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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 226

[Docket No. 120912447-4278-01]

RIN 0648-BC56

Endangered and Threatened Species; Designation of Critical Habitat for the Arctic

Ringed Seal

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and

Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: We, NMFS, propose to designate critical habitat for the Arctic subspecies (Phoca hispida hispida) of the ringed seal (Phoca hispida) under the Endangered Species Act (ESA). We propose to designate one specific area of marine habitat in the northern

Bering, Chukchi, and Beaufort seas. We are soliciting comments from the public on all

aspects of the proposal, including our identification and consideration of the economic,

national security, and other relevant impacts of the proposed designation.

DATES: Comments on this proposed rule must be received by [insert date 90 days after

date of publication in the FEDERAL REGISTER]. Four public hearings on the proposed

rule will be held in Alaska (Anchorage, Barrow, Kotzebue, and Nome). The dates and

times of these hearings will be provided in a subsequent <u>Federal Register</u> notice.

ADDRESSES: You may submit comments on this document, identified by FDMS

1

Docket Number NOAA-NMFS-2013-0114, by any one of the following methods:

- Electronic Submission: Submit all electronic public comments via the Federal e-Rulemaking Portal. Go to http://www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2013-0114, click the "Comment Now!" icon, complete the required fields, and enter or attach your comments.
- Mail: Address written comments to Jon Kurland, Assistant Regional
 Administrator for Protected Resources, Alaska Region NMFS, Attn: Ellen
 Sebastian. Mail comments to P.O. Box 21668, Juneau, AK 99802-1668.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on http://www.regulations.gov without change. All personal identifying information (e.g., name, address, etc.), 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). Attachments to electronic comments will be accepted in Microsoft Word, Excel, or Adobe PDF file formats only.

Electronic copies of the proposed rule, list of references and supporting documents, and the draft economic report (i.e., Regulatory Impact Review (RIR)/4(b)(2) Preparatory Assessment/Initial Regulatory Flexibility Act (IRFA) report) prepared for this action are available from http://www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2013-0114 or from the NMFS Alaska Region Web site at

http://alaskafisheries.noaa.gov.

FOR FURTHER INFORMATION CONTACT: Tamara Olson, NMFS Alaska Region, (907) 271-5006; Jon Kurland, NMFS Alaska Region, (907) 586-7638; or Marta Nammack, NMFS Office of Protected Resources, (301) 427-8469.

SUPPLEMENTARY INFORMATION:

Background

On December 28, 2012, we published a final rule to list the Arctic ringed seal as threatened under the ESA (77 FR 76706). Section 4(b)(6)(C) of the ESA requires the Secretary of Commerce (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 1 year. At the time of listing, we announced our intention to designate critical habitat for the Arctic ringed seal in separate rulemaking, as sufficient information was not available to: (1) identify and describe the physical and biological features essential to the conservation of the Arctic ringed seal; and (2) assess the economic consequences of designating critical habitat for the Arctic ringed seal. At that time, we also solicited comments related to identification of critical habitat during a 60-day comment period. We received nine comment submissions in response to this solicitation. Subsequently we researched, reviewed, and compiled the best available scientific and commercial data available, including the public comments received to date, to develop a critical habitat proposal for the Arctic ringed seal. We used these data to identify the physical and biological features essential to the conservation of the Arctic ringed seal, specific areas

that we are proposing as critical habitat for the Arctic ringed seal, and the impacts associated with the proposed designation.

This proposed rule would designate critical habitat for the Arctic ringed seal pursuant to section 4(b)(2) of the ESA. Critical habitat is defined by section 3 of the ESA as: "(i) 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 (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed . . . upon a determination by the Secretary that such areas are essential for the conservation of the species." Section 3 of the ESA (16 U.S.C. 1532(3)) also defines the terms "conserve," "conserving," and "conservation" to mean: "to use, and the use of, all methods and procedures that are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary." Critical habitat cannot be designated in areas outside U.S. jurisdiction (50 CFR 424.12(h)).

Section 4(b)(2) of the ESA and our implementing regulations require that, before designating critical habitat, we consider the economic, national security, and other relevant impacts of the designation. The Secretary has discretion to exclude any particular area from the critical habitat if she determines that the benefits of exclusion outweigh the benefits of designation. The Secretary, however, may not exclude a particular area if the failure to designate that area as critical habitat would result in the extinction of the species.

Once critical habitat is designated, section 7(a)(2) of the ESA requires Federal agencies to ensure they do not fund, authorize, or carry out any actions that will destroy or adversely modify that habitat. This requirement is additional to the section 7 requirement that Federal agencies ensure their actions do not jeopardize the continued existence of listed species.

This proposed rule describes information on Arctic ringed seal biology, distribution, and habitat use, the methods used to develop the proposed designation, and our proposal to designate critical habitat for the Arctic ringed seal.

Arctic Ringed Seal Biology and Habitat Use

The following discussion of the natural history and ecology of Arctic ringed seals as it relates to habitat use is based on the best scientific and commercial data available, including information in the status review report for the ringed seal (Kelly et al., 2010a). In this proposed rule, we focus on those aspects directly relevant to the designation of critical habitat for the Arctic ringed seal. For more detailed information on the biology and habitat use of ringed seals, refer to the status review report and the proposed and final listing rules (75 FR 77476, December 10, 2010; 77 FR 76706, December 28, 2012).

The Arctic ringed seal is the smallest of the northern seals, with typical adult body size of 1.5 m in length and 70 kg in weight. Arctic ringed seal females generally reach sexual maturity at 3 to 6 years of age, and males at 5 to 7 years of age, but with geographic and temporal variability depending on animal condition and population structure. The average life span of Arctic ringed seals is about 15 to 28 years.

Seasonal Distribution and Habitat Use

Arctic ringed seals are circumpolar and are found throughout ice-covered waters of the Arctic Basin and southward into adjacent seas, including the Bering and Labrador seas. In the United States, ringed seals occur in the Beaufort, Chukchi, and Bering seas off Alaska's coast, as far south as Bristol Bay in years of extensive ice coverage (King, 1964; Frost and Lowry, 1981; Frost, 1985; Kelly, 1988; Rice, 1998).

Ringed seals are adapted to remaining in heavily ice-covered areas throughout the fall, winter, and spring by using the stout claws on their foreflippers to maintain breathing holes in the ice. Arctic ringed seals do not normally come ashore, but instead use sea ice as a substrate for resting, whelping (birthing), nursing, and molting (shedding and regrowing hair and outer skin layers). The seasonality of ice cover strongly influences Arctic ringed seal movements, foraging, reproductive behavior, and vulnerability to predation. Kelly et al. (2010b) referred to three time periods important to Arctic ringed seal seasonal movements and habitat use: the winter through early spring "subnivean period" when the seals rest primarily in subnivean lairs (snow caves on top of the ice); the late spring to early summer "basking period" between abandonment of the lairs and melting of the seasonal sea ice when the seals undergo their annual molt; and the openwater "foraging period" when feeding occurs most intensively during late summer through fall.

Subnivean Period: With the advance of winter, many Arctic ringed seals that summer in the Beaufort and Chukchi seas are thought to move generally west and south with the advancing ice, while others remain in the Beaufort Sea (Frost, 1985). Adult movements during the subnivean period have been reported as typically limited,

especially where ice cover is extensive, likely due to maintenance of breathing holes and social behavior during the breeding season (Kelly and Quakenbush, 1990; Kelly <u>et al.</u>, 2010b; Crawford <u>et al.</u>, 2012). In contrast, subadult Arctic ringed seals have been observed to travel relatively long distances in winter to near the ice edge in the Bering Sea (Crawford et al., 2012).

At freeze up in the fall, ringed seals surface to breathe in the remaining open water of cracks and leads. As these openings in the ice freeze over, the seals push through the ice to breathe until it is too thick (Lukin and Potelov, 1978). They then open breathing holes by abrading the ice with the claws on their foreflippers (Bailey and Hendee, 1926; Smith and Stirling, 1975). As the ice thickens, the seals continue to maintain the breathing holes by scratching at the walls. As snow accumulates and buries the breathing hole, the seals breathe through the snow layer. Ringed seals excavate lairs in the snow above breathing holes where snow depth is sufficient (Chapskii, 1940; McLaren, 1958; Smith and Stirling, 1975). These subnivean lairs are occupied for resting, whelping, and nursing young in areas of annual landfast (shorefast) ice (McLaren, 1958; Burns, 1970) and stable pack ice (Finley et al., 1983; Wiig et al., 1999; Bengtson et al., 2005) that has undergone a low to moderate amount of deformation and where pressure ridges or ice hummocks have caused snow to form drifts of sufficient depth (Smith and Stirling, 1975; Lydersen and Gjertz, 1986; Kelly, 1988; Furgal et al., 1996; Lydersen, 1998).

Females give birth to a single pup in their lairs during mid-March through April (Kelly et al., 2010a) and the pups are nursed in the lairs for an average of 39 days

(Hammill <u>et al.</u>, 1991). Females continue to forage throughout lactation while making frequent visits to birth lairs (Hammill, 1987; Kelly and Wartzok, 1996; Simpkins <u>et al.</u>, 2001). The pups develop foraging skills prior to weaning (Lydersen and Hammill, 1993), and are normally weaned before break-up of spring ice.

Lairs provide protection from cold and predators throughout the winter months, but they are especially important for protecting newborn ringed seals. Lairs conceal ringed seals from predators, an advantage especially important to the small pups that start life with minimal tolerance for immersion in cold water (Smith et al., 1991). Polar bears prey heavily on ringed seals. Other predators include Arctic foxes, common ravens, and glaucous gulls. Pups in lairs with thin snow cover are more vulnerable to polar bear predation than pups in lairs with thick snow cover (Hammill and Smith, 1989; Ferguson et al., 2005). For example, Hammill and Smith (1991) noted that polar bear predation on ringed seal pups increased 4-fold in a year when average snow depths in their study area decreased from 23 to 10 cm. When ringed seal pups are forced out of subnivean lairs prematurely because of low snow accumulation and/or early melts, gulls and ravens can also successfully prey on them (Kumlien, 1879; Gjertz and Lydersen, 1983; Lydersen and Gjertz, 1987; Lydersen et al., 1987; Lydersen and Smith, 1989; Lydersen and Ryg, 1990; Lydersen, 1998). Stirling and Smith (2004) surmised that most pups that survived exposure to cold after their subnivean lairs collapsed during unseasonal rains were eventually killed by polar bears, Arctic foxes, or gulls.

Subnivean lairs also provide refuge from air temperatures too low for survival of ringed seal pups. When forced to flee into the water to avoid predators, the ringed seal

pups that survive depend on the subnivean lairs to subsequently warm themselves. When snow cover is insufficient, pups can freeze in their lairs, as documented when roofs of lairs in the White Sea were only 5 to 10 cm thick (Lukin and Potelov, 1978). Stirling and Smith (2004) also documented exposure of ringed seals to hypothermia following the collapse of subnivean lairs during unseasonal rains near southeastern Baffin Island.

During winter and spring, Arctic ringed seals are found throughout the Chukchi and Beaufort seas; and in the Bering Sea, surveys indicate that ringed seals use nearly the entire ice field over the Bering Sea shelf. During an exceptionally high ice year (1976), Braham et al. (1984) found ringed seals present in the southeastern Bering Sea north of the Pribilof Islands to outer Bristol Bay, primarily north of the ice front. But they noted that most of these seals were likely immature or nonbreeding animals. Frost (1985) indicated that ringed seals "occur as far south as Nunivak Island and Bristol Bay, depending on ice conditions in a particular year, but generally are not abundant south of Norton Sound except in nearshore areas." However, recent surveys conducted in the Bering Sea during spring have documented ringed seals in both nearshore and offshore habitat including south of Norton Sound, AK (National Marine Mammal Laboratory, 2012, unpublished data). Crawford et al. (2012) reported that the adult ringed seals tagged in Kotzebue Sound, AK, remained in the Chukchi Sea and the northern Bering Sea north of St. Lawrence Island during winter and spring. However, movement data for ringed seals tagged near Barrow, AK, indicated that some adults over-wintered farther south toward the shelf break in the Bering Sea (North Slope Borough, 2012, unpublished data). Finally, harvest of ringed seal pups by hunters in Quinhagak, Alaska (Coffing et

<u>al.</u>, 1998) suggests that some ringed seals may whelp south of Nunivak Island.

Basking Period: Numbers of ringed seals hauled out on the surface of the ice typically begin to increase during spring as the temperatures warm and the snow covering the seals' lairs melts. Although the snow cover can melt rapidly, the ice remains largely intact and serves as a substrate for annual molting, during which time seals spend many hours basking in the sun (Smith, 1973; Smith and Hammill, 1981; Finley, 1979; Kelly and Quakenbush, 1990; Kelly et al., 2010b). Adults generally molt from mid-May to mid-July (McLaren, 1958), although there is regional variation. Kelly and Quakenbush (1990) reported that in the Beaufort and Chukchi seas, most seals begin basking in late May or early June. Usually the largest numbers of basking seals are observed in June (McLaren, 1958; Smith, 1973; Finley, 1979; Smith et al., 1979; Smith and Hammill, 1981; Moulton et al., 2002).

The relatively long periods of time that ringed seals spend out of the water during the molt (Smith, 1973; Smith and Hammill, 1981; Kelly et al., 2010b) have been ascribed to the need to maintain elevated skin temperatures during new hair growth (Feltz and Fay, 1966; Kelly and Quakenbush, 1990). Higher skin temperatures are facilitated by basking on the ice and this may accelerate shedding and regrowth of hair and skin (Feltz and Fay, 1966). Feeding is reduced and the seal's metabolism declines during the molt (Ashwell-Erickson et al., 1986). As seals complete this phase of the annual pelage cycle and the seasonal sea ice melts during the summer, ringed seals spend increasing amounts of time in the water feeding (Kelly et al., 2010b).

Open-Water Foraging Period: Most Arctic ringed seals that winter in the Bering

and Chukchi seas are thought to migrate northward in spring with the receding ice edge and spend summer in the pack ice of the northern Chukchi and Beaufort seas (Burns, 1970; Frost, 1985). Arctic ringed seals are also dispersed in ice-free areas of the Bering, Chukchi, and Beaufort seas during the open-water period. Overall, the record from satellite tracking indicates that Arctic ringed seals breeding in landfast ice practice one of two strategies during the open-water foraging period (Freitas et al., 2008). Some seals forage within 100 km of their landfast ice breeding habitat, while others make extensive movements of hundreds or thousands of kilometers to forage in highly productive areas and along the pack ice edge. Movements during the open-water foraging period by Arctic ringed seals that breed in the pack ice are unknown. High- quality, abundant food is important to the annual energy budgets of ringed seals. Ringed seals typically lose a significant proportion of their blubber mass during the spring to early summer and then replenish their blubber reserves by increasing feeding during late summer, fall, and winter.

Diet

Arctic ringed seals eat a wide variety of prey spanning several trophic levels; however, most prey is small and preferred fishes tend to be schooling species that form dense aggregations. Ringed seals rarely prey upon more than 10 to 15 species in any specific geographical location, and not more than 2 to 4 of those species are considered important prey. Despite regional and seasonal variations in the diets of Arctic ringed seals, fishes of the cod family tend to dominate their diet in many areas from late autumn through early spring. Arctic cod (Boreogadus saida) is often reported to be among the

most important prey species, especially during the ice-covered periods of the year.

Crustaceans appear to become more important in many areas during the open water season, and are often found to dominate the diets of young ringed seals.

Critical Habitat Identification

In the following sections, we describe the relevant definitions and requirements in the ESA, and our implementing regulations, and the key information and criteria used to prepare this proposed critical habitat designation. In accordance with section 4(b)(2) of the ESA and our implementing regulations at 50 CFR part 424, this proposed critical habitat designation is based on the best scientific data available. Our primary sources of information are the NMFS status review report for the ringed seal (Kelly et al., 2010a) and the proposed and final rules to list four subspecies of the ringed seals, including the Arctic ringed seal (75 FR 77476, December 10, 2010; 77 FR 76706, December 28, 2012). Additional information sources include articles in peer-reviewed journals, other scientific reports, and relevant Geographic Information System (GIS) data (such as shoreline, maritime limits and boundaries, and sea ice extent) for area calculations and mapping.

We followed a five-step process to identify specific areas that may qualify as critical habitat for the Arctic ringed seal: (1) determine the geographical area occupied by the species; (2) identify physical or biological habitat features essential to the conservation of the species; (3) delineate specific areas within the geographical area occupied by the species on which are found the physical or biological features; (4) determine whether the features in a specific area may require special management considerations or protection; and (5) determine whether any unoccupied areas are

essential for conservation. Our evaluation and conclusions are described in detail in the following sections.

Geographical Area Occupied by the Species

The range of the Arctic ringed seal was identified in the final ESA listing rule (77 FR 76706; December 28, 2012) as the Arctic Ocean and adjacent seas, except west of 157° E. long. (the Kamchatka Peninsula), where the Okhotsk subspecies of the ringed seal occurs, or in the Baltic Sea where the Baltic subspecies of the ringed seal is found. As noted above, 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 Arctic ringed seals actually 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 into the Bering Sea, as far south as Bristol Bay in years with extensive ice coverage (Kelly et al., 2010a). We consider the shoreward extent of this area to be the "coast line" of Alaska as that term has been defined in the Submerged Lands Act ("the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters"), 43 U.S.C. 1301(c).

Physical or Biological Features Essential to the Conservation of the Species

Implementing regulations at 50 CFR 424.12(b) state that in determining what areas are critical habitat, the Secretary "shall consider those physical and biological features that are essential to the conservation of a given species and that may require special management considerations or protection." These features may include: "(1)

Space for individual and population growth, and for normal behavior; (2) Food, water, air, light, minerals, or other nutritional or physiological requirements; (3) Cover or shelter; (4) Sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and generally: (5) Habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species." The regulations further state the Secretary shall "focus on the principal biological or physical constituent elements within the defined area that are essential to the conservation of the species. Known primary constituent elements shall be listed with the critical habitat description. Primary constituent elements may include the following: roost sites, nesting grounds, spawning sites, feeding sites, seasonal wetland or dryland, water quality or quantity, host species or plant pollinator, geological formation, vegetation type, tide, and specific soil types." For the purposes of this proposed rule, the essential features identified are the same as primary constituent elements. Based on the best scientific information available on the physical and biological features and habitat characteristics required to sustain its life history functions, we have determined that the following features are essential to the conservation of the Arctic ringed seal in the United States.

1. Sea ice habitat suitable for the formation and maintenance of subnivean birth lairs used for sheltering pups during whelping and nursing, which is defined as seasonal landfast (shorefast) ice, or dense, stable pack ice, that has undergone deformation and contains snowdrifts at least 54 cm deep.

Sea ice habitat suitable for the formation and maintenance of subnivean birth lairs used for sheltering pups during whelping and nursing is essential to conservation of the

Arctic ringed seal because as discussed above, without the protection of lairs, ringed seal pups are more vulnerable to freezing and predation.

Snowdrifts of sufficient depth for birth lair formation and maintenance typically occur in deformed ice where drifting has taken place along pressure ridges or ice hummocks (Smith and Stirling, 1975; Lydersen and Gjertz, 1986; Kelly, 1988; Furgal et al., 1996; Lydersen, 1998). For purposes of assessing potential impacts of projected changes in April Northern Hemisphere snow conditions on ringed seals, Kelly et al. (2010a) considered 20 cm to be the minimum average snow depth required on areas of flat ice to form drifts of sufficient depth to support birth lair formation. Further, Kelly et al. (2010a, p. 109) discussed that ringed seals require snow drift depths of 50 to 65 cm or more to support birth lair formation. To identify a snow drift depth criterion for sea ice habitat that we consider essential for Arctic ringed seal birth lair formation and maintenance, we derived a specific depth threshold as follows. At least seven studies have reported minimum snowdrift depth measurements at Arctic ringed seal birth lairs (typically measured near the center of the lairs or over the breathing holes) off the coasts of Alaska (Kelly et al., 1986; Frost and Burns, 1989), the Canadian Arctic Archipelago (Smith and Stirling, 1975; Kelly, 1988; Furgal et al., 1996), Svalbard (Lydersen and Gjertz, 1986), and in the White Sea (Lukin and Potelov, 1978). The average minimum snowdrift depth at birth lairs was 54 cm across all of the studies combined, and 64 cm in the Alaska studies only. The average from studies in Alaska is based on data from fewer years over a shorter time span than from all studies combined (3 years during 1982-1984 versus 11 years during 1971-1993, respectively); consequently, the Alaska-specific

average is more likely to be biased if an anomalous weather pattern occurred during its more limited timeframe. For this reason, we conclude that the average minimum snowdrift depth based on all studies combined (54 cm) provides the best estimate of the minimum snowdrift depth that is essential for birth lairs.

Although Arctic ringed seals appear to favor landfast ice as whelping habitat, ringed seal whelping has also been observed on both nearshore and offshore drifting pack ice. As Reeves (1998) noted, nearly all research on Arctic ringed seal reproduction has been conducted in landfast ice, and the potential importance of stable but drifting pack ice has not been adequately investigated. Studies in the Barents Sea (Wiig et al., 1999) and Baffin Bay (Finley et al., 1983) have documented pup production in pack ice, and Smith and Stirling (1975), citing unpublished data from the "Western Arctic" (presumably the Canadian Beaufort Sea), indicated that "the offshore areas of shifting but relatively stable ice are an important part of the breeding habitat." Lentfer (1972) reported "a significant amount of ringed seal denning and pupping on moving heavy pack ice north of Barrow." Arctic ringed seal vocalizations detected throughout the winter and spring in long-term autonomous acoustic recordings collected along the shelf break north-northwest of Barrow also suggest that some ringed seals overwinter and breed in offshore pack ice (Jones et al., in press). We therefore conclude that the best scientific information available indicates that sea ice habitat essential for construction and maintenance of birth lairs includes areas of both shorefast ice and dense, stable pack ice that contain snowdrifts of sufficient depths, i.e., 54 cm.

2. Sea ice habitat suitable as a platform for basking and molting, which is defined

as sea ice of 15 percent or more concentration.

Sea ice habitat suitable as a platform for basking and molting is essential to conservation of the Arctic ringed seal because molting is a biologically-important, energy-intensive process that could incur increased energetic costs if it were to occur in water, or increased risk of predation if it were to occur on land. Moreover, we are unaware of any studies establishing whether Arctic ringed seals can molt successfully in water, or reports of healthy Arctic ringed seals basking on land (they are known to come ashore when sick). If Arctic ringed seals were unable to successfully complete their annual molt, they would be at increased risk from parasites and disease.

During their annual molt, Arctic ringed seals transition from lair use to basking on the surface of the ice for long periods of time near breathing holes, lairs, or cracks in the ice. There are limited data available on ice concentrations (percentage of ocean surface covered by sea ice) favored by Arctic ringed seals during the basking period, in particular for the time period following ice breakup. Although a number of studies have reported an apparent preference for consolidated stable ice (i.e., landfast ice and consolidated pack ice), at least during the initial weeks of the basking period, some of these studies have also reported observations of Arctic ringed seals hauled out at low densities in unconsolidated ice (e.g., Stirling et al., 1982; Kingsley et al., 1985; Lunn et al., 1997; Chambellant et al., 2012). Arctic ringed seals in the Chukchi Sea have also been observed basking in high densities on the last remnants of the seasonal sea ice during late June to early July, near the end of the molting period (Shawn Dahle, NMFS, personal communication, 2013). Crawford et al. (2012) reported that the average ice

concentrations (\pm standard error [SE]; standard error is a measure of variability in the data) used by ringed seals in the Chukchi and Bering seas during the basking period in June was 20 percent (SE = 7.8 percent) for subadults and 38 percent (SE = 21.4 percent) for adults. Based on the best available information, we conclude that sea ice essential for basking and molting is sea ice of at least 15 percent concentration.

3. Primary prey resources to support Arctic ringed seals, which are defined to be Arctic cod, saffron cod, shrimps, and amphipods.

Primary prey resources are essential to conserving the Arctic ringed seal, because Arctic ringed seals likely rely on these prey resources the most to meet their annual energy budgets. Arctic ringed seals feed on a wide variety of vertebrate and invertebrate prey species, but certain prey species appear to occupy a prominent role in their diets in waters along the Alaskan coast. Quakenbush et al. (2011, Table 3) reported that prey items found in at least 25 percent of ringed seal stomachs collected within the 1961 to 1984 and 1998 to 2009 time periods in the Bering and Chukchi seas included Arctic cod, saffron cod (Eleginus gracilis), shrimps (from the families Hippolytidae, Pandalidae, and Crangonidae), and amphipods (primarily from the families Gammaridae and Hyperiidae). In the Barrow vicinity, Dehn et al. (2007, Table 2) reported that prey items found in at least 25 percent of the stomachs of ringed seals collected between 1996 and 2001 included euphausiids (<u>Thysanoessa</u> spp.), cods (primarily Arctic and saffron cod), mysids (Mysis and Neomysis spp.), amphipods, and Pandalid shrimps. Finally, Lowry et al. (1980) found that prey items that were consumed in the greatest quantities (i.e., ≥ 25 percent of the total food volume in any of the five seasonal samples) by ringed seals in

the Bering and Chukchi seas included Arctic cod, saffron cod, shrimp, and amphipods (Chukchi Sea only), and in the central Beaufort Sea included Arctic cod as well as Gammarid and Hyperiid amphipods. Arctic cod, saffron cod, shrimps, and amphipods were identified as prominent prey species for the studies conducted in both the Bering Sea and the Chukchi Sea. As noted above, Arctic cod and amphipods were also identified as the most important prey species by volume for ringed seals sampled in the Beaufort Sea. Therefore, based on these studies, we conclude that Arctic cod, saffron cod, shrimps, and amphipods are the primary prey resources of Arctic ringed seals in U.S. waters. As discussed above, Arctic ringed seals feed on a variety of prey items and regional and seasonal differences in diet have been reported; therefore, we conclude that areas in which the primary prey essential feature occurs will contain one or more of these particular prey resources.

Specific Areas Containing Physical or Biological Features Essential to the Species

After determining the geographical area occupied by the Arctic ringed seal at the time of listing, and identifying the physical and biological features essential to its conservation, we then considered which specific area(s) may be eligible for designation as critical habitat. For a specific area to be eligible for designation, it must contain at least one physical or biological feature essential to the conservation of the species that may require special management considerations or protection. When several habitats, each satisfying the requirements for designation as critical habitat, are located in proximity to one another, a single inclusive area may be designated as critical habitat (50 CFR 424.12(d)).

In identifying these specific areas, we first focused on those physical or biological features that support the critical Arctic ringed seal life history functions of whelping and nursing, when birth lairs are constructed and maintained, and molting (i.e., specific areas that contain the sea ice essential features). As discussed above, Arctic ringed seals are highly associated with sea ice, and are thought to migrate seasonally to maintain access to the ice. Arctic ringed seal whelping, nursing, and molting occur in the Bering, Chukchi, and Beaufort seas. To delineate specific areas that contain one or both of the sea ice essential features 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 and on-ice snow cover constrain our ability to map with precision the specific geographic locations where the ice-associated essential features occur. The specific geographic locations of where essential sea ice habitat occurs vary from year to year, or even day to day, depending on many factors, including time of year, local weather, and oceanographic conditions. In addition, the duration that any given location has sea ice habitat essential for birth lairs or for molting can vary annually depending on the rate of ice melt and other factors. Temporal overlap of Arctic ringed 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 sea ice features occur. Since the ESA requires the designation of critical habitat where one or more such features occur, the inability to separately identify areas where each essential ice feature occurs is inconsequential. Arctic ringed seals can range widely, which, combined with the

dynamic variations in sea ice and snow cover, results in individuals distributing broadly and utilizing different sea ice habitat within a range of suitable conditions. We integrated these physical and biological factors into our identification of specific areas based on the seasonal distribution and movements of Arctic ringed seals and satellite-derived estimates of the position of the ice edge over time. Although this approach allowed us to identify specific areas that contain one or both of the essential sea ice features, 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 Arctic ringed seals, as described below.

We first identified the southern boundary of the specific area essential to conservation of the Arctic ringed seal. The information discussed above regarding the distribution of Arctic ringed seals in the Bering Sea (see Seasonal Distribution and Habitat Use) suggests that sea ice essential for Arctic ringed seal birth lairs (and potentially for molting) extends to some point south of St. Matthew Island and Nunivak Island. A precise southern boundary for this habitat is unavailable because existing information is limited on the spatial distribution of Arctic ringed seals in the Bering Sea during spring and where they may whelp. In addition, although minimum on-ice snowdrift depths are essential for ringed seal birth lairs, we are not aware of any available data on this particular component of sea ice cover in the Bering Sea that could assist in identifying the southern boundary of essential Arctic ringed seal birth lair habitat. 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 sea ice edge in

the Bering Sea during April (Fetterer et al., 2002, updated 2009; accessed December 2012), which is the peak month for Arctic ringed seal whelping activity (peak molting for adults occurs later in the spring). This estimated median ice edge is derived from a time series of satellite records for the 1979 to 2000 reference period. We note that the NSIDC has lengthened this reference period to include more recent data through 2010. However, several of those more recent years had above-average ice extent in the Bering Sea; and use of these data would have resulted in the inclusion of areas that are unlikely to contain the essential sea ice features on a consistent basis in more than a few scattered portions of those areas.

The April median ice edge position is located approximately 135 km (73 nmi) southwest of St. Matthew Island and 110 km (59 nmi) south of Nunivak Island, which is relatively consistent with the information discussed above regarding the spring distribution of Arctic ringed seals in the Bering Sea. We therefore conclude that this estimate of the position of the April median ice edge provides a reasonable estimate of the southern extent of where the sea ice essential features occur. To simplify this southern boundary for purposes of delineation on maps, we modified this median ice edge contour as follows: (1) line vertices between the intersection point of the median ice extent at the outer extent of the U.S. EEZ at 60°31 N. lat., 179°13 W. long., and the point at 58°22 N. lat., 170°27 W. long., were removed to form the segment of the southern boundary that extends from the outer extent of the U.S. EEZ southeast approximately 553 km; (2) line vertices between 58°22 N. lat., 170°27 W. long., and 59° N. lat., 164° W. long., were removed to form a second segment of the southern

boundary that extends east approximately 370 km; and (3) finally, these two contour line segments were connected to the mainland coast southeast of Cape Avinof by 164° W. long. This editing produced a simplified southern boundary that retains the general shape of the original contour line, while including 99 percent of the area encompassed by the more detailed original line.

We note that some Arctic ringed seals may whelp south/southeast of the southern boundary described above, as evidenced by harvest records of ringed seal pups (Coffing et al., 1998). However, variability in the annual extent and timing of sea ice in this southernmost portion of the Arctic ringed seal's range in U.S. waters renders the area south of the boundary described above unlikely to contain the essential sea ice features on a consistent basis in more than a few scattered areas.

We then identified the northern boundary of the specific area essential to conservation of the Arctic ringed seal. As discussed above, the available data suggest that although Arctic ringed seals appear to favor landfast ice, they are widely distributed offshore in the northern Chukchi Sea and Beaufort seas and Arctic Ocean. Molting ringed seals use suitable sea ice as a haul-out platform, and many seals are thought to migrate north with the receding ice. As discussed above, the specific geographic locations where the sea ice essential features occur vary within and between years. Given the inherent variability in the spatial distribution of sea ice and the widespread distribution of Arctic ringed seals, including in offshore pack ice, we defined the northern and eastern boundaries of the one specific area identified as the outer extent of the U.S. EEZ. 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 nmi (as opposed to an equidistant line that extends seaward perpendicular to the coast at the U.S.-Canada land border). Because Arctic ringed seals are broadly distributed in suitable habitat, we identified the shoreward extent of this specific area as the coast line of Alaska as defined above (see <u>Geographical Area</u> Occupied by the Species).

The primary prey resources essential feature also occurs within the specific area identified above (e.g., North Pacific Fishery Management Council, 2009; NMFS, 2013), as evidenced by the presence of the primary prey species in the stomach contents of Arctic ringed seals sampled in the Bering, Chukchi, and Beaufort seas off Alaska (see Physical or Biological Features Essential to Conservation of the Species). This is of particular note with respect to the northern boundary of this specific area. Following molting, some Arctic ringed seals may remain in nearshore waters along the coast to feed, while others travel extensively and feed farther offshore (Frost, 1985; Gjertz et al., 2000; Freitas et al., 2008; Kelly et al., 2010b). Harwood et al. (2012) reported that in late summer, several tagged ringed seals that migrated from the Canadian Beaufort Sea to the Beaufort and Chukchi seas off Alaska tended to remain over the continental shelf, almost always remaining within 100 km of shore. However, recent telemetry data documenting Arctic ringed seal movements during the open-water season showed several seals made multiple trips between continental shelf waters and the southern pack ice edge (Herreman et al., 2012), which was well into the Arctic Basin and beyond the outer extent of the U.S. EEZ in some cases. Dive recorders indicated that foraging-type movements occurred

over both the continental shelf and deep waters of the Arctic Basin, suggesting that both areas may be important during the open-water foraging period. Thus, the northern boundary of the specific area identified above accounts not only for habitat containing one or both of the sea ice features essential to conservation, but very likely also includes the distributions of the primary prey resources used by foraging Arctic ringed seals in U.S. waters.

Special Management Considerations or Protection

An occupied area may be designated as critical habitat only if it contains physical or biological features that "may require special management considerations or protection" (50 CFR 424.12(b)). It is important to note that the phrase "may require special management considerations or protection" refers to the physical or biological features, rather than the area proposed as critical habitat. We interpret this to mean that a feature may presently or in the future require special management considerations or protection.

Joint NMFS and USFWS regulations at 50 CFR 424.02(j) define "special management considerations or protection" to mean "any methods or procedures useful in protecting physical and biological features of the environment for the conservation of listed species."

The status review report (Kelly et al., 2010a) and the proposed and final rules listing the subspecies as threatened (75 FR 77476, December 10, 2010; 77 FR 76706, December 28, 2012) comprehensively review the threats affecting the Arctic ringed seal. Based upon that review, we identified several categories of human activities and associated threats that may affect each of the features identified as essential to

conservation of Arctic ringed seals. These activities include: greenhouse gas (GHG) emissions; oil and gas exploration, development, and production; shipping and transportation; and commercial fishing. Below, we evaluate whether each essential feature may require special management considerations or protection due to the potential effects of these activities on the essential features. We note that our evaluation does not consider an exhaustive list of potential effects on the essential features, but rather considers the primary potential effects that we are aware of at this time.

GHG Emissions: The principal threat to the persistence of the Arctic ringed seal is the ongoing and anticipated loss of sea ice and on-ice snow cover stemming from climate change. Climate change related threats to the Arctic ringed seal's habitat are discussed in detail in the ringed seal status review report (Kelly et al., 2010a), as well as in the proposed and final rules listing the Arctic ringed seal as threatened. Activities that release carbon dioxide and other heat-trapping 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 (IPCC, 2013). Such activities may adversely affect the essential features of Arctic ringed seal habitat by diminishing sea ice suitable for birth lairs and molting, and by causing changes in the distribution and/or species composition of prey resources. The best scientific data currently 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 Arctic ringed seals. Regardless, given that the quality and quantity of these essential habitat 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, even if the exact focus and nature of that management is presently undeterminable.

Oil and Gas Activity: Extensive oil and gas reserves, coupled with rising global demand, make it very likely that oil and gas activity will increase throughout the Arctic in the future. 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, ice roads, shore-based facilities, and pipelines; and vessel and aircraft operations. These activities have the potential to affect Arctic ringed seals and their habitat, primarily through noise, physical disturbance, and pollution, particularly in the event of an oil spill, and especially a large oil spill.

The Arctic ringed seal's range overlaps with, and is adjacent to, a number of active and planned oil and gas operations. To date, most oil and gas activities conducted off the Alaska coast have occurred in the Beaufort Sea, primarily near Prudhoe Bay. No oil fields have been developed or brought into production in the Chukchi Sea; however, the one recent lease sale in the Chukchi Sea (Lease Sale 193) and exploration drilling programs moving forward in this region signal growing interest in oil and gas development there.

Large oil spills are generally considered to be the greatest threat of oil and gas activities in the Arctic marine environment (Arctic Monitoring and Assessment Program (AMAP), 2007). In contrast to spills on land, large spills at sea are difficult to contain and may spread over hundreds or thousands of 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 difficulties experienced in stopping and containing the 2010 oil blowout at the Deepwater Horizon well in the Gulf of Mexico, where environmental conditions, available infrastructure, and response preparedness are comparatively good, point toward even greater challenges in attempting a similar feat in a much more environmentally severe and geographically remote 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, 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.

The introduction of sounds and physical disturbance associated with oil and gas exploration and development could also affect Arctic ringed seals and their habitat. Such

activities may include physical presence of vessels, icebreaking activity, aircraft activity, seismic surveys, site clearance and shallow hazards surveys, and drilling and production activities. Icebreaking vessels, which may be used for in-ice seismic surveys or to manage ice near exploratory drilling ships, have the potential to affect Arctic ringed seals and their habitat through both acoustic effects and physical alteration of the sea ice (Richardson et al., 1995). Seismic surveys are a particularly intense source of noise, and thus warrant specific consideration. Arctic ringed seals, like other phocids or "true" seals, have good low-frequency hearing, and so it is expected that they will be susceptible to masking of biologically significant signals by low frequency sounds, such as those from seismic surveys (Gordon et al., 2003). Reported seal responses to seismic surveys have been variable and often contradictory, although they suggest that pinnipeds frequently do not avoid the area within a few hundred meters of operating airgun arrays (Brueggeman et al., 1991; Harris et al.; 2001, Miller and Davis, 2002). Construction, drilling, and development activities on a manmade artificial island were reported to have had at most minor, short-term, and localized effects on ringed seals (Blackwell et al., 2004; Richardson and Williams, 2004; Moulton et al., 2005); and during a single season of a near shore exploratory drilling operation, Harwood et al. (2007) found no detectable effects on ringed seals.

In summary, a major oil spill could render areas containing the identified essential features unsuitable for use by Arctic ringed seals. In such an event, sea ice habitat suitable for whelping, nursing, or molting could be oiled. The primary Arctic ringed seal prey species 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 Artic ringed seal critical habitat, or render habitat unsuitable. We conclude that the essential features of the habitat of the Arctic ringed seal 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.

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 (Brigham and Ellis, 2004). 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 shipping routes and a lengthening of the potential navigation season (Arctic Climate Impact Assessment (ACIA), 2004; Khon et al., 2010). At present, the two main navigation routes crossing the Arctic are the Northwest Passage (NWP) and the Northern Sea Route (NSR). Based on an analysis of sea ice model projections, Smith and Stephenson (2013) concluded that, by mid-century, changing sea ice conditions will enable expanded September navigability for common open-water ships along these two navigation routes. By 2100, the navigation season for the NSR is projected to increase from the current period of 20 to 30 days per year to 90 to 100 days per year (ACIA, 2004).

The fact that nearly all shipping activity in the Arctic (with the exception of icebreaking) purposefully avoids areas of ice, and primarily occurs during the ice-free or

low-ice seasons, helps to mitigate the risks of shipping to Arctic ringed seal habitat. However, as noted above, icebreakers pose greater risks to ringed seals and their habitat 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., oil spills, pollution, noise, disturbance, and habitat alteration) occurring in ice-covered areas where Arctic ringed seals reside will likely also increase.

Increases in international shipping are producing ever-greater levels of underwater noise capable of long-range transmission (Southall, 2005; Götz et al., 2009). All vessels produce sound during operation, which when propagated at certain frequencies and intensities can alter the normal behavior of marine mammals, mask their underwater communications and other uses of sound, cause them to avoid noisy areas, and, in extreme cases, damage their auditory systems and cause death (Marine Mammal Commission, 2007; Arctic Council, 2009; Götz et al., 2009).

In addition to the potential introduction of sound from increased vessel traffic and the physical presence and movements of these vessels, the maritime shipping industry transports various types of petroleum products, both as fuel and cargo, within the proposed critical habitat. If increased shipping involves the tanker transport of crude oil or oil products, there would be an increased risk of spills (ACIA, 2005; U.S. Arctic Research Commission, 2012). Similar to oil and gas activities, the most significant threat

posed by shipping activities is considered the accidental or illegal discharge of oil or other toxic substance carried by ships (Arctic Council, 2009).

We conclude that the essential features of the habitat of the Arctic ringed seal may require special management considerations or protection in the future to minimize the risks posed to these features by potential shipping and transportation activities, because:

(1) both the physical disturbance and noise associated with these activities could displace seals from favored habitat that contains the essential features, thus altering the quantity and/or quality of these features; and (2) in the event of an oil spill, sea ice essential for birth lairs and for molting could become oiled, and the quantity and/or quality of the primary prey resources could be adversely affected.

Commercial Fisheries: The proposed critical habitat area overlaps with waters of the Federal Arctic Management Area and the Bering Sea and Aleutian Islands

Management Area. 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. Two of the primary Arctic ringed seal prey species identified as essential to conservation—Arctic cod and saffron cod—have been identified as likely initial target species for commercial fishing in Federal Arctic waters in the future (North Pacific Fishery Management Council, 2009).

In the northern portion of the Bering Sea and Aleutian Islands Management Area, limited 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 (<u>Hippoglossus stenolepis</u>), several other flatfish species, Pacific cod (<u>Gadus macrocephalus</u>), several crab species, walleye pollock (<u>Theragra chalcogramma</u>), and several salmon species.

Commercial fisheries may affect the primary prey resources identified as essential to the conservation of the Arctic ringed seal, through removal of prey biomass and potentially through modification of benthic habitat by bottom-trawl gear. 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, 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 further defines critical habitat to include specific areas outside the geographical area occupied by the species if the Secretary determines them to be essential for the conservation of the species. Our regulations at 50 CFR 424.12(e) emphasize that the Secretary "shall designate as critical habitat areas outside the geographical area presently occupied by a species only when a designation limited to its present range would be inadequate to ensure the conservation of the species." We have not identified any specific areas outside the geographical area occupied by the Arctic ringed seal that are essential for its conservation; consequently, we are not proposing to designate any specific areas outside its current range.

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

ESA section 4(a)(3)(B)(i) states: "The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 670a of this title [section 101 of the Sikes Act], if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation." We contacted the Department of Defense (DOD) and requested information on any facilities or managed areas that are subject to an Integrated Natural Resources Management Plan (INRMP) and are located within areas that could potentially be proposed as critical habitat for the Arctic ringed seal. In response, DOD provided a map of facilities subject to an INRMP. No DOD lands overlap with the area proposed as critical habitat. 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.

Application of ESA Section 4(b)(2)

Before including areas in a critical habitat designation, section 4(b)(2) of the ESA and our implementing regulations require the Secretary to take into consideration the economic, national security, and other relevant impacts of the designation. Impacts may be quantitatively or qualitatively described, and considered at a scale that the Secretary determines to be appropriate (50 CFR 424.19(b)). Additionally, the Secretary has discretion to exclude any particular area from the critical habitat upon a determination that the benefits of such exclusion outweigh the benefits of designation. The Secretary,

however, cannot exclude any particular area if, based on the best scientific and commercial data available, the Secretary determines that the failure to designate that area as critical habitat will result in the extinction of the species concerned. Because the authority to exclude any area from the critical habitat designation is discretionary, exclusion is not required for any particular area. For the reasons set forth below, we do not propose to exercise our discretion to exclude any 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 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 their actions are not likely to jeopardize the species' continued existence (i.e., the jeopardy standard). One incremental impact of critical habitat designation is the extent to which Federal agencies modify their proposed actions to ensure they are not likely to adversely modify the critical habitat, beyond any modifications they would make because of listing and the jeopardy standard. 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), and benefits that may arise from education of the public to the importance of an area for species conservation.

A draft economic report, prepared by an environmental consulting firm (in cooperation with NMFS) with expertise in natural resource economics, describes the

impact analyses for this proposed rule in detail (Cardno Entrix, 2014). 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 Arizona Cattle Growers v. Salazar, 606 F. 3d 1160 (9th Cir. 2010)) (holding that the FWS 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 proposed designation based on a comparison of conditions with and without the designation of critical habitat for the Arctic ringed seal. The "without critical habitat" scenario represents the baseline for the analysis. It includes process requirements and habitat protections already extended to the Arctic ringed seal 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 Arctic ringed seal. This analysis assesses the incremental costs and benefits that may arise due to the proposed critical habitat designation, with economic costs estimated within a 10-year post-designation timeframe. The 10-year timeframe was chosen 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. 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 economic report includes a discussion of the potential types of costs and benefits that may accrue beyond the 10-year time window of the analysis.

Benefits of Designation

As noted above, the protection afforded under the ESA section 7 requirement for Federal agencies to ensure their actions are not likely to destroy or adversely modify designated critical habitat is in addition to ESA requirements to protect listed species. Specifically, ESA section 7(a)(1) requires all Federal agencies to use their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of endangered and threatened species, and section 7(a)(2) requires Federal agencies to ensure their actions are not likely to jeopardize the continued existence of listed species. Another benefit of critical habitat designation is that it provides specific notice of the features essential to the conservation of the Arctic ringed seal and where they occur. This information will focus future consultations on the key habitat attributes and avoid unnecessary attention on other, non-essential habitat features. By identifying the specific areas where the features essential to conservation of the Arctic ringed seal occur, there may also be enhanced awareness by Federal agencies and the general public of activities that might affect those essential features. Moreover, identification of features essential to the conservation of the species may improve discussions with action agencies regarding relevant habitat considerations of proposed projects.

In addition, the critical habitat designation may result in indirect benefits, as discussed in detail in the draft economic report (Cardno Entrix, 2014), including education benefits and enhanced public awareness, which may help focus and contribute to conservation efforts for the Arctic ringed seal and its habitat. For example, by identifying features essential to conservation of the Arctic ringed seal and where those features are found, 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 Arctic ringed seal 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 of the proposed critical habitat overlaps substantially with the range of the polar bear in the United States, and the Arctic ringed seal is the primary 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 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 Arctic ringed seal. Therefore, we augmented the quantitative measurements that are summarized here and discussed in detail in the economic report with qualitative and descriptive assessments, as provided for under 50 CFR 424.19(b) and in guidance from the Office of Management and Budget (OMB) (OMB Circular A–4, September 17, 2003). Although we cannot monetize or quantify all of the incremental benefits of the proposed critical habitat designation, we believe that they are not inconsequential.

Economic Impacts of Designation

Direct economic costs of the critical habitat designation accrue primarily through implementation of section 7 of the ESA in consultations with Federal agencies to ensure their proposed actions are not likely to destroy or adversely modify critical habitat.

Those economic impacts may include both administrative costs and project modifications. At this time, on the basis of how protections are currently being implemented for Arctic ringed seals 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 a designation of critical habitat. As a result, the direct incremental costs of the proposed critical habitat designation are expected to be limited to the additional administrative costs of considering Arctic ringed seal critical habitat in future ESA section 7 consultations.

Because the Arctic ringed seal is newly listed and we lack a lengthy consultation history for this species, we needed to make assumptions about the types of future Federal activities that might require section 7 consultations under the ESA. To identify the types of Federal activities that may affect critical habitat for the Arctic ringed seal, and therefore would be subject to the ESA section 7 adverse modification standard, we

examined recent incidental take authorizations issued by NMFS under the MMPA and the limited number of ESA section 7 consultations that have addressed Arctic ringed seals. To derive estimates of the maximum number of future oil and gas related consultations, we extrapolated from the maximum exploration activity level described in the supplemental draft environmental impact statement on the effects of oil and gas activities in the Arctic Ocean (NMFS, 2013). We request Federal agencies to provide us with information on future consultations, if our assumptions omitted any future actions likely to affect the proposed critical habitat.

We identified several categories of activities with a Federal nexus that may affect critical habitat for the Arctic ringed seal within the time frame of the analysis (10 years post-designation) and, therefore, would be subject to the ESA section 7 adverse modification standard. These include oil and gas related activities, dredge mining, navigation dredging, commercial fishing, oil spill prevention and response, and certain military activities. All of the projected future Federal actions that may trigger consultation due to the potential to affect critical habitat also have the potential to affect individual ringed seals. In other words, none of the activities we identified would trigger consultation solely on the basis of the proposed critical habitat designation. Federal action agencies with jurisdiction over projected future actions that may affect the proposed critical habitat area include the U.S. Army Corps of Engineers, BOEM, Bureau of Land Management, DOD, Environmental Protection Agency, U.S. Coast Guard, and NMFS. We would expect the majority of projected consultations due to potential effects on critical habitat to involve NMFS and BOEM authorizations and permitting of oil and

gas related activities.

As detailed in the draft economic report (Cardno Entrix, 2014), the total incremental costs associated with this proposed critical habitat designation within the 10year post-designation timeframe, in discounted present value terms, were estimated at \$1.33 million (discounted at 7 percent) to \$1.86 million (discounted at 3 percent). Ninety-five percent of the incremental costs attributed to the critical habitat designation are expected to accrue from consultations associated with oil and gas related activities in the Chukchi and Beaufort seas. We note that absent historical experience on consultation frequency involving the proposed critical habitat, in deriving these cost estimates, we assumed that a maximum projected level of oil and gas activity will occur annually (10 formal consultations each and every year; and several other formal and informal consultations over the 10-year post-designation timeframe). However, it is unlikely that this peak level of activity would occur every year. Indeed, in 2011, 2012, and 2013, there were one, five, and three formal consultations, respectively, completed relating to oil and gas activities in the Beaufort and Chukchi seas. While not quantifiable at this time, the draft economic report (Cardno Entrix, 2014) discusses that the oil and gas industry may also incur indirect costs associated with the critical habitat designation if future thirdparty litigation over specific consultations is successful and creates delays or other sources of regulatory uncertainty.

In summary, we have preliminarily concluded, subject to further consideration based on public comment, that the potential economic impacts of the proposed critical habitat designation would be modest both in absolute terms and relative to the level of

economic activity expected to occur in the affected area in the foreseeable future. As a result, and in light of the benefits of critical habitat designation discussed above and in the draft economic report, we are not proposing to exclude any areas pursuant to section 4(b)(2) of the ESA based on economic impacts.

National Security Impacts of Designation

Section 4(b)(2) of the ESA also requires consideration of national security impacts. We contacted the DOD regarding any potential impacts of the proposed critical habitat designation to military operations. In a letter dated June 3, 2013, the DOD Regional Environmental Coordinator indicated that no impacts on national security are currently foreseen from the proposed critical habitat designation. As a result, we have not identified any direct impacts from the critical habitat designation on activities associated with national security. We have preliminarily concluded, subject to further consideration based on public comment or additional information from DOD, that we will not exercise our discretionary authority to exclude any areas based on national security impacts.

Other Relevant Impacts of Designation

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 plans or conservations 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 proposed critical habitat designation. Accordingly, we have preliminarily concluded, subject to further consideration based on public comment, that we will not exercise our discretionary authority to exclude any areas based on other relevant impacts.

Critical Habitat Designation

We propose to designate as critical habitat one specific area of marine habitat in Alaska and offshore Federal waters of the northern Bering, Chukchi, and Beaufort seas within the geographical area presently occupied by the Arctic ringed seal. This critical habitat area contains physical or biological features essential to the conservation of Arctic ringed seals that may require special management considerations or protection. We have not identified any unoccupied areas that are essential to conservation of the Arctic ringed seal and we are not proposing any such areas for designation as critical habitat. We are not proposing to exclude any areas based on economic impacts, impacts to national security, or other relevant impacts of the proposed designation. In accordance with our regulations regarding critical habitat designation (50 CFR 424.12(c)), the map we are including 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 does not 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 action

that may affect listed species or critical habitat. During the consultation, we evaluate the agency action to determine whether the action may adversely affect listed species or critical habitat. If we conclude that the agency action would likely result in the destruction or adverse modification of critical habitat, we would suggest reasonable and prudent alternatives to the action that avoid that result.

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, following designation of critical habitat for Arctic ringed seals, 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.

Section 4(c)(2) of the ESA directs the Secretary to review the listing classification of threatened and endangered species, based on the best available scientific information concerning the species' status, at least once every 5 years. The ESA also provides that NMFS may, from time-to-time, revise critical habitat as new data become available to the Secretary (section 4(a)(3)(A)(ii)). Thus, new information considered during a 5-year review may also help inform future consideration of whether the best available information at that time indicates revision of critical habitat may be appropriate.

Activities That May Be Affected by Critical Habitat Designation

Section 4(b)(8) of the ESA requires that we briefly describe and evaluate, in any proposed or final regulation to designate critical habitat, those activities that may destroy or adversely modify such habitat, or that may be affected by such designation. A wide variety of activities may affect the proposed critical habitat for Arctic ringed seals and, if carried out, funded, or authorized by a Federal agency, would require ESA section 7 consultation. Such activities or actions include: in-water and coastal construction; activities that generate water pollution; dredging; commercial fisheries; oil and gas exploration, development, and production; oil spill prevention and response; and certain DOD activities. An evaluation of the economic effects of ESA section 7 consultations regarding the proposed critical habitat is provided in the draft economic report (Cardno Entrix, 2014) and summarized above.

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, and any other interested parties concerning this proposed rule. We particularly seek comments and information concerning: (1) habitat use of Arctic ringed seals; (2) the identification, location, and quality of physical or biological features essential to the conservation of Arctic ringed seal; (3) the potential impacts of designating the proposed critical habitat, including the types of Federal activities that may trigger ESA section 7 consultation; (4) current or planned activities in the area proposed for designation and their possible impacts on the proposed critical habitat; (5) the potential

effects of the designation on Alaska Native cultural practices and villages; (6) any foreseeable economic, national security, Tribal, or other relevant impacts resulting from the proposed designation; and (7) 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 Arctic ringed seal habitat; and (4) a point of contact. You may submit your comments and information concerning this proposed rule by any one of several methods (see ADDRESSES). Copies of the proposed rule and supporting documentation, including the draft economic report (Cardno Entrix, 2014), are available on the NMFS Alaska Region Web site at http://alaskafisheries.noaa.gov, from the Federal eRulemaking Web site at http://www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2013-0114, or upon request (see ADDRESSES). 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. Information Quality Act and Peer Review

On December 16, 2004, the OMB issued a 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 OMB Bulletin, implemented under the Information Quality Act (Public Law 106-554), is intended to enhance the quality and credibility of scientific information disseminated by the Federal government, and applies to influential and highly influential scientific information disseminated on or after June 16, 2005. To satisfy our requirements under the OMB Bulletin, we are obtaining independent peer review of this proposed rule and the draft economic report (Cardno Entrix, 2014), and will address all comments received in developing the final rule and the final version of the economic report.

Classification

Regulatory Planning and Review (E.O. 12866)

The economic costs and benefits of the proposed critical habitat designation are described in our draft economic report (i.e., RIR/4(b)(2) Preparatory Analysis/IRFA; Cardno Entrix, 2014). OMB has determined that this rule is "significant," but not "economically significant," under E.O. 12866(3)(f).

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), which is included as part of the draft economic

report (Cardno Entrix, 2014). 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 Arctic ringed seal.

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 during ESA section 7 consultations (the primary parties being the Federal action agency and NMFS)

and thus they may be indirectly affected by the proposed critical habitat designation.

As detailed in the draft economic report (Cardno Entrix, 2014), 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 500 employees (crude petroleum and natural gas extraction industry); or (2) average annual receipts of no more than \$35.5 million (support activities for oil and has operations industry). No independent not-for-profit enterprises were identified that are likely to be affected by the proposed critical habitat designation. None of the parties identified in the oil and gas category appear to qualify as small businesses. Two government jurisdictions with ports appear to qualify as small government jurisdictions (serving populations of less than 50,000). Within the 10-year analytical timeframe, one of these two ports is expected to incur up to \$4,000 (discounted at 3 percent) in total incremental consultation costs for authorization of navigation dredging activities, while the other is not expected to incur any costs associated with ESA section 7 consultations. This cost represents less than 0.1 percent of average annual receipts for this port.

We encourage small businesses, small governmental jurisdictions, and other small entities that may be affected indirectly by this rule to provide comment on the estimated number of small entities likely to participate as third parties during ESA section 7 consultations and the potential economic impacts of the proposed critical habitat designation, such as anticipated costs of consultation and potential project modifications,

to improve the RFA analysis.

As required by the RFA (as amended by the SBREFA), we considered various alternatives to the proposed critical habitat designation for the Arctic ringed seal. We considered and rejected the alternative of not designating critical habitat for the Arctic ringed seal, because such an alternative does not meet the legal requirements of the ESA. We considered an alternative under which we would exercise discretion pursuant to section 4(b)(2) of the ESA to exclude certain areas, but we are not proposing to do so: the 4(b)(2) analysis identifies that there will be economic impacts from this designation, but we do not believe the benefits of excluding any particular area outweigh the benefits of inclusion. NMFS is seeking comments on the 4(b)(2) analysis, and all comments and information received will be considered in developing our final determination to designate critical habitat for the Arctic ringed seal.

Energy Supply, Distribution, or Use (E.O. 13211)

Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking any action that promulgates or is expected to lead to the promulgation of a final rule or regulations that: (1) is a significant regulatory action under E.O. 12866, and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy. We have considered the potential impacts of this action on the supply, distribution, or use of energy (see Cardno Entrix, 2014). The 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 likely would have to undergo ESA section 7 consultations to ensure that the actions are not likely to destroy or adversely modify designated critical habitat. However, as discussed in the draft economic report (Cardno Entrix, 2014), 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 proposed critical habitat (e.g., relative to 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 Arctic ringed seals. 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 proposed rulemaking is not a significant energy action.

Unfunded Mandates Reform Act

In accordance with the Unfunded Mandates Reform Act (2 U.S.C 1501 et seq.), 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 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." These terms are defined in 2 U.S.C. 658(5)–(7). "Federal intergovernmental mandate" includes a

regulation that "would impose an enforceable duty upon State, local, or tribal governments" with two exceptions. It excludes "a condition of Federal assistance." It also excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority," if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding" and the state, local, or tribal governments "lack authority" to adjust accordingly.

"Federal private sector mandate" includes a regulation that "would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance; or (ii) a duty arising from participation in a voluntary Federal program." The designation of critical habitat does not impose a legally binding duty on non-Federal government entities or private parties. Under the ESA, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities who receive Federal funding, assistance, permits, or otherwise require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal action agency. Furthermore, to the extent that non-Federal entities are indirectly impacted, because they receive a Federal permit or Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor

would critical habitat shift the costs of the large entitlement programs listed above to State governments.

2. This rule will not significantly or uniquely affect small governments, because it will not 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. The proposed critical habitat designation falls within marine waters under Federal or State of Alaska jurisdiction. The State of Alaska does not fit the definition of a "small governmental jurisdiction" and thus a Small Government Agency Plan is not required. Waters adjacent to Native-owned lands are owned and managed by the State of Alaska. Takings (E.O. 12630)

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, this proposed rule does not have significant takings implications. A takings implication assessment is not required. The designation of critical habitat affects only Federal agency actions. Private lands do not exist within the proposed critical habitat and would not be affected by this action.

Federalism (E.O. 13132)

In accordance with E.O. 13132 (Federalism), we determined that this proposed rule does not have significant Federalism effects and that a Federalism assessment is not

required.

Paperwork Reduction Act of 1995

This proposed rule does not contain new or revised information collections that require approval by OMB under the Paperwork Reduction Act (44 U.S.C. 3501 <u>et seq.</u>). This proposed rule will not impose recordkeeping or reporting requirements on state or local governments, individuals, businesses, or organizations.

National Environmental Policy Act (NEPA)

Environmental analysis under NEPA for ESA critical habitat designations is not required. See <u>Douglas County v. Babbitt</u>, 48 F.3d 1495 (9th Cir. 1995), cert. denied, 116 S. Ct. 698 (1996).

Government-to-Government Relationship with Tribes

The longstanding and distinctive relationship between the Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and comanagement 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 Public Law 108-199 (188 Stat. 452), as amended by section 518 of Public Law 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 coast line of Alaska, no tribal-owned lands overlap with the proposed designation. However, this proposed designation overlaps with areas used by Alaska Natives for subsistence, cultural, and other purposes. We coordinate with Alaska Native hunters regarding management issues related to ice seals through the Ice Seal Committee (ISC), a comanagement organization under section 119 of the Marine Mammal Protection Act.

NMFS discussed the designation of critical habitat for Arctic ringed seals with the ISC and provided updates regarding the timeline for publication of this proposed rule. We also contacted potentially affected tribes by mail and offered them the opportunity to consult on the designation of critical habitat for the Arctic ringed seal and discuss any concerns they may have. We received no requests for consultation in response to this mailing. If we receive any such requests in response to this proposed rule, we will respond to each request prior to issuing a final rule.

References Cited

A complete list of all references cited in this rulemaking can be found on the NMFS Alaska Region Web site at http://alaskafisheries.noaa.gov/ and is available upon request from the NMFS office in Juneau, Alaska (see ADDRESSES).

List of Subjects in 50 CFR Part 226

Endangered and threatened species.

Dated: November 21, 2014.

Samuel. D. Rauch, III,

Deputy Assistant Administrator for Regulatory Programs,

National Marine Fisheries Service.

For the reasons set out in the preamble, we propose to amend 50 CFR part 226 as follows:

PART 226—DESIGNATED CRITICAL HABITAT

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

Authority: 16 U.S.C. 1533.

2. A new § 226.226 is added to read as follows:

§ 226.226 <u>Critical Habitat for the Arctic Subspecies (Phoca hispida) of the Ringed Seal (Phoca hispida).</u>

Critical habitat is designated for the Arctic subspecies of the ringed seal as depicted in the map below and described in paragraph (a) of this section. Textual information is included for the purposes of clarifying or refining the location and

boundaries of the critical habitat area.

- (a) <u>Critical habitat boundaries</u>. Critical habitat includes all the contiguous marine waters from the "coast line" of Alaska as that term has been defined in the Submerged Lands Act ("the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters"), 43 U.S.C. 1301(c), to an offshore limit within the U.S. Exclusive Economic Zone (EEZ). The boundary extends offshore from the northern limit of the United States-Canada land border (from the ordinary low water line of the Beaufort Sea at 141° W. long.) and follows the outer extent of the U.S. EEZ boundary north and slightly northeastward; thence westerly and southwesterly; thence southerly and southwesterly to 60°31 N. lat., 179°13 W. long. From there it runs southeasterly to 58°22 N. lat., 170°27 W. long.; thence easterly to 59° N. lat., 164° W. long. The boundary then follows 164° W. long. due north to the coast line of Alaska southeast of Cape Avinof. Critical habitat does not include permanent manmade structures such as boat ramps, docks, or pilings that were in existence on or before the effective date of this rule.
- (b) <u>Essential features</u>. The essential features for the conservation of the Arctic ringed seal are:
- (1) Sea ice habitat suitable for the formation and maintenance of subnivean birth lairs used for sheltering pups during whelping and nursing, which is defined as seasonal landfast (shorefast) ice, or dense, stable pack ice, that has undergone deformation and contains snowdrifts at least 54 cm deep.
 - (2) Sea ice habitat suitable as a platform for basking and molting, which is

defined as sea ice of 15 percent or more concentration.

- (3) Primary prey resources to support Arctic ringed seals, which are defined to be Arctic cod, saffron cod, shrimps, and amphipods.
- (c) <u>Critical habitat map.</u> The proposed critical habitat boundary was mapped using an Alaska Albers Equal Area Conic projection referenced to the North American Datum of 1983 (NAD83). The map, as clarified by the accompanying regulatory text, establishes the boundaries of the critical habitat designation. The map, along with the coordinates or plot points on which the map is based, is available to the public on http://www.regulations.gov at Docket No. NOAA-NMFS-2013-0114, on the NMFS Alaska region Web site at http://alaskafisheries.noaa.gov, and at the NMFS office in Juneau, Alaska. The map of critical habitat for the Arctic ringed seal follows:

