposing to exercise our discretion to exclude any particular area from the critical habitat designation by evaluating whether the benefits of excluding such area based on economic impacts outweighs the benefits of including such area.

National Security Impacts

Section 4(b)(2) of the ESA also requires consideration of national security impacts. As noted in the **Application of ESA Section 4(a)(3)(B)(i)** section above, before publication of this proposed rule, we contacted the DOD regarding any potential impacts of the designation of designating critical habitat for the Beringia DPS on military operations. In a letter dated June 3, 2013, the DOD Regional Environmental Coordinator indicated that no impacts on national security were foreseen from such a designation. More recently, by letter dated March 17, 2020, the Navy submitted a request for exclusion of a particular area north of the Beaufort Sea shelf from the designation of critical habitat based on national security impacts. This area does not overlap with the specific area identified in this proposed rule as meeting the definition of critical habitat for the Beringia DPS. In this letter, the Navy also provided information regarding its training and testing activities that currently occur or are planned to occur in U.S. waters inhabited by bearded seals. The Navy commented that based on the current and expected training and testing activities occurring in the Arctic region, it has determined that training and testing activities do not pose any substantial threat to the essential features of the habitat of the Beringia DPS.

In addition, by letter dated April 30, 2020, the Air Force provided information concerning its activities at radar sites located adjacent to the area under consideration for designation as critical habitat (relevant sites identified above in the **Application of ESA**

Section 4(a)(3)(B)(i) section). The Air Force requested that we consider excluding critical habitat near these sites under section 4(b)(2) of the ESA due to impacts on national security. Although we are not proposing to exempt the radar sites pursuant to section 4(a)(3)(B)(i) of the ESA, as discussed above, here we consider whether to propose excluding critical habitat located adjacent to these sites under section 4(b)(2).

The Air Force noted that annual fuel and cargo resupply activities occur at these radar sites primarily in the summer, and installation beaches are used for offload. The Air Force indicated that coastal operations at these installations are limited, and when barge operations occur, protective measures are implemented per the Polar Bear and Pacific Walrus Avoidance Plan (preliminary final 2020) associated with the INRMP in place for these sites. The Air Force discussed that it also conducts sampling and monitoring at these sites as part of the department's Installation Restoration Program, and conducts larger scale contaminant or debris removal in some years that can require active disturbance of the shoreline. Coastal barge operations are a feature of both monitoring and removal actions.

Federal agencies have an existing obligation to consult with NMFS under section 7(a)(2) of the ESA to ensure the activities they fund or carry out are not likely to jeopardize the continued existence of the Beringia DPS of bearded seals, regardless of whether or where critical habitat is designated for the species. The information provided by the Navy does not point to any tangible consequences or restrictions that would impinge upon the Navy's training and testing activities, and suggests that the Navy would need to expend very minimal added time and effort to complete section 7 consultations to evaluate effects on critical habitat in addition to effects on the species. The activities described in the Air Force's exclusion request are localized and small in scale, and it is unlikely that modifications to these activities would be needed to address impacts to critical habitat beyond any modifications that may be necessary to address impacts to

Beringia DPS bearded seals. We therefore anticipate that the time and costs associated with consideration of the effects of future Air Force actions on critical habitat of the Beringia DPS under section 7(a)(2) of the ESA would be limited if any, and the consequences for the Air Force's activities, even if we do not exempt or exclude the requested areas from critical habitat designation, would be negligible.

As a result, and in light of the benefits of critical habitat designation discussed above and in the Draft Impact Analysis Report, we have preliminarily concluded that the benefits of exclusion do not outweigh the benefits of designation and are therefore not proposing to exercise our discretionary authority to exclude these particular areas pursuant to section 4(b)(2) of the ESA based on national security impacts. We will continue to coordinate with DOD regarding the identification of potential national security impacts that could result from the critical habitat designation to further inform our determinations regarding exclusions from the designation under section 4(b)(2) based on national security impacts.

Other Relevant Impacts

Finally, under ESA section 4(b)(2) we consider any other relevant impacts of critical habitat designation to inform our decision as to whether to exclude any areas. For example, we may consider potential adverse effects on existing management or conservation plans that benefit listed species, and we may consider potential adverse effects on tribal lands or trust resources. In preparing this proposed designation, we have not identified any such management or conservation plans, tribal lands or resources, or anything else that would be adversely affected by the critical habitat designation. Some Alaska Native organizations and tribes have expressed concern that the critical habitat designation might restrict subsistence hunting of bearded seals or other marine mammals, such that important hunting areas should be considered for exclusion, but no restrictions on subsistence hunting are associated with this designation. Accordingly, we are not

exercising our discretion to conduct an exclusion analysis pursuant to section 4(b)(2) of the ESA based on other relevant impacts.

Proposed Critical Habitat Designation

We propose to designate as critical habitat a specific area of marine habitat in Alaska and offshore Federal waters of the Bering, Chukchi, and Beaufort seas within the geographical area presently occupied by the Beringia DPS of the bearded seal. This critical habitat area contains physical or biological features essential to the conservation of bearded seals of the Beringia DPS that may require special management considerations or protection. We are not proposing to exclude any areas based on economic impacts, impacts to national security, or other relevant impacts of this proposed designation. We have not identified any unoccupied areas that are essential to the conservation of the Beringia DPS of the bearded seal, and thus we are not proposing any such areas for designation as critical habitat. In accordance with our regulations regarding critical habitat designation (50 CFR 424.12(c)), the map included in the proposed regulation, as clarified by the accompanying regulatory text, would constitute the official boundary of the proposed designation.

Effects of Critical Habitat Designation

Section 7(a)(2) of the ESA requires Federal agencies, including NMFS, to ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any threatened or endangered species or destroy or adversely modify designated critical habitat. Federal agencies must consult with us on any agency action that may affect listed species or critical habitat. During interagency consultation, we evaluate the agency action to determine whether the action is likely to adversely affect listed species or critical habitat. The potential effects of a proposed action may depend on, among other factors, the specific timing and location of the action relative to the seasonal presence of essential features or seasonal use of critical habitat by listed species

for essential life history functions. Although the requirement to consult on an action that may affect critical habitat applies regardless of the season, NMFS addresses spatial-temporal considerations when evaluating the potential impacts of a proposed action during the ESA section 7 consultation process. For example, if an action with short-term effects is proposed during a time of year that sea ice is not present, we may advise that consequences to critical habitat are unlikely. If we conclude in a biological opinion pursuant to section 7(a)(2) of the ESA that the agency action would likely result in the destruction or adverse modification of critical habitat, we would recommend reasonable and prudent alternatives to the action that avoid that result.

Reasonable and prudent alternatives are defined in 50 CFR 402.02 as alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that would avoid the destruction or adverse modification of critical habitat. NMFS may also provide with the biological opinion a statement containing discretionary conservation recommendations. Conservation recommendations are advisory and are not intended to carry any binding legal force.

Regulations at 50 CFR 402.16 require Federal agencies that have retained discretionary involvement or control over an action, or where such discretionary involvement or control is authorized by law, to reinitiate consultation on previously reviewed actions in instances where: (1) critical habitat is subsequently designated; or (2) new information or changes to the action may result in effects to critical habitat not previously considered (among other reasons for reinitiation). Consequently, some Federal agencies may request reinitiation of consultation or conference with us on actions for which consultation has been completed, if those actions may affect designated critical habitat for the Beringia DPS. Activities subject to the ESA section 7 consultation process

include activities on Federal lands as well as activities requiring a permit or other authorization from a Federal agency (*e.g.*, a section 10(a)(1)(B) permit from NMFS), or some other Federal action, including funding (*e.g.*, Federal Highway Administration or Federal Emergency Management Agency funding). Consultation under section 7 of the ESA would not be required for Federal actions that do not affect listed species or designated critical habitat, and would not be required for actions on non-Federal and private lands that are not carried out, funded, or authorized by a Federal agency.

Activities That May Be Affected by Critical Habitat Designation

Section 4(b)(8) of the ESA requires, to the maximum extent practicable, in any proposed regulation to designate critical habitat, an evaluation and brief description of those activities that may adversely modify such habitat or that may be affected by such designation. A variety of activities may affect critical habitat designated for the Beringia DPS of the bearded seals and, if carried out, funded, or authorized by a Federal agency, may be subject to ESA section 7 consultation. Such activities include: in-water and coastal construction; activities that generate water pollution; dredging; commercial fishing; oil and gas exploration, development, and production; oil spill response; and certain military readiness activities. As explained above, at this time, on the basis of how protections are currently implemented for bearded seals of the Beringia DPS under the MMPA and as a threatened species under the ESA, we do not anticipate that additional requests for project modifications will result specifically from this proposed designation of critical habitat.

Private or non-Federal entities may also be affected by the proposed critical habitat designation if a Federal permit is required, Federal funding is received, or the entity is involved in or receives benefits from a Federal project. These activities would need to be evaluated with respect to their potential to destroy or adversely modify Beringia DPS critical habitat. As noted in the **Public Comments Solicited** section below,

NMFS also requests information on the types of non-Federal activities that may be affected by this rulemaking.

Public Comments Solicited

To ensure the final action resulting from this proposal will be as accurate and effective as possible, we solicit comments and information from the public, other concerned government agencies, Alaska Native tribes and organizations, the scientific community, industry, non-governmental organizations, and any other interested parties concerning the proposed designation of critical habitat for the Beringia DPS of the bearded seal. In particular, we are interested in data and information regarding the following: (1) habitat use of the Beringia DPS, including bearded seal use of rivers and streams near their confluence with the ocean; (2) the identification, location, and quality of physical or biological features essential to the conservation of the Beringia DPS, including in particular, the inclusion of "Acoustic conditions that allow for effective communication by bearded seals for breeding purposes within waters used by breeding bearded seals" as a feature essential to the conservation of the Beringia DPS, as well characteristics of noise that result in adverse effects on this essential feature, such as interference with bearded seal detection of acoustic communications for breeding purposes (i.e., acoustic masking); (3) the delineation of the boundaries, including in particular the shoreward boundary, of where one or more of these features occur; (4) the potential impacts of designating the proposed critical habitat, including information on the types of Federal activities that may trigger an ESA section 7 consultation; (5) current or planned activities in the area proposed for designation and their possible impacts on the proposed critical habitat; (6) the potential effects of the designation on Alaska Native cultural practices and villages; (7) any foreseeable economic, national security, Tribal, or other relevant impacts resulting from the proposed designation; (8) whether any data used in the economic analysis needs to be updated; (9) foreseeable additional costs arising

specifically from the designation of critical habitat for the Beringia DPS that have not been identified in the Draft Impact Analysis Report; (10) additional information regarding impacts on small businesses and federally recognized tribes not identified in the Draft Impact Analysis Report; and (11) whether any particular areas that we are proposing for critical habitat designation should be considered for exclusion under section 4(b)(2) of the ESA and why. For these described impacts or benefits, we request that the following specific information (if relevant) be provided to inform our ESA section 4(b)(2) analysis: (1) a map and description of the affected area; (2) a description of the activities that may be affected within the area; (3) a description of past, ongoing, or future conservation measures conducted within the area that may protect the habitat for Beringia DPS bearded seals; and (4) a point of contact.

You may submit your comments and information concerning this proposed rule by any one of the methods described under **ADDRESSES** above. The proposed rule and supporting documentation can be found on the Federal eRulemaking Portal at *www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2020-0029*. We will consider all comments and information received during the comment period for this proposed rule in preparing the final rule. Accordingly, the final decision may differ from this proposed rule.

References Cited

A complete list of all references cited in this proposed rule can be found on the Federal eRulemaking Portal and is available upon request from the NMFS office in Juneau, Alaska (see **ADDRESSES**).

Classifications

National Environmental Policy Act

We have determined that an environmental analysis as provided for under the National Environmental Policy Act of 1969 for critical habitat designations made

pursuant to the ESA is not required. *See Douglas Cnty.* v. *Babbitt*, 48 F.3d 1495, 1502–08 (9th Cir. 1995).

Regulatory Flexibility Act

Under the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996, whenever an agency publishes a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (*i.e.*, small businesses, small not-for-profit organizations, and small government jurisdictions). We have prepared an initial regulatory flexibility act analysis (IRFA) that is included as part of the Draft Impact Analysis Report for this proposed rule. The IRFA estimates the potential number of small businesses that may be directly regulated by this proposed rule, and the impact (incremental costs) per small entity for a given activity type. Specifically, based on an examination of the North American Industry Classification System (NAICS), this analysis classifies the economic activities potentially directly regulated by the proposed action into industry sectors and provides an estimate of their number in each sector, based on the applicable NAICS codes. A summary of the IRFA follows.

A description of the action (*i.e.*, proposed designation of critical habitat), why it is being considered, and its legal basis are included in the preamble of this proposed rule. This proposed action does not impose new recordkeeping or reporting requirements on small entities. The analysis did not reveal any Federal rules that duplicate, overlap, or conflict with the proposed action. Existing Federal laws and regulations overlap with the proposed rule only to the extent that they provide protection to natural resources within the area proposed as critical habitat generally. However, no existing regulations specifically prohibit destruction or adverse modification of critical habitat for the Beringia DPS of the bearded seal.

This proposed critical habitat rule does not directly apply to any particular entity, small or large. The regulatory mechanism through which critical habitat protections are enforced is section 7 of the ESA, which directly regulates only those activities carried out, funded, or permitted by a Federal agency. By definition, Federal agencies are not considered small entities, although the activities they fund or permit may be proposed or carried out by small entities. In some cases, small entities may participate as third parties (*e.g.*, permittees, applicants, grantees) during ESA section 7 consultations (the primary parties being the Federal action agency and NMFS) and thus they may be indirectly affected by the critical habitat designation.

Based on the best information currently available, the Federal actions projected to occur within the time frame of the analysis (*i.e.*, the next 10 years) that may trigger an ESA section 7 consultation due to the potential to affect one or more of the essential habitat features also have the potential to affect Beringia DPS bearded seals. Thus, as discussed above, we expect that none of the activities we identified would trigger a consultation solely on the basis of this critical habitat designation; in addition, we do not anticipate that additional requests for project modifications will result specifically from this designation of critical habitat. As a result, the direct incremental costs of this critical habitat designation are expected to be limited to the additional administrative costs of considering bearded seal critical habitat in future section 7 consultations that would occur regardless based on the listing of Beringia DPS bearded seals.

As detailed in the Draft Impact Analysis Report, the oil and gas exploration, development, and production industries participate in activities that are likely to require consideration of critical habitat in ESA section 7 consultations. The Small Business Administration size standards used to define small businesses in these cases are: (1) an average of no more than 1,250 employees (crude petroleum and natural gas extraction industry); or (2) average annual receipts of no more than $41.5 million (support activities

for oil and gas operations industry). Only two of the parties identified in the oil and gas category appear to qualify as small businesses based on these criteria. Based on past ESA section 7 consultations, the additional third party administrative costs in future consultations involving Beringia DPS critical habitat over the next 10 years are expected to be borne principally by large oil and gas operations. The estimated range of annual third party costs over this 10 year period is $32,000 to $59,000 (discounted at 7 percent), virtually all of which is expected to be associated with oil and gas activities. It is possible that a limited portion of these administrative costs may be borne by small entities (based on past consultations, an estimated maximum of two entities). Two government jurisdictions with ports appear to qualify as small government jurisdictions (serving populations of fewer than 50,000). The total third party costs that may be borne by these small government jurisdictions over 10 years are less than $1,000 (discounted at 7 percent) for the additional administrative effort to consider Beringia DPS critical habitat as part of a future ESA section 7 consultation involving one port.

As required by the RFA (as amended by the SBREFA), we considered alternatives to the proposed critical habitat designation for the Beringia DPS. We considered and rejected the alternative of not designating critical habitat for the Beringia DPS, because such an alternative does not meet our statutory requirements under the ESA. Under section 4(b)(2) of the ESA, NMFS must consider the economic impacts, impacts to national security, and other relevant impacts of designating any particular area as critical habitat. NMFS has the discretion to exclude any area from critical habitat if the benefits of exclusion (*i.e.*, the impacts that would be avoided if an area were excluded from the designation) outweigh the benefits of designation (*i.e.*, the conservation benefits to the Beringia DPS if an area were designated), as long as exclusion of the area will not result in extinction of the species. However, based on the best information currently available, we concluded that this rule would result in minimal impacts to small entities

and the economic impacts associated with the critical habitat designation would be modest. Therefore, we are not proposing to exclude any areas from the critical habitat designation pursuant to section 4(b)(2) of the ESA. Instead, we selected the alternative of proposing to designate as critical habitat the entire specific area that contains at least one identified essential feature because it would result in a critical habitat designation that provides for the conservation of the species and is consistent with the ESA and joint NMFS and U.S. Fish and Wildlife Service regulations concerning critical habitat at 50 CFR part 424.

Paperwork Reduction Act

The purpose of the Paperwork Reduction Act is to minimize the paperwork burden for individuals, small businesses, educational and nonprofit institutions, and other persons resulting from the collection of information by or for the Federal government. This proposed rule does not contain any new or revised collection of information. This rule, if adopted, would not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act, we make the following findings:

(1) This proposed rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute or regulation that would impose an enforceable duty upon State, local, tribal governments, or the private sector and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” The designation of critical habitat does not impose an enforceable duty on non-Federal government entities or private parties. Under the ESA, the only regulatory effect of this critical habitat designation is that Federal agencies must ensure that their actions are not likely to destroy or adversely modify critical habitat under section 7. Non-Federal entities

that receive Federal funding, assistance, permits, or otherwise require approval or authorization from a Federal agency for an action, may be indirectly affected by the designation of critical habitat, but the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly affected because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandate Reform Act would not apply, nor would critical habitat shift to state governments the costs of the large entitlement programs listed above.

(2) This proposed rule will not significantly or uniquely affect small governments because it is not likely to produce a Federal mandate of $100 million or greater in any year; that is, it is not a "significant regulatory action" under the Unfunded Mandates Reform Act. In addition, the designation of critical habitat imposes no obligations on local, state, or tribal governments. Therefore, a Small Government Agency Plan is not required.

Information Quality Act and Peer Review

The data and analyses supporting this proposed action have undergone a pre-dissemination review and have been determined to be in compliance with applicable information quality guidelines implementing the Information Quality Act (Section 515 of Pub. L. 106–554).

On December 16, 2004, the OMB issued its Final Information Quality Bulletin for Peer Review (Bulletin) establishing minimum peer review standards, a transparent process for public disclosure of peer review planning, and opportunities for public participation. The Bulletin was published in the **Federal Register** on January 14, 2005 (70 FR 2664). The primary purpose of the Bulletin, which was implemented under the Information Quality Act, is to improve the quality and credibility of scientific information disseminated by the Federal government by requiring peer review of

"influential scientific information" and "highly influential scientific information" prior to public dissemination. Influential scientific information is defined as information the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private sector decisions. The Bulletin provides agencies broad discretion in determining the appropriate process and level of peer review. Stricter standards were established for the peer review of "highly influential scientific assessments," defined as information whose dissemination could have a potential impact of more than $500 million in any one year on either the public or private sector or that the information is novel, controversial, or precedent-setting, or has significant interagency interest. The evaluation of critical habitat presented in this proposed rule and the information presented in the supporting Draft Impact Analysis Report are considered influential scientific information subject to peer review. To satisfy our requirements under the OMB Bulletin, we are obtaining independent peer review of the information used to prepare this proposed rule and will address all comments received in developing the final rule.

Executive Order 13175, Consultation and Coordination with Indian Tribal Governments

The longstanding and distinctive relationship between the Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and co-management agreements, which differentiate tribal governments from the other entities that deal with, or are affected by, the Federal Government. This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the United States toward Indian tribes and the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. Executive Order 13175 on Consultation and Coordination with Indian Tribal Governments outlines the responsibilities of the Federal Government in matters affecting tribal interests. Section 161 of Pub. L. 108-199 (188 Stat. 452), as amended by

section 518 of Pub. L. 108-447 (118 Stat. 3267), directs all Federal agencies to consult with Alaska Native corporations on the same basis as Indian tribes under E.O. 13175.

As the entire proposed critical habitat area is located seaward of the line of MLLW and does not extend into tidally-influenced channels of tributary waters, no tribal-owned lands overlap with the proposed designation. However, we seek comments and information concerning tribal and Alaska Native corporation activities that are likely to be affected by the proposed designation (see **Public Comments Solicited** section). Although this proposed designation overlaps with areas used by Alaska Natives for subsistence, cultural, and other purposes, no restrictions on subsistence hunting are associated with the critical habitat designation. We coordinate with Alaska Native hunters regarding management issues related to bearded seals through the Ice Seal Committee (ISC), a co-management organization under section 119 of the MMPA. We discussed the designation of critical habitat for the Beringia DPS of the bearded seal with the ISC and provided updates regarding the timeline for publication of this proposed rule. We will also contact potentially affected tribes and Alaska Native corporations by mail and offer them the opportunity to consult on the designation of critical habitat for the Beringia DPS and discuss any concerns they may have. If we receive any such requests in response to this proposed rule, we will respond to each request before issuing a final rule.

Executive Order 12630, Takings

Under E.O. 12630, Federal agencies must consider the effects of their actions on constitutionally protected private property rights and avoid unnecessary takings of property. A taking of property includes actions that result in physical invasion or occupancy of private property, and regulations imposed on private property that substantially affect its value or use. In accordance with E.O. 12630, the proposed rule does not have significant takings implications. The designation of critical habitat directly affects only Federal agency actions (*i.e.*, those actions authorized, funded, or carried out

by Federal agencies). Further, no areas of private property exist within the proposed critical habitat and hence none would be affected by this action. Therefore, a takings implication assessment is not required.

Executive Order 12866, Regulatory Planning and Review, and Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs

OMB has determined that this proposed rule is significant for purposes of E.O. 12866 review. A Draft Impact Analysis Report has been prepared that considers the economic costs and benefits of the proposed critical habitat designation and alternatives to this rulemaking as required under E.O. 12866. To review this report, see the **ADDRESSES** section above.

Based on the Draft Impact Analysis Report, the total estimated present value of the incremental impacts of the proposed critical habitat designation is approximately $786,000 over the next 10 years (discounted at 7 percent). Assuming a 7 percent discount rate, the range of annual impacts is estimated to be $57,000 to $105,000. Overall, economic impacts are expected to be small and Federal agencies are anticipated to bear at least 45 percent of these costs. While there are expected beneficial economic impacts of designating critical habitat for the Beringia DPS, there are insufficient data available to monetize those impacts (see *Benefits of Designation* section).

This proposed rulemaking is expected to be regulatory under E.O. 13771.

Executive Order 13132, Federalism

Executive Order 13132 requires agencies to take into account any federalism impacts of regulations under development. It includes specific consultation directives for situations in which a regulation may preempt state law or impose substantial direct compliance costs on state and local governments (unless required by statute). Pursuant to E.O. 13132, we determined that this proposed rule does not have significant federalism effects and that a federalism assessment is not required. The designation of critical habitat

directly affects only the responsibilities of Federal agencies. As a result, the proposed rule does not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in the Order. State or local governments may be indirectly affected by the proposed designation if they require Federal funds or formal approval or authorization from a Federal agency as a prerequisite to conducting an action. In these cases, the State or local government agency may participate in the ESA section 7 consultation as a third party. However, in keeping with Department of Commerce policies and consistent with ESA regulations at 50 CFR 424.16(c)(1)(ii), we will request information for this proposed rule from the appropriate state resource agencies in Alaska.

Executive Order 13211, Energy Supply, Distribution, and Use

Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking any significant energy action. Under E.O. 13211, a significant energy action means any action by an agency that is expected to lead to the promulgation of a final rule or regulation that is a significant regulatory action under E.O. 12866 and is likely to have a significant adverse effect on the supply, distribution, or use of energy. We have considered the potential impacts of this proposed critical habitat designation on the supply, distribution, or use of energy (see Draft Impact Analysis Report for this proposed rule). This proposed critical habitat designation overlaps with five BOEM planning areas for Outer Continental Shelf oil and gas leasing; however, the Beaufort and Chukchi Sea planning areas are the only areas with existing or planned leases.

Currently, the majority of oil and gas production occurs on land adjacent to the Beaufort Sea and the proposed critical habitat area. Any proposed offshore oil and gas projects would likely undergo an ESA section 7 consultation to ensure that the project would not likely destroy or adversely modify designated critical habitat. However, as

discussed in the Draft Impact Analysis Report for this proposed rule, such consultations will not result in any new and significant effects on energy supply, distribution, or use. ESA section 7 consultations have occurred for numerous oil and gas projects within the area of the critical habitat designation (*e.g.*, regarding possible effects on endangered bowhead whales, a species without designated critical habitat) without adversely affecting energy supply, distribution, or use, and we would expect the same relative to critical habitat for the Beringia DPS of the bearded seal. We have, therefore, determined that the energy effects of this proposed rule are unlikely to exceed the impact thresholds identified in E.O. 13211, and that this rulemaking is not a significant energy action.

List of Subjects

50 CFR Part 223

Endangered and threatened species.

50 CFR Part 226

Endangered and threatened species.

Dated: December 28, 2020.

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Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs,

National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR parts 223 and 226 are proposed to

be amended as follows:

PART 223—THREATENED MARINE AND ANADROMOUS SPECIES

1. The authority citation for part 223 continues to read as follows:

Authority: 16 U.S.C. 1531-1543; subpart B, § 223.201-202 also issued under 16 U.S.C. 1361 *et seq.*; 16 U.S.C. 5503(d) for § 223.206(d)(9).

2. In § 223.102, amend the table in paragraph (e), under Marine Mammals, by revising the entry for "Seal, bearded (Beringia DPS)" to read as follows:

§ 223.102 Enumeration of threatened marine and anadromous species.

* * * * *

(e) * * *

Species[1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	**Scientific name**	**Description of listed entity**			
Marine Mammals					
* * * * * * *					
Seal, bearded (Beringia DPS)	*Erignathus barbatus nauticus*	Bearded seals originating from breeding areas in the Arctic Ocean and adjacent seas in the Pacific Ocean between 145° E. Long. (Novosibirskiye) and 130° W. Long., and east of 157° E. Long. or east of the Kamchatka Peninsula	77 FR 76740, Dec. 28, 2012	226.230	NA.
* * * * * * *					

[1]Species includes taxonomic species, subspecies, distinct population segments (DPSs) (for a policy statement, see 61 FR 4722; February 7, 1996), and evolutionarily significant units (ESUs) (for a policy statement, see 56 FR 58612; November 20, 1991).

* * * * *

PART 226—DESIGNATED CRITICAL HABITAT

3. The authority citation for part 226 continues to read as follows:

Authority: 16 U.S.C. 1533.

4. Add § 226.230 to read as follows:

§ 226.230 Critical Habitat for the Beringia Distinct Population Segment of the Bearded Seal Subspecies *Erignathus barbatus nauticus*.

Critical habitat is designated for the Beringia distinct population segment of the bearded seal subspecies *Erignathus barbatus nauticus* (Beringia DPS) as depicted in this section. The map, clarified by the textual descriptions in this section, is the definitive source for determining the critical habitat boundaries.

(a) *Critical habitat boundaries.* Critical habitat for the Beringia DPS includes marine waters within one specific area in the Bering, Chukchi, and Beaufort seas, extending from the line of mean lower low water (MLLW) to an offshore limit with a maximum water depth of 200 m from the ocean surface within the U.S. Exclusive Economic Zone (EEZ). Critical habitat does not extend into tidally-influenced channels of tributary waters of the Bering, Chukchi, or Beaufort seas. The 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 boundary then follows the limit of the U.S. EEZ southwestward and south to the intersection of the southern boundary of the critical habitat in the Bering Sea at 60°32′26′′ N/179°9′53′′ W. The southern boundary extends southeastward from this intersection point to 57°58′ N/170°25′ W, then eastward to 58°29′ N/164°46′ W, then follows longitude 164°46′ W to the line of MLLW near the mouth of the Kolovinerak River. Critical habitat does not include permanent manmade structures such as boat ramps, docks, and pilings that were in existence within the legal boundaries on or before the effective date of this rule.

(b) *Essential features.* The essential features for the conservation of the Beringia DPS are:

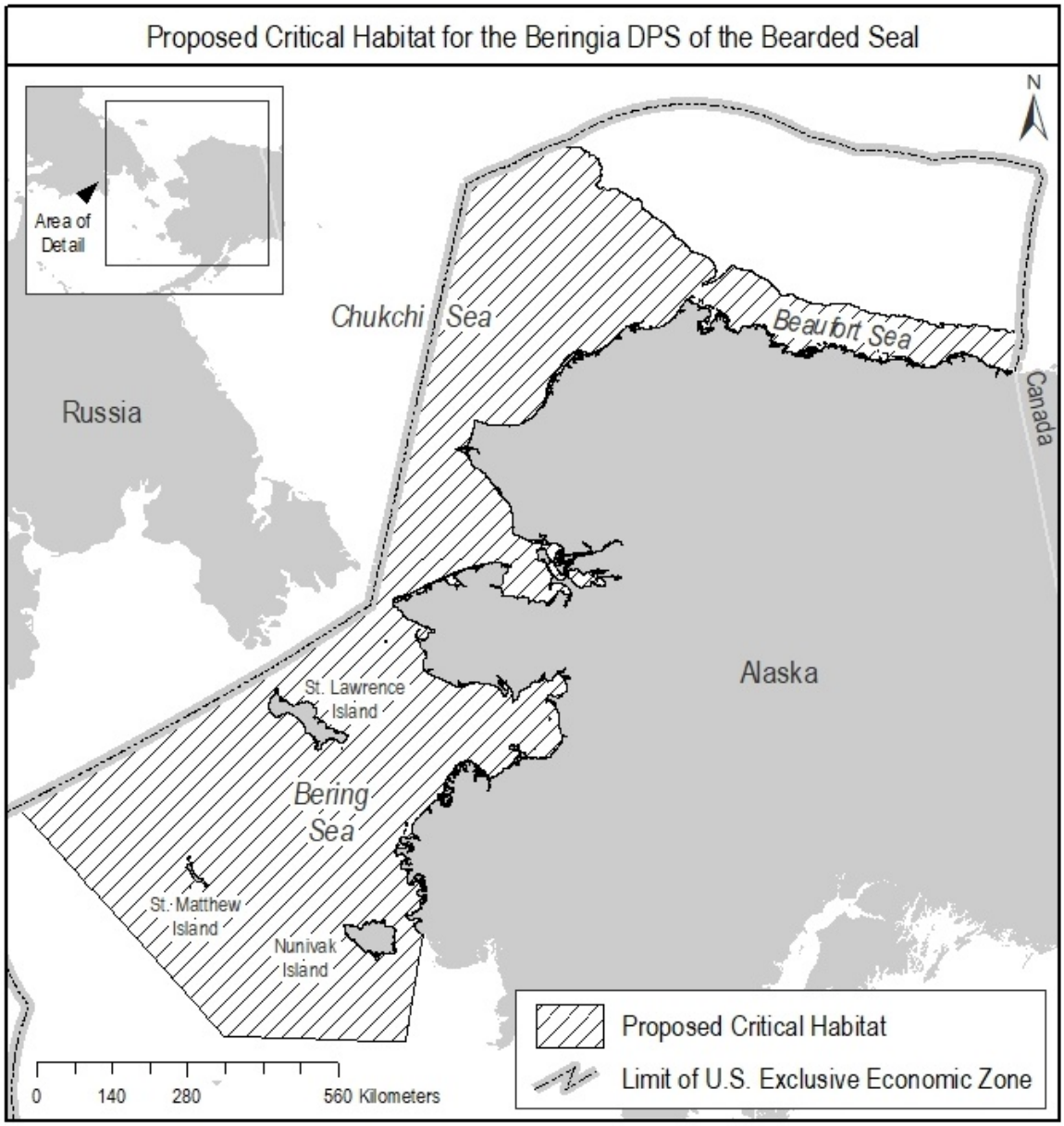
(1) Sea ice habitat suitable for whelping and nursing, which is defined as areas with waters 200 m or less in depth containing pack ice of at least 25 percent concentration and providing bearded seals access to those waters from the ice.

(2) Sea ice habitat suitable as a platform for molting, which is defined as areas with waters 200 m or less in depth containing pack ice of at least 15 percent concentration and providing bearded seals access to those waters from the ice.

(3) 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.

(4) Acoustic conditions that allow for effective communication by bearded seals for breeding purposes within waters used by breeding bearded seals.

(c) *Map of Beringia DPS critical habitat*.



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