



MARINE MAMMAL COMMISSION

28 December 2009

Mr. Thomas L. Strickland
Assistant Secretary for Fish and Wildlife and Parks
Department of the Interior
1849 C Street, N.W.
Washington, DC 20240

Public Comments Processing
Attn: FWS-R7-ES-2009-0042
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
4401 N. Fairfax Drive, Suite 222
Arlington, VA 22203

Dear Mr. Strickland:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Fish and Wildlife Service's 29 October 2009 *Federal Register* notice (74 Fed. Reg. 56058) proposing to designate critical habitat for the polar bear (*Ursus maritimus*). The Service has done a thorough job of describing and weighing the issues involved in the designation of critical habitat for the two polar bear populations that occur in the United States. The areas identified by the Service in the proposed rule fit within the Endangered Species Act's definition of critical habitat and, for the reasons discussed below, the Commission supports the proposed designation and related conservation efforts.

RECOMMENDATIONS

The Marine Mammal Commission recommends that the Fish and Wildlife Service adopt a final rule designating as critical habitat for the polar bear all areas identified in the proposed rule published in the *Federal Register* on 29 October 2009. In addition, the Marine Mammal Commission recommends that the Fish and Wildlife Service—

- review that designation periodically (e.g., every five years) to consider changes in habitat use and the need to supplement the original designation;
- work with key agencies (e.g., the Environmental Protection Agency, the Department of Energy, the Department of Transportation, etc.) to develop a coordinated strategy to identify how best to use their authorities to address the negative effects on polar bears of climate change, thereby promoting the conservation of polar bears, and similarly situated species, and their habitats;
- examine the integrated natural resources management plan for each military facility that otherwise would occur within the designated critical habitat to ensure that it provides adequate long-term protection of polar bears and polar bear habitat before excluding any of those sites;

- clarify the exclusion on manmade structures in the final rule by delineating the boundaries of the existing municipal areas and structures that would be excluded from the critical habitat designation; and
- review the manmade structures exclusion every five years to ensure that it continues to be appropriate to the habitat needs of the polar bear.

RATIONALE

The Marine Mammal Commission offers the following explanation and discussion of its recommendations.

In its 29 October 2009 *Federal Register* notice, the Fish and Wildlife Service proposes to designate critical habitat for polar bears in certain terrestrial areas within the state of Alaska, in adjacent territorial waters, and in other waters subject to U.S. jurisdiction. The proposed designation consists of three units—Unit 1: sea-ice habitat, Unit 2: terrestrial denning habitat, and Unit 3: barrier island habitat. The proposed designation excludes manmade structures (e.g., docks, seawalls, pipelines) and the land on which they are located “existing within the boundaries on the effective date of the rule [sic].” The Service estimates the total area being proposed for designation to be approximately 519,403 km² (200,541 mi²). The Service has requested comments on whether to exclude military facilities, which already are required to have integrated natural resources management plans.

Section 3(5)(A) of the Endangered Species Act defines “critical habitat” as

(i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with section 4 of this Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and

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

Although the area being proposed by the Service as critical habitat for polar bears is large, the Commission concurs that, because of the large degree of inter-annual variation in the distribution of different sea ice habitat types and the large areas that individual polar bears use each year, all of these areas constitute important habitat that, for one reason or another, is essential for the conservation of polar bears—that is, these areas are necessary to prevent the polar bear populations that occur in the United States from becoming endangered and to bring these populations to the point where the protections afforded by the Endangered Species Act are no longer necessary.

In its notice, the Service provides a comprehensive review and analysis of the “primary constituent elements” of habitat essential for polar bears in the United States. As outlined in the regulations governing the designation of critical habitat (50 C.F.R. § 424.12(b)), the Service presents and considers information pertaining to the following five habitat needs: (1) space for individual or population growth; (2) food, water, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, nursing, and reproduction; and (5) habitats protected from disturbance or representative of a species’ historical or ecological distribution. Applying these factors, the Service determined the presence of three primary constituent elements for the polar bear in the United States: (i) sea-ice habitat, which is sea ice over marine waters out to the 300 m (984.2 ft) contour over the continental shelf, which is where the most productive feeding habitat occurs, because it is within the preferred depth range of their primary prey species, the ringed seal, (ii) terrestrial denning habitat, which is characterized by topographic features, such as coastal bluffs and river banks, with the following suitable macro-habitat characteristics: (A) steep, stable slopes (range 15.5 – 50.0°), with heights ranging from 1.3 to 34 m (4.3 to 111.6 ft), and with water or relatively level ground below the slope and relatively flat terrain above the slope; (B) unobstructed, undisturbed access between den sites and the coast; and (C) the absence of human activities that might disturb denning female bears or attract possibly predatory adult male bears, (iii) barrier island habitat, which consists of the barrier islands along the Alaska coast and their associated spits, and water, ice, and terrestrial habitat within 1.6 km (1 mi) of these islands. The three critical habitat units proposed by the Service are based on the presence of one or more primary constituent elements.

Delineating critical habitat for polar bears presents some unique challenges. Polar bears have extensive ranges and utilize a variety of habitat types for different functions at different times of the year. The sea ice habitat on which polar bears depend is dynamic and varies considerably within and among seasons and between years. Thus, for example, one cannot identify a specific feeding area that reliably will be available throughout the year, year after year except that, in general, the floe edge, where the moving ice habitat begins and where the highest densities of seals are found, usually starts at about the 20 m depth contour. In general, however, polar bears rely predominantly on the productive waters over the continental shelf, where their primary prey, ringed seals, are most abundant, but concentrate their hunting efforts at specific areas, such as recurrent leads, polynyas, and the northern edge of the landfast sea ice that develop and change throughout the year. Although a particular area over the continental shelf may not constitute the best feeding areas in a specific year or season, it will, over time, almost certainly provide essential feeding habitat during the year or during a polar bear’s lifetime. This being the case, the Marine Mammal Commission concurs with the Service’s proposal to include all sea-ice habitat out to the 300-meter isobath (Unit 1) in its designation of critical habitat because this area contains much of the most essential habitat for feeding, breeding, denning, and migrations.

The inclusion of Units 2 and 3 in the critical habitat designation is more straightforward. These areas are much more static and are used predictably by polar bears for essential activities at certain times of the year. Unit 2 includes primary denning habitat, without which the conservation of these populations would be impossible. Unit 3, the barrier islands off Alaska’s coast, provide important denning habitat and also serve as corridors for movements between denning sites and primary feeding areas.

In light of these considerations, the Marine Mammal Commission recommends that the Fish and Wildlife Service adopt a final rule designating as critical habitat for the polar bear all areas identified in the proposed rule.

Exclusion of Currently Unoccupied Habitat

The Service indicates that including only areas currently occupied by polar bears in the critical habitat designation is sufficient for the conservation of the species. As such, the proposed designation includes no areas outside of the species' current range, although such a designation is permissible under the Endangered Species Act. The Commission agrees that areas outside of the polar bear's current range may not be essential to the conservation of the species at this time. Nevertheless, if sea ice is lost in future years, as predicted, polar bears may have little choice but to move into areas that currently are unoccupied or that provide less than optimal habitat. As sea-ice over the continental shelf retreats or disappears, polar bears may make greater use of terrestrial areas and increase their use of pack ice over waters deeper than 300 m as feeding platforms or simply for refuge, not because those areas will become more productive, but because they will be the only habitat that provides a platform from which polar bears will be able to hunt seals. Those areas that are currently unoccupied or that are occupied only seasonally and provide marginal habitat for polar bears may take on greater importance as prime habitat is lost. While these areas are not currently essential for the conservation of polar bears, they may become so in the future. This being the case, the Marine Mammal Commission recommends that, once an initial critical habitat designation has been made, the Fish and Wildlife Service make a focused effort to review that designation periodically (e.g., every five years) to consider changes in habitat use and the need to supplement the original designation. Such a review could be conducted in concert with the status reviews required every five years under section 4(c)(2) of the Act.

Special Management Considerations or Protection

The Service provides an assessment of the impacts that could harm the identified elements of critical habitat and considers whether special management considerations or protection may be needed for polar bears and their habitat. The Service identifies predicted reductions in the extent of arctic sea ice due to climate change and the subsequent consequences of such reductions on oil and gas exploration, development, and production; human disturbance from the use of aircraft, boats, snow machines, vehicles, and other equipment; and commercial shipping as factors that could harm the essential physical and biological features and may require special management considerations.

The Commission is not convinced that this type of detailed review of management considerations or protection is necessary or required by the Act. The regulations implementing section 4 of the Act 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." In keeping with this definition, section 424.12(b) of those regulations seems to assume that any habitat areas that are essential to the conservation of a listed species because they provide space for population growth, feeding, breeding and the rearing of

offspring, etc., may require special management considerations or protection. Against this backdrop, it does not appear that the type of analysis in which the Service examines particular threats to the population(s) from particular sources is needed to support a critical habitat designation. This is particularly the case for a species such as the polar bear, for which the primary threat identified in the 15 May 2008 listing rule is ongoing and expected habitat loss. If, as the Service has already determined, the primary threat to the species is habitat loss, it follows that the loss of any habitat that is essential to the conservation of the species would necessarily prompt special management considerations or protection, thereby meeting the statutory definition of critical habitat. It seems that the types of specific threats and related factors being considered by the Service in the proposed designation are more appropriately assessed when considering whether to list a species under the Endangered Species Act, which the Service did in its final listing rule for polar bears.

That being said, the Commission agrees that the types of factors identified and analyzed by the Service present risks to essential habitats that may require special management considerations or protection to help prevent their loss and the consequent further endangerment or extinction of the polar bear. Decisions on the measures to be undertaken to protect essential habitats are not, and should not be, the subject of this proposed rule. Rather, the Service should identify those measures in carrying out its other responsibilities, such as the development of a recovery plan for polar bears, conducting consultations under section 7 of the Endangered Species Act, and issuing incidental take authorizations under the Marine Mammal Protection Act.

In addition, the Commission takes exception to a position taken by the Service in the discussion of special management considerations in the proposed rule. This is the statement in the first full paragraph on page 56070 that, although climate change will negatively affect polar bear habitat, “the underlying causes...are complex global issues that are beyond the scope of the Act.” The Commission continues to believe that the Endangered Species Act obligates the Service and other agencies to do more than simply identify this central threat to the continued existence of polar bears and their principal habitat. Failing to address this threat runs counter to the central purposes of the Act—conserving the ecosystems upon which endangered and threatened species depend and providing a program for the conservation of listed species. Although addressing the issue of climate change will be difficult, the fact that it is a complex problem or one that is global in scope, does not exempt it from coverage under the Endangered Species Act. In fact, finding an effective way of addressing the problem is likely the only way of carrying out the Act’s mandate to conserve polar bears and the ecosystems on which they depend. The Commission has already addressed how the Service might use its authority under section 7 of the Act in the enclosed 14 October 2008 letter to the Assistant Secretary for Fish and Wildlife and Parks and will not repeat that discussion here. In addition, section 7(a)(1) directs all federal agencies, in consultation with the Secretary, to utilize their authorities in furtherance of the purposes of the Act. The Marine Mammal Commission recommends that the Fish and Wildlife Service work with key agencies (e.g., the Environmental Protection Agency, the Department of Energy, the Department of Transportation, etc.) to develop a coordinated strategy to identify how best to use their authorities to address climate change, thereby promoting the conservation of polar bears, and other similarly situated species (some of which polar bears depend upon, such as ringed seals) and their habitats.

Exclusion of Military Sites under the Sikes Act

The Service is considering whether to exempt areas owned or controlled by the Department of Defense from designation as critical habitat under section 4(a)(3)(B)(i) of the National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108-136). That provision directs that such areas are to be excluded from designation as critical if the Service determines that an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), provides a benefit to the species for which critical habitat is being proposed. According to the proposed rule, there are 11 areas operated by the Department of Defense within the area proposed for designation as critical habitat for which integrated natural resources management plans have been completed. In general, such plans provide for the management of fish and wildlife, the enhancement of fish and wildlife habitat, and the enforcement of applicable natural resource laws. As such, they may provide benefits to polar bears sufficient to warrant exclusion of those areas from polar bear critical habitat. However, the proposed rule does not include sufficient details concerning the areas covered by the plans or the specifics of those plans for the Commission to be able to provide an informed recommendation as to whether those plans will benefit polar bears in particular and whether the exclusion of some or all of the areas is warranted. The Marine Mammal Commission recommends that the Fish and Wildlife Service examine the integrated natural resources management plan for each military facility that otherwise would occur within the designated critical habitat to ensure that it provides adequate long-term protection of polar bears and polar bear habitat before excluding any of those sites.

The Commission notes that the status and range of polar bears in the areas being proposed for designation as critical habitat are expected to change markedly in the next several decades. Such changes may bring them into contact with military facilities other than those identified in the *Federal Register* notice or in ways not currently at issue, and for which the integrated natural resources management plans in place were not designed. As such, the Service will need to review any such exclusions periodically to ensure that the plans remain adequate to protect polar bears and their habitat and/or to work with the appropriate officials within the Department of Defense to ensure that these plans are updated and revised to address changing and emerging threats.

Economic Analysis

Section 4 (b)(2) of the Endangered Species Act directs the Secretary to consider the economic impact of designating critical habitat and authorizes the Secretary to exclude any area from the designation if he or she determines that the benefits of exclusion outweigh the benefits of such a designation. However, an area may not be excluded if the Secretary determines that failure to designate that area will result in the extinction of the species. The Service indicates that it is in the process of preparing an analysis of the potential economic consequences of the proposed critical habitat designation. The Commission looks forward to the opportunity to review that analysis. At this juncture, the Commission does not foresee any major economic impacts from the designation of critical habitat. For now, the Commission will make only some general comments concerning the analysis. Although important, critical habitat has a limited function under the Endangered Species

Act. Primarily, critical habitat comes into play during consultations on federal actions under section 7(a)(2), which are designed to ensure that actions authorized, funded, or carried out by federal agencies are not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. In considering whether or not to exclude an area from the critical habitat designation based on economic concerns, the Service should focus its attention on this provision. In particular, the Service should consider whether the designation will pose any impediments to economic activities within critical habitat independent of those that would result under the jeopardy standard applicable under that provision.

The Commission notes that the Service is proposing to exclude existing manmade structures from the designation of critical habitat. To a large extent, this will minimize any potential impacts to Alaska Native communities within the range of the polar bears. In addition, as the Service indicates on page 56080 of the *Federal Register* notice, it does “not anticipate that the proposed designation of critical habitat will have an effect on Alaska native activities especially as they pertain the subsistence activities.” Recognizing that critical habitat should not affect non-federal actions, the Commission concurs with this assessment. Nevertheless, the Commission believes that the Service’s economic analysis should consider the possible effects of designating polar bear critical habitat on other Alaska Native activities, some of which may have a sufficient federal nexus to trigger section 7 consultation.

Exclusion of Manmade Structures and Related Areas

The proposed designation of critical habitat “does not include manmade structures (e.g., docks, seawalls, pipelines) and the land on which they are located existing within the boundaries on the effective date of the rule [sic].” The Commission believes that such areas, which are very limited in the polar bear’s range within the United States, generally do not contain physical or biological features essential to the conservation of the species. Therefore, the Commission supports the exclusion of these areas from the designation. However, the proposed rule is not clear how this formulation relates to the boundaries of existing villages and the structures within those villages with respect to the proposed critical habitat in coastal mainland Alaska and St. Lawrence Island. The Marine Mammal Commission therefore recommends that the Fish and Wildlife Service clarify the exclusion on manmade structures in the final rule by delineating the boundaries of the existing municipal areas and structures that would be excluded from the critical habitat designation.

As ice diminishes in the Arctic, human activities and facilities are expected to expand. Such changes are likely to bring polar bears into increased contact with existing settlements and developed areas. In addition, the significance of these areas to the survival of polar bears also can be expected to change. Given the projected pace of changes in Arctic ecosystems, the Marine Mammal Commission recommends that the Fish and Wildlife Service review the manmade structures exclusion every five years to ensure that it continues to be appropriate to the habitat needs of the polar bear.

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Temporal Aspects of Critical Habitat Designation

As noted above, polar bear use of certain areas within the proposed critical habitat and the importance of those areas to the bears can vary considerably by season. For example, denning areas are essential to the conservation of polar bears at some times of the year, but may be of little consequence at other times. This may prompt some to argue that critical habitat should be designated only on a seasonal basis or should be dynamic to reflect changing ice patterns throughout the year or on an inter-annual basis. Such an approach seems at odds with the structure and mandates of the Endangered Species Act. Critical habitat should include all areas that are essential to the conservation of a listed species during any part of the year and federal agencies should be under a continuing obligation to consult with the Service if any action it authorizes, funds, or carries out may affect that critical habitat. That is, the temporal aspect of critical habitat should be an issue for consideration during the consultation. If an action would affect critical habitat only during a time of the year when it is not serving an essential function for the species, it presumably would not constitute an adverse modification of that habitat.

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

Sincerely,

A handwritten signature in cursive script, appearing to read "Michael L. Goren for".

Timothy J. Ragen, Ph.D.
Executive Director

Enclosure