



National Headquarters

1130 17th Street, N.W. | Washington, D.C. 20036-4604 | tel 202.682.9400 | fax 202.684.1331
www.defenders.org

April 9, 2007

Supervisor
U.S. Fish and Wildlife Service
Marine Mammals Management Office
1011 East Tudor Road
Anchorage, Alaska 99503

VIA ELECTRONIC MAIL TO: [Polar Bear Finding@fws.gov](mailto:Polar_Bear_Finding@fws.gov)

Re: Comments from Defenders of Wildlife in Support of the Proposed Rule to List the Polar Bear (*Ursus maritimus*) as Threatened under the U.S. Endangered Species Act

Dear Supervisor:

I am writing on behalf of Defenders of Wildlife (“Defenders”) in response to the Federal Register¹ (“FR”) notice published by the Fish and Wildlife Service (“FWS” or “Service”) on January 9, 2007, seeking public comment on its proposed rule to list the polar bear as threatened under the U.S. Endangered Species Act (“ESA” or “Act”).² Defenders supports the proposed rule and urges the Service to promulgate it as a final rule.

Defenders is a non-profit conservation organization with over 500,000 members dedicated to the protection of native wild animals and plants in their natural communities. Since it was founded in 1947, Defenders has been an advocate for the conservation of wolves, bears, and other predators in North America. In particular, Defenders works to protect Arctic ecosystems, such as the Arctic National Wildlife Refuge in Alaska, from harmful development by the oil and gas industry, the effects of global warming, and other threats. Consequently, Defenders has expertise particular to the polar bear’s habitat and a special interest in its conservation.

I. FACTORS THAT THREATEN THE SURVIVAL OF THE POLAR BEAR

Defenders would like to commend the Service for its detailed summary of the biology of the polar bear and the status of the population. We agree that the indefinite, if not permanent, destruction of the polar bear’s habitat warrants listing of the species as threatened. However, we urge the Service to incorporate the major findings and conclusion of the international scientific community by identifying anthropogenic global warming as the primary driver of that destruction. Further, we request that the Service elaborate on its discussion of the other listing factors.

¹ 12-Month Petition Finding and Proposed Rule to List the Polar Bear (*Ursus maritimus*) as Threatened Throughout its Range, 72 Fed. Reg. 1064 (Jan. 9, 2007) [hereinafter Proposed Rule].

² Endangered Species Act, 16 U.S.C. §§ 1531-1544 (2000).

A. HABITAT DESTRUCTION IS CAUSED BY ANTHROPOGENIC GLOBAL WARMING

The Arctic sea ice upon which the polar bear depends for mating, hunting, denning and travel is disappearing. Although the Service recognized that the disappearance is due to “climatic warming,”³ it failed to identify the underlying cause of that warming, namely anthropogenic greenhouse gas emissions. Proper identification of the threats facing the polar bear is necessary to take corrective action to provide for the recovery of the species, the ultimate purpose and intent of the Act.⁴

Although there was ample evidence prior to publication of the Service’s proposed rule that human activity was causing global warming,⁵ the Fourth Assessment Report (“AR4”) of the Intergovernmental Panel on Climate Change released on February 2, 2007, subsequent to the rule’s publication, left no doubt.⁶ It found with “*very high confidence*” that the globally averaged net effect of human activities since 1750 has been one of warming.⁷ Further, the AR4 found that the warming due to emissions of carbon dioxide, methane, and nitrous oxide during the industrial era “is *very likely* to have been unprecedented in more than 10,000 years.”⁸ The AR4 also confirmed that the Arctic is being disproportionately affected: “Average Arctic temperatures increased at almost twice the global average rate in the past 100 years.”⁹

This report was produced by 600 authors from over 40 countries, including the United States.¹⁰ It is the best available science on the drivers and impacts of global warming. When the Service listed the spotted owl as threatened in 1990, it did not attribute the loss of habitat to abrupt and unexpected tree falls, but to the harvest of old growth trees by humans.¹¹ Similarly, it is not enough to say the sea ice is melting because of “climatic warming” without attributing that warming to human activity.

B. IMPACTS ON POLAR BEARS FROM PLANNED OCS OIL AND GAS LEASE SALES IN BEAUFORT AND CHUKCHI SEAS NOT ADEQUATELY DISCUSSED

In its FR notice, the Service described that, in Alaska, most oil and gas activities occur on land, but only mentioned in passing that some production sites have been developed and are planned offshore.¹² In fact, there are two new, major Outer Continental Shelf (“OCS”) lease sales planned this year in the Beaufort and Chukchi Seas, encompassing important polar bear habitat.

³ Proposed Rule, 72 Fed. Reg. at 1081.

⁴ U.S. Fish and Wildlife Service, REPORT TO CONGRESS, RECOVERY PROGRAM FOR THREATENED AND ENDANGERED SPECIES 2 (1996) (“[R]ecovery is the cornerstone and ultimate purpose of the endangered species program”).

⁵ See, e.g., Roger Revelle & Hans E. Suess, *Carbon Dioxide Exchange between Atmosphere and Ocean and the Question of an Increase in Atmospheric CO₂ During the Past Decade*, 9 Tellus 18 (1957).

⁶ RICHARD ALLEY ET AL., WORKING GROUP I OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS (SUMMARY FOR POLICYMAKERS) (2007), available at <http://www.ipcc.ch>.

⁷ *Id.* at 5.

⁸ *Id.*

⁹ *Id.* at 8.

¹⁰ WORKING GROUP I CONTRIBUTION TO THE IPCC FOURTH ASSESSMENT REPORT, CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS, LIST OF AUTHORS (2007) at http://ipcc-wg1.ucar.edu/wg1/docs/wg1_AuthorList_2005-11-03.pdf.

¹¹ Determination of Threatened Status for the Northern Spotted Owl, 55 Fed. Reg. 26,114 (June 26, 1990) (to be codified at 50 C.F.R. pt. 17) (“The northern spotted owl is threatened throughout its range by the loss and adverse modification of suitable habitat as the result of timber harvesting and exacerbated by catastrophic events such as fire, volcanic eruption, and wind storms.”).

¹² Proposed Rule, 72 Fed. Reg. at 1079.

OCS Lease Sale 193 planned for this year in the Chukchi Sea off the Northwest coast of Alaska will offer for lease about 34 million acres¹³—an area roughly the size of Illinois. Activities that could be conducted under the lease include exploration, seismic surveying, on-lease ancillary activities, exploration and delineation drilling, development and production of OCS oil and gas resources, and lease abandonment.¹⁴ The Service estimates the polar bear population in the Chukchi Sea at 2,000 individuals¹⁵ and describes it as “closely associated with pack ice,”¹⁶ some individuals traveling as much as 1000 kilometers to stay with the retreating ice in summer.¹⁷ Extensive oil and gas operations within the polar bear’s habitat create the potential for serious disruption to the species and should have been addressed as a threat to its survival in the Service’s analysis.

The Beaufort Sea Oil and Gas Lease Sale 202, planned for April 18, 2007, is smaller than Lease Sale 193, though still significant at 8.7 million acres.¹⁸ The report of the National Research Council (“NRC”) referenced by the Service in its FR notice concluded that oil development in the Beaufort Sea had not caused “serious cumulative effects” to polar bears, but that conclusion was based on only “limited and sporadic” activity in the area to date.¹⁹ The report continued by finding that “the effects of full-scale industrial development of waters off the North Slope would accumulate through the displacement of polar bears and ringed seals from their habitats, increased mortality, and decreased reproductive success.”²⁰ The combined area of Lease Sales 193 and 202 is 42.7 million acres, leaving little of the Arctic and, more importantly, little of the polar bear’s habitat untouched. It is hard to imagine what the NRC could have intended by the phrase “full-scale industrial development” if it is not these two lease sales.

Further, the mitigation techniques recommended to reduce the impact of oil spills on polar bear populations will exacerbate the food shortage caused by climate change. In the Information to Lessees for Lease Sale 202, the Department of the Interior’s Minerals Management Service recommends that “making subsistence-harvested whale carcasses unavailable to polar bears on land during the fall open-water period may reduce polar bear aggregations and, thus, lower the potential for an oil spill to impact polar bears.”²¹ Though not the primary food source for polar bears, whale carcasses often serve as an important bridging food source when polar bears are fasting on land, awaiting the autumn freeze-up. As polar bears spend an increasing amount of time on land due to earlier spring melt and later autumn freeze-up, this food source will be essential in sustaining polar bears until they can return to their hunting grounds on the ice. The larger point is that mitigation measures for the polar bear must be analyzed in a broader context that includes all of the cumulative threats faced by the species.

¹³ Chukchi Sea Planning Area Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea, 71 Fed. Reg. 60,751 (Oct. 16, 2006).

¹⁴ *Id.* at 60,752.

¹⁵ Proposed Rule, 72 Fed. Reg. at 1084.

¹⁶ Proposed Rule, 72 Fed. Reg. at 1066.

¹⁷ *Id.*

¹⁸ MINERALS MANAGEMENT SERVICE, NOTICE OF SALE, BEAUFORT SEA OIL AND GAS LEASE SALE 202 (2007) at www.mms.gov/alaska/cproject/beaufortsale/Sale202/FNOS/202nos.pdf.

¹⁹ Proposed Rule, 72 Fed. Reg. at 1079.

²⁰ *Id.*

²¹ MINERALS MANAGEMENT SERVICE, INFORMATION TO LESSEES, BEAUFORT SEA OIL AND GAS LEASE SALE 202 (2007) at www.mms.gov/alaska/cproject/beaufortsale/Sale202/FNOS/202itl.pdf.

Given the scale of these new, planned lease sales off the coast of Alaska and their potential to impact polar bears and their habitat, the Service should have included a more thorough discussion of them in its analysis. Further, following promulgation of a final rule listing polar bears, a comprehensive study of the cumulative impacts of oil and gas development on the species should be conducted.

C. SERVICE OMITTED DISCUSSION OF EXISTING REGULATORY MECHANISMS ADDRESSING GREENHOUSE GAS EMISSIONS

The Service was in error when it found that “there are no known regulatory mechanisms effectively addressing reductions in sea ice habitat at this time.”²² There is at least one international mechanism already—though it doesn’t have polar bear in its title and the United States is not a Party. It is the Kyoto Protocol.²³ The Protocol and the negotiations currently underway for a post-Kyoto agreement are the world’s collective response to global warming. It is a cooperative approach to reduce global greenhouse gas emissions. Although its mission is not solely to conserve polar bear habitat, that may well be one of its results. Just as the effects of global warming in the Arctic are disproportionate, the benefits of emissions reductions will similarly be great in the region. By ratifying the Kyoto Protocol the United States would be going a long way to halt and reverse the destruction of polar bear habitat.

Though the United States is not a Party to the Kyoto Protocol, it is Party to the United Nations Framework Convention on Climate Change²⁴ the objective of which is the “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.”²⁵ Specifically, the United States committed to “adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs.”²⁶ Although some states²⁷ and private companies²⁸ have taken action to make good on this commitment, the federal government has failed to act.

In addition, the U.S. Supreme Court has ruled that the Environmental Protection Agency has the authority to regulate greenhouse gas emissions as a pollutant under the Clean Air Act.²⁹ The Service should discuss that decision, along with the international mechanisms for regulating greenhouse gas emissions, in the final rule.

II. FINAL RULE SHOULD BE FULLY AND EFFECTIVELY IMPLEMENTED

²² Proposed Rule, 72 Fed. Reg. at 1087.

²³ Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 37 I.L.M. 22.

²⁴ United Nations Framework Convention on Climate Change, May 9, 1992, 31 I.L.M. 849 [hereinafter UNFCCC].

²⁵ *Id.* at art. 2.

²⁶ *Id.* at art. 4(2)(a).

²⁷ California Global Warming Solutions Act of 2006, CAL. HEALTH & SAFETY CODE § 38500. *See also* Office of the Governor, Gov. Schwarzenegger Signs Landmark Legislation to Reduce Greenhouse Gas Emissions, Press Release (Sept. 27, 2006) at www.climatechange.ca.gov/documents/2006-09-27_AB32_GOV_NEWS_RELEASE.PDF.

²⁸ Wal-Mart plans to reduce its overall greenhouse gas emissions by 20 percent over the next eight years. Wal-Mart, Renewable Energy, at www.walmartstores.com/GlobalWMStoresWeb/navigate.do?catg=347 (last visited Apr 1, 2007).

²⁹ *Massachusetts v. Environmental Protection Agency*, --U.S.--, No. 05-1120 (April 2, 2007).

Listing the polar bear must not be merely a symbolic act. In promulgating a final rule, the Service must at the same time designate critical habitat³⁰ and shortly thereafter develop a recovery plan³¹ for the species. Finally, any special rule for the polar bear promulgated under Section 4(d) of the ESA must not subvert the purposes of the Act or the effectiveness of the listing. No industry or activity should be given special dispensation.

A. CRITICAL HABITAT SHOULD BE DESIGNATED TO INCLUDE AREAS TO WHICH POLAR BEARS ARE LIKELY TO MIGRATE AS A RESULT OF GLOBAL WARMING

The Service in its FR notice stated that due to uncertain and changing conditions in the Arctic, “the designation of critical habitat for the polar bear is not determinable at this time.”³² During the public hearing held on March 5, 2007 in Washington D.C., Scott Schliebe of the FWS said that critical habitat was “prudent but not determinable.”

Regulations define that critical habitat is not determinable when either “information sufficient to perform required analyses of the impacts of the designation is lacking” or “the biological needs of the species are not sufficiently well known to permit identification of an area as critical habitat.”³³ It is true that we cannot predict with certainty what conditions will prevail in the Arctic in 50 years, or how the polar bears will adapt. But this uncertainty dictates that the Service err on the side of caution. The Service should designate as critical habitat those areas we know polar bears use now, as well as areas to which they are likely to migrate as a result of global warming, in order to provide a buffer for changing conditions over time.

In its FR notice, the Service not only described the terrestrial topographic features that make for good denning conditions,³⁴ but specifically identified several important denning areas.³⁵ All such areas should be designated as critical habitat.³⁶ Further, under the Act, the Secretary has the authority to designate areas outside those currently occupied by the species when he determines that “such areas are essential for the conservation of the species.”³⁷ As polar bears are forced to spend more time on land as a result of melting sea ice, they will need additional space³⁸ in which to perform their basic life functions unimpeded by conflicting land uses.

B. PREPARATION OF A RECOVERY PLAN FOR THE SPECIES SHOULD NOT BE DELAYED

The ESA requires that the Service develop and implement a recovery plan for the conservation and survival of threatened species, giving priority to those species that “are, or may be, in conflict with construction or other development projects or other forms of economic activity.”³⁹ Given the current oil and gas development already found on the north slope of Alaska in polar bear habitat and

³⁰ 16 U.S.C. § 1533(a)(3)(A).

³¹ 16 U.S.C. § 1533(f).

³² Proposed Rule, 72 Fed. Reg. at 1096.

³³ 50 C.F.R. § 424.12(a)(2).

³⁴ Proposed Rule, 72 Fed. Reg. at 1068.

³⁵ Proposed Rule, 72 Fed. Reg. at 1078, 1089, 1096.

³⁶ 50 C.F.R. § 424.12(b)(4) (including sites for breeding and rearing of offspring in the list of areas that require protection under critical habitat designation).

³⁷ 16 U.S.C. § 1532(5)(A)(ii).

³⁸ 50 C.F.R. § 424.12(b)(1) (Space for individual and population growth, and for normal behavior).

³⁹ 16 U.S.C. § 1533(f)(1)(A).

the planned development described above, a recovery plan for the species should be prepared as a matter of priority as soon as the proposed rule is finalized.

The recovery plan should recognize anthropogenic greenhouse gas emissions as a specific threat to the conservation and survival of the polar bear. The Service should recommend action to address greenhouse gas emissions as part of the recovery plan. In setting recovery goals in the plan, the polar bear should not be considered for delisting until the threats to polar bear habitat have been adequately addressed and population recovery levels have been achieved.⁴⁰

One site-specific management action which should be included in the recovery plan is a pro-active bear awareness program. As the Service points out, more polar bears are moving onto land due to loss of habitat, resulting in an increased risk of human-bear conflict which may further threaten polar bear populations if lethal control is not managed correctly.⁴¹ Fortunately, educating people about bear behavior minimizes the need to use this management action on polar bears seeking scarce food around human settlements. Such bear awareness programs, like those led by Defenders for grizzly bears in the northern Rockies and Canada and black bears in California and Florida, provide excellent models which can be used to build upon efforts already underway in Alaska.

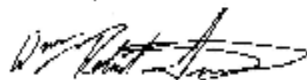
Defenders stands ready to assist and share the expertise of its staff with the Service in the development and implementation of a recovery plan for the polar bear.

III. CONCLUSION

Again, we would like to commend the Service on the thorough analysis it has undertaken on the threats to the survival and conservation of the polar bear. We urge the Service to finalize the proposed rule, list the polar bear as a threatened species, and designate critical habitat. The Service should acknowledge in its decision that the destruction of the polar bear's habitat is caused by human-induced global warming. Once we identify the cause, we can begin to find a solution.

If you have any questions, please contact me at 202-772-3220 or birvin@defenders.org.

Sincerely,



Wm. Robert Irvin
Senior Vice President, Conservation Programs

⁴⁰ Section 1533(f)(1)(B)(ii) requires that each plan include “objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of this section, that the species be removed from the list.” One possible criteria could be the concentration of greenhouse gases in the atmosphere which would indicate the trend and severity of increase in global average temperatures.

⁴¹ Proposed Rule, 72 Fed. Reg. at 1085.