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VIA HAND DELIVERY

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Re: Proposed Rule Listing Polar Bears as a Threatened Species Under the Endangered Species Act

Dear Dr. Meehan:

This letter and the accompanying attachments provide the comments of the American Petroleum Institute ("API"), the Alaska Oil and Gas Association ("AOGA"), the National Ocean Industries Association ("NOIA") and the International Association of Geophysical Contractors ("IAGC") in response to the U.S. Fish & Wildlife Services' ("FWS") request for public comment on the proposed rule listing polar bears (*Ursus maritimus*) as a "threatened species"

under the Endangered Species Act (“ESA”).¹ 72 Fed. Reg. 1,064 (January 9, 2007). API, AOGA, NOIA and IAGC represent the principal industry stakeholders that operate within the polar bears’ Alaska range. We are longstanding supporters of polar bear conservation, management, and research in both Alaska and western Canada.

INTRODUCTION AND SUMMARY

For the reasons stated in our detailed comments, which are summarized below, we believe that listing the polar bear as a threatened species is not warranted at the present time and that the proposed rule is both contrary to the ESA and arbitrary and capricious under the Administrative Procedure Act (“APA”).

1. *The proposed listing contravenes the statutory purposes of the ESA.* FWS has repeatedly acknowledged that human activities in the Arctic are not currently a threat to the polar bear species or its habitat. Instead, the proposed rule is based solely on the premise that the potential loss of summer sea ice resulting from global climate change will be extensive enough over the next 45 years to threaten the species throughout all or a significant portion of its range. The advocacy group that petitioned FWS to list the polar bear has made it very clear that it believes such a listing would obligate FWS to implement the ESA so as to regulate greenhouse gas emissions sources in the Lower 48 states, and affect federal emission and climate change policies. Yet, FWS has repeatedly stated that it has neither the expertise nor the statutory authority to address carbon emissions, let alone the broader aspects of global climate change. This, in turn, creates a conundrum. If FWS cannot regulate the causes of future sea recession, then the proposed listing is merely an empty gesture with no regulatory force. Alternatively, if the proposed listing will compel ESA consultation on all federally funded or approved carbon emission sources and climate policies, the consequences of listing the polar bear would stretch the ESA beyond the breaking point. Neither result is consistent with the statutory purposes of the ESA, a fact that FWS thus far has failed to address.

2. *The best available science and traditional knowledge demonstrate that polar bears currently occupy their entire historical range in healthy and sustainable numbers.* The polar bear species currently occupies its entire original range at healthy and sustainable population numbers of 21,500 to 25,000. The discussion of polar bear population status in the proposed listing misinterprets small differences and inconsistent patterns, as well as anecdotal observations, to project future declines that are neither evident today nor reliably predictable in the foreseeable future.

3. *The proposed listing does not address the factors most important to determining whether an ESA listing is warranted or not.* The proposed listing is an attempt to protect a species not currently in need of recovery (i.e., a healthy species) from a future – and generalized – potential risk factor (i.e., global climate change). We do not think that Congress intended the ESA to authorize the prophylactic listings of species under these circumstances. Even if it did,

¹ This comment letter builds on information presented to FWS in AOGA’s and API’s separate April 10, 2006 comment letters on the polar bear listing petition, copies of which are attached hereto as Exhibits A and B, and incorporated by reference.

the proposed listing assumes far too much. The proposed listing is premised on the potential impact of global climate change on Arctic summer sea ice. Yet, the proposed rule provides no discussion of the causes of climate change, the role of carbon emissions, or any remaining uncertainties regarding the timing, extent, and location of future climate impacts. Indeed, FWS has disclaimed any expertise in these subjects. Similarly, the proposed listing concludes that there are no adequate regulatory mechanisms to control potential sea ice recession. However, this statement both assumes the answer and misses the real question. The listing petition itself asserts that sea ice recession is not a cause but a result of climate change. Even assuming that the ESA grants to FWS the authority to make prophylactic listings of healthy species, it cannot do so without a rational and reasonable cause and effect analysis linking observable data and reliably predictable facts concerning factors believed to influence species populations in the future. Additionally, the underlying data, analyses and models must meet the Information Quality Act guidelines adopted by FWS to ensure the statutorily required data integrity, utility and transparency.

4. *Listing the polar bear species will have a disproportionate and adverse impact on the people and the industries that live and operate in the Alaska Arctic.* We concur in the proposed rule's finding that oil and gas exploration, development, and production present no discernable threat to polar bears. Existing regulatory mechanisms to protect polar bears are effective in mitigating potential impacts. We also concur that polar bears are not threatened with extinction by the effects of contamination, subsistence and commercial hunting, or other activities occurring in the Arctic. Given these facts, there are no special management considerations that can be applied to protect the polar bear or polar bear habitat beyond current measures already afforded through programs established by industry, as well as co-management agreements between the U. S. and Canada. Nonetheless, the costs of an ESA listing (and any related designation of critical habitat) will be entirely and disproportionately born by the Inupiat people that live in the Alaska Arctic, by those industries, such as the oil and gas industry, that operate on Alaska's North Slope, and by the State of Alaska. Thus, the people and industries of Alaska will unnecessarily shoulder the economic consequences of presumably well-intended but ultimately ineffectual regulatory burdens.

Like FWS and members of the public, we are committed to protecting the polar bear and recognize the challenges that global climate change presents. However, generalized concern for polar bears and an acknowledgment that global warming is indeed occurring does not, by itself, either justify the proposed rule or require FWS to list the polar bear as a threatened species under the ESA. As FWS has admitted, the ESA is not the right tool to address climate change. Instead, as FWS recognizes, climate change is a global problem that demands global solutions – many of which are currently being considered by Congress, as well as the Executive Branch and various international bodies. Given the healthy status of the polar bear, the inherent uncertainties in the future emission scenarios which underlie predictive models about the potential extent and pace of sea ice decline, the fact that activities currently taking place within the polar bear's habitat are highly regulated to avoid population-level impacts, and the limitations of the ESA itself, we believe the proposed rule is not warranted.²

² Notably, the view that the proposed listing is not warranted is also expressed by a diverse and knowledgeable array of international, native, and governmental stakeholders,

DETAILED COMMENTS

I. FWS MUST DIRECTLY ADDRESS THE IMPLICATIONS OF ITS PROPOSED LISTING DECISION AND THE LIMITATIONS OF THE ESA

As a threshold matter, we believe that FWS must consider the relationship, if any, between the current policy debate about global climate change and the statutory goals and limitations of the ESA. The intent behind the listing petition submitted by the Center for Biological Diversity (“CBD”), which triggered the instant rulemaking, has been apparent from the start of this administrative process. Based on the petition and CBD’s statements to the press, it is clear that the petition was designed to draw public attention to the potential risks of greenhouse gas emissions and climate change, and, more specifically, to collaterally attack the United States’ climate policies. In addition, CBD and other proponents of the petition have explicitly stated that they believe the proposed listing would obligate FWS to consult on greenhouse gas emitting activities and policies that are authorized, funded, or carried out by the other agencies of the federal government. Despite the clarity of CBD’s position, FWS has chosen to sidestep both of these key issues.

We do not believe FWS can lawfully promulgate a listing decision on the basis of potential sea ice recession without addressing the anticipated causes of projected future recession and without directly examining in the proposed rule the limitations of the ESA to solve that problem. While FWS, and supporters of the listing, may maintain that these practical and policy considerations are not relevant to a listing determination, that is not the case. Congress, in passing the ESA, made it clear that the Act, and more specifically a listing decision, is intended to have a practical effect. As the ESA itself states:

The purposes of this chapter are to provide a *means* whereby the ecosystems upon which endangered species and threatened species depend may be conserved, *to provide a program* for the conservation of such endangered species and threatened species, and *to take such steps* as may be appropriate to achieve the purpose of the treaties and conventions set forth in subsection (a) of this section.

16 U.S.C. § 1531(b) (emphasis added). The ESA’s emphasis on constructive action is echoed in the legislative history. *See* H. Rep. No. 93-412, at 149 (1973) (“essential purpose” of ESA is to provide a “means” for protecting listed species); S. Rep. No. 93-307, at 305 (1973) (the purpose of the ESA is to provide an “effective means” to conserve, protect, and restore ecosystems upon which listed species depend); *Id.* at 357 (threatened listing allows Secretary “to take steps to insure” species do not become endangered). In short, the ESA is an action-forcing statute designed to bring real protections to the species that are in peril.

including, among others, the IUCN Sustainable Use Specialist Group, members of the Inupiat community in Alaska and Canadian native groups, the State of Alaska, and the Alaska Department of Fish and Game.

In the present case, however, FWS has neglected to address the purported causes of sea ice recession and global climate change in the proposed rule, claiming that such an analysis “is beyond the scope of the Endangered Species Review process,” and has simultaneously stated, at public hearings, that the agency cannot and will not use the proposed listing to impose restrictions on greenhouse gas emissions. *See* Exhibit C (DOI Press Release dated Dec. 27, 2006); Exhibit D (FWS interview declaring the ESA to be an “administrative tool, not a legislative tool” that is ill-equipped to address the underlying causes of climate change). As a result, FWS has conceded that the proposed listing is merely a regulatory gesture that will have no effect on the only potential threat to polar bears that the agency has identified, namely the projected decline of summer Arctic sea ice due to global climate change. As such, the proposed rule is contrary to the purpose and spirit of the ESA.

The alternative scenario is equally untenable. It is inconceivable, as CBD and other advocacy groups suggest, that Congress intended for FWS, a wildlife agency, to single-handedly step into the complex and international field of greenhouse gas emission regulation. Climate change is a global phenomenon that presents wide-ranging concerns that have been the subject of Congressional and Executive consideration and response that far exceed FWS’s areas of expertise and resources.³ Moreover, because FWS concedes that it lacks authority to regulate greenhouse gas emissions, application of the ESA would not result in meaningful protection for the polar bear because the link between any greenhouse gas emitters and any projected impact on Arctic sea ice is far too attenuated to trigger formal consultation requirements in the first instance or to impose mitigation measures to prevent jeopardy or adverse modification of critical habitat. 50 C.F.R. § 402.14(b) (formal consultation is not required where agency determines that proposed action is not likely to adversely affect listed species or critical habitat); 16 U.S.C. § 1536. Thus, any attempt to use the ESA indirectly to limit carbon emissions, like the proposed listing itself, would be nothing more than a futile exercise with no tangible benefit to the species or effect on the stated reason for the proposed listing. *Cf.* S. Rep. 93-307, at 305 (1973) (ESA is intended to be effective).

Instead, the consequence of the proposed rule as currently written would be to impose unnecessary regulatory burdens on human activities in the Arctic, such as oil and gas development and subsistence harvest, which FWS has repeatedly found to be sufficiently protective of polar bears and their habitat. By failing to discuss the underlying causes of global climate change and skirting the issue of how the proposed listing will be implemented, the proposed rule will subject those whose activities are adequately regulated, and do not directly contribute to potential sea ice decline, to additional restrictions, administrative burdens, and potential litigation. Such a result would also conflict with the statutory purposes of the ESA. Just as it is clear that Congress intended for a listing decision to have a meaningful effect on species conservation, it is equally clear that Congress did not intend for the ESA to be used to

³ Climate change can also be fairly described as a generalized grievance. Under the rationale of the proposed rule, any number of currently healthy species would be eligible for listing as soon as selective computer modeling based on unverifiable assumptions about future emissions levels “projects” a certain amount of change in their habitat. Such a result further highlights the unreasonable nature of the precedent that would be set by the proposed listing.

further restrict already highly-regulated activities absent an identifiable benefit to a listed species. *See, e.g., Bennett v. Spear*, 520 U.S. 154, 176-77 (1997) (ESA's "best science" requirement is intended to prevent well-intentioned but scientifically unsupported regulatory restrictions).

In sum, while the proposed listing, if finalized, will likely lead to renewed argument and litigation, and will expose the people and industries of the Alaska Arctic to additional regulatory burdens, it will have no meaningful impact on the polar bear species and will stretch the ESA, not to mention FWS resources, beyond the breaking point. As discussed above, neither outcome is what Congress intended when it passed the ESA. Nor does either outcome reflect good public policy or common-sense. Most significantly, neither outcome serves the laudable interests of polar bear conservation, management, and research. Had FWS directly confronted the potential causes of future sea ice recession and assessed the limitations of the ESA in evaluating CBD's petition, the agency would likely have concluded that listing the polar bear as threatened species is not warranted.

II. THE PROPOSED RULE IS NOT DEFENSIBLE ON ITS OWN GROUNDS

Even setting these broader policy concerns aside, the proposed rule is not defensible on its own grounds. The proposed rule selectively uses data on the status of the polar bear to create the misimpression that a healthy species — one that currently occupies all of its historic range at sustaining population levels — is in dire decline due to global climate change. Moreover, the proposed rule does not adequately address what current climate change studies can and cannot tell us about what is "likely" in the foreseeable future. Because FWS has failed to consider the inherent limits on the predictive value of the climate modeling data, its conclusions about the "likelihood" of future sea ice recession, like its proposed conclusions about the health of the polar bear species, render the resulting rule arbitrary and capricious and contrary to the ESA. Finally, FWS's refusal to directly address the causes of potential future sea ice recession has prevented the agency from satisfying its statutory obligation under the ESA to evaluate the adequacy of existing regulatory mechanisms to prevent or to mitigate factors believed to present a threat to polar bears.

A. THE STATUS OF THE POLAR BEAR SPECIES DOES NOT SUPPORT FWS'S LISTING DECISION

Uncritically extrapolating from subtle changes, inconsistent patterns, and anecdotal observations in small populations, the proposed listing creates the impression that there has been a significant decline in the health and/or distribution of polar bears due to sea ice recession, and that this decline is sufficient to list the polar bear as a threatened species. *See, e.g., 72 Fed. Reg.* at 1,080 (claiming "[p]olar bear populations throughout the Arctic are being affected by changes in their sea ice habitat"). However, FWS's central assumptions about the status of the species and the impacts of sea ice recession are contradicted by the best available science and traditional knowledge. There is a broad scientific consensus that the polar bear species currently occupies its entire circumpolar historical range in stable and sustaining numbers, as do polar bear prey species. Moreover, Alaska populations of polar bears are increasing or stable, except for the Chukchi Sea population, which FWS has designated as declining as a precautionary measure in

light of unknown levels of illegal harvest in Russia.

In order for the listing decision to be legally defensible, FWS must consider the undisputed strong health of the species and must directly confront the weaknesses in the data upon which it relies. If FWS continues to ignore the encouraging population size and impressive distribution of the polar bear species or persists in overstating the relevance of some data while disregarding inconsistencies and reasonable alternatives, the resulting listing decision will violate both the APA and the ESA. *Pacific Coast Fed'n of Fishermen's Ass'ns, Inc. v. National Marine Fisheries Serv.*, 265 F.3d 1028, 1034 (9th Cir. 2001) (agency must consider all relevant factors and present a rational connection between the facts found and conclusions drawn); *see also Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Insurance Co.*, 463 U.S. 29, 43 (1983).

1. The Polar Bear's Global Population and Distribution Reveals a Healthy Species

Despite the proposed rule's intimation to the contrary, there is an international consensus that polar bears occupy their entire historical range at healthy numbers between 21,500 and 25,000 and that there is no current evidence of an overall decline in the global polar bear population.⁴ Indeed, polar bears are the only bear species, and one of the few carnivores, that continue to occupy their entire range. This consensus position is shared by CBD, which in drafting the listing petition, admitted that "most populations are currently reasonably healthy and the global population is not presently endangered," and is acknowledged elsewhere by FWS and the USGS. CBD Petition at viii; 72 Fed. Reg. at 1,095.

2. The Proposed Rule Ignores Important Countervailing Information that Conflicts with FWS's Conclusions About the Impacts of Potential Climate Change on Polar Bear Populations

To date, only one polar bear population – the Western Hudson Bay population – has been identified as experiencing negative effects attributed to current sea ice recession. However, while the proposed rule relies heavily on the information regarding the Western Hudson Bay population, it fails to provide a fair discussion of important countervailing evidence that calls into question many of FWS's key assumptions regarding the causes of this population's decline as well as FWS's sweeping conclusion that decline in the Western Hudson Bay population can be seen as a harbinger of impacts to come. *See, e.g.*, 72 Fed. Reg. at 1,081 (contending that all polar bear populations are expected to experience impacts comparable to the Western Hudson Bay population as marine ecosystems change).

⁴ For identification purposes, polar bears have been divided among 19 loosely defined, low density populations. (Aars et al. 2006). Seven polar bear populations are increasing or stable, five are declining (for a variety of reasons, not all of which are related to sea ice recession), and seven have unknown trends due to insufficient data.

Located entirely in Canada, the Western Hudson Bay population occupies the southern-most fringe of the polar bear's global range. While sea ice has been reported to break up earlier and consolidate later in Western Hudson Bay, the pattern is not consistent throughout the region. (Stirling et al. 2004). For example, there is a statistically significant trend toward earlier breakup off the Manitoba coast but not off the Ontario coast of Western Hudson Bay. Given this regional variability, Aars et al. (2006) have hypothesized that the numbers of bears in the latter area have remained stable in recent years due to later ice breakup, while those in the former area may be declining partially because of the earlier breakup of spring ice. Significantly, however, Aars et al. has identified over-harvest as another factor contributing to a possible decline off the Manitoba coast. Indeed, over-harvest appears to have had a much more significant effect on the size and structure of the Western Hudson Bay population than global warming, including creating a large imbalance in the sex ratio. (Stirling and Parkinson 2005). Assessment of the status of the Western Hudson Bay population is further complicated by the traditional knowledge of resident native communities, which shows an increase in the Western Hudson Bay polar bear population that contradicts Aars et al. Traditional knowledge is commonly used to gauge the accuracy of population estimates by government scientists and Canada has subsequently increased the harvest quota for the Western Hudson Bay population to reflect information provided by the native communities. The regional variability in sea ice conditions, combined with evidence of over-harvest, and the countervailing information from native communities about increasing numbers of polar bears greatly diminishes the strength of FWS's determination that global warming is negatively affecting the current health and status of the Western Hudson Bay population.

Observations of potential climate change and sea ice recession have also been inconsistent in other areas of the polar bears' range. There was no clear pattern of later or earlier sea ice breakup or consolidation in M'Clintock Channel and the Bay of Boothia. (Barber and Iacozza, 2004). Other studies report that some areas within the circumpolar climate have demonstrated recent increases in temperature or precipitation, while others have displayed decreases in these elements causing uncertainty as to the effects of global warming on sea ice. (Whitfield et al. 2004). In addition, recent examination of decadal and multi-decadal variations in Arctic surface air temperatures has identified strong correlation between this variability and annual data compiled for total solar irradiance, and poor correlation with atmospheric CO₂. (Soon, 2005). Broader regional variability within the Arctic, like that witnessed in Western Hudson Bay, also serves to undermine FWS's conclusion that global climate change will affect all polar bear populations, if at all, in the same way.

Moreover, Rosing-Asvid (2006) provides an alternative explanation that contradicts FWS's position that polar bear populations will necessarily experience declines during periods of warmer weather. Rosing-Asvid demonstrates that polar bear and ringed seal populations respond inversely to cycles of cold and warm weather during the spring, as suggested by Born et al. (2004) for ringed seals. Using catch statistics from the late 1800s to the early 2000s, Rosing-Asvid shows a strong increase in the number of polar bears and a reduction in the number of ringed seals during mild climatic periods when there is less ice coverage with reverse trends occurring during cold periods. As Rosing-Asvid explains, during milder climatic periods, ringed seal habitat is less abundant while lair density is higher, thereby resulting in better spring hunting for polar bears. Conversely, during colder climatic periods, ringed seal habitat is more abundant

while lair density is lower, resulting in poorer hunting success in the spring. Significantly, this relationship has also been observed in the Norwegian polar bear population. (Aars et al. 2006). Rosing-Asvid also notes a corresponding lower seal pup mortality and higher polar bear cub mortality during cold climatic periods causing a decline in the bear population and the reverse during warmer climatic periods. Based on these findings, Rosing-Asvid concludes that alternative theories are being ignored by researchers who are focused on a single theory based on global warming – a flaw that the proposed rule shares.

3. The Proposed Rule's Conclusion that the Southern Beaufort Sea Population is Declining Due to Climate Change Is Not Defensible

Alaska has approximately 4,700 polar bears represented by three populations. (Lunn et al. 2002, Regehr et al. 2006).⁵ An estimated 2,000 comprise the Chukchi Sea population, 1,500 the Southern Beaufort Sea population, and 1,200 the Northern Beaufort Sea population. Consistent with the global condition of the polar bear species, polar bear populations in Alaska are stable to increasing, with the possible exception of one Chukchi Sea population which is designated as declining due to illegal harvest outside the United States.⁶ Significantly, in 2002, FWS designated the Southern Beaufort Sea population as increasing. (Lunn et al. 2002).

Notwithstanding the overall good health of the Alaska polar bear populations, FWS now attempts to bolster its proposed listing by maintaining that the Southern Beaufort Sea population is also experiencing a “declining trend” due to “dramatic changes” in sea ice conditions. 72 Fed. Reg. at 1,076. The sole support offered for FWS’s position is a reinterpretation of existing data, (see Regehr et al. (2006)) that has not been peer reviewed, and which contradicts its own “best estimate” regarding the stability of the Southern Beaufort Sea population. Relying on Regehr et al., FWS now asserts that differences observed in the Southern Beaufort Sea population between two discrete periods of time (1967-1989 and 1990-2006) signifies a change in the status

⁵ Polar bears are highly mobile and wide ranging. They are capable of accessing widely distributed prey populations to compensate for changing environmental conditions. (Amstrup et al. 2000). Their high mobility, combined with long distance movements of pack ice, add a high level of uncertainty to the actual discreteness of the three Alaska populations, which FWS has not fully accounted for in its Range-Wide Status Review of the Polar Bear (“Status Review”) or the proposed rule. This is confirmed in the report prepared by the Polar Bear Specialist Group (Aars et al. 2006), where recent data suggest that the estimated sizes of the populations may need to be changed to reflect a re-adjustment in the boundaries of the Southern Beaufort Sea population.

⁶ FWS stated in its Status Review that the unknown number of illegal takes in Russia makes the stable designation uncertain and tentative and as a precaution the population status is categorized as declining. (Schliebe et al. 2006). However, surveys of the Chukchi Sea population in 2000 off the coast of Alaska suggest the density is *three times* higher than previously reported for the most comparable study, which was conducted in 1987. (Evans et al. 2003). Consequently, the Chukchi population appears to be healthy, and would likely be categorized as stable if not for illegal harvest.

population attributable to climate change. According to FWS, these include a decline in population size, reduction in the survival rate of cubs and yearlings, changes in body weight and skull size in adult male bears, and recent anecdotal observations of a small number of drowned bears, cannibalized bears, and dead cubs. FWS, again citing Regehr et al., goes on to speculate that these trends are comparable to similar effects seen in the Western Hudson Bay population before a statistical decline in that population was observed. 72 Fed. Reg. at 1,076.

However, FWS not only fails to address the limitations described above in the information on the Western Hudson Bay population, it has failed to critically assess the value of the data culled from Regehr et al. on the Southern Beaufort Sea population. On closer inspection, it is clear from Regehr et al., and other sources, that (1) the revised population size is not significantly different from the previous estimate, (2) survival rates for cubs and yearlings are inconsistent, not always statistically significant, and not supported by a corresponding decrease in litter size, (3) findings regarding reduced body weight and skull size are not consistent across age/sex classes, and (4) that anecdotal reports of polar bear deaths are likely due to natural events commonly experienced by animals that live in a harsh, expansive, and frequently changing environment like the Alaska Arctic.

The strength of any scientific analysis is directly related to the consistency of its results across all categories of interest and to the sustainability of its conclusions when subjected to peer review and publication. FWS's application of data from Regehr et al. (2006) meets neither of these critical validating standards. Such problems are particularly evident when it comes to the use of data on skull size and body weight, upon which FWS heavily relies to support its conclusions about population decline. According to Regehr et al., differences between skull and body weight measurements for the two study periods were often inconsistent, contradictory, or too small to be statistically significant. For example, skull size for the two periods was nearly identical for adult females and yearling males, whereas body weight was greater for yearling males during the most recent study period and nearly identical for yearling females, adult females, and male and female cubs-of-the-year for the two periods. Moreover, in many cases, the size and weight differences between periods were small enough and sufficiently inconsistent enough to suggest to Regehr et al. that they were due to variability in measurements taken by different researchers, at different times, under a variety of environmental conditions, using different techniques rather than any actual external impact on polar bear health. Yet, FWS provides no analysis of investigator error to gauge the integrity of the data taken from Regehr et al., which is necessary to verify both the credibility of the study and FWS's use of the results. Finally, as indicated above, Regehr, et al., has not been scientifically peer-reviewed in a professional journal, which is also essential for validating the accuracy of the study and FWS's conclusions.

FWS's discussion of anecdotal observations of polar bear cannibalism and drownings, which are culled from a variety of sources, also demonstrates the agency's skewed interpretation of the information before it to justify establishing a decline in the Southern Beaufort Sea population that conflicts with its own "best estimate." See 72 Fed. Reg. at 1,076. While FWS sees cannibalism and drownings as evidence of the impact of climate change, in reality similar events have been reported to occur in the past under natural conditions by both the scientific literature (Lunn and Stenhouse 1985) and by traditional knowledge. As early as 1975,

researchers reported finding polar bear cubs' claws in adult polar bear scat (Russell, 1975). Meanwhile, other researchers have directly observed cannibalism among polar bears. (Dyck and Daley 2002).⁷ Similarly, polar bears, like other Arctic species, sometimes drown due to unexpected but natural changes in the movements and structure of sea ice,⁸ something FWS neglects to mention when discussing the four polar bears found in the Beaufort Sea in the fall of 2004. 72 Fed. Reg. at 1,079. FWS, like CBD and other advocacy groups, has tried to link these drownings to sea ice recession. However, scientists cited by FWS in the proposed rule have attributed these drownings to an unexpected storm with winds exceeding 50 kilometers per hour and wave heights of over 2 meters. (Monnett and Gleason 2006).

In sum, apparently in order to justify its assumptions concerning climate-related decline in the Southern Beaufort Sea population, FWS has failed to critically review the data in Regehr et al., and to examine well-known, and not extraordinary, natural causes of polar bear deaths. Consequently, FWS's suggestion that the Southern Beaufort Sea population is declining due to climate change is not supported by its own cited evidence – a fact that FWS acknowledges in the proposed rule when it states that “our *best estimate* of the current size of the [Southern Beaufort Sea] population *does not show a statistically significant decline*.” 72 Fed. Reg. at 1,076 (emphasis added). Moreover, FWS's position is inconsistent with the traditional knowledge of the resident Eskimo communities. See Exhibit E (March 7, 2007, testimony of Richard Glenn, Inupiat subsistence hunter, whaling crew co-captain, and board President of the Barrow Arctic Science Consortium of the Alaska Eskimo Whaling Commission) (“Arctic coastal residents see a great many polar bears here, and have observed no decline in numbers or range in our region”). Similarly, FWS has failed to consider alternative explanations for the perceived decline in the Western Hudson Bay population, such as harvest, and has ignored or discounted contradictory information indicating that the population may well be increasing. As a result, FWS's conclusion that polar bear populations – either in Western Hudson Bay or the Southern Beaufort Sea – are declining due to climate change and that this decline will “inevitably” be experienced by the wider polar bear population is both contrary to the ESA's best available science requirement and arbitrary and capricious under the APA.

4. The Proposed Rule Fails to Consider the Adaptability of the Polar Bear Species

Finally, the proposed rule fails to seriously consider the adaptability of the polar bear species. This is particularly evident from the proposed rule's discussion of polar bear prey species. FWS maintains that ringed seal populations are also expected to decline as a result of

⁷ Armstrup et al. (2006) reports on the three instances of polar bear cannibalism in 2004 that have received attention. However, Armstrup et al (2006) failed to acknowledge the existing literature on polar bear cannibalism. Moreover, they conclude that their observations could reflect rare natural events and, in any event, the underlying causes of the cannibalism they observed are not known. There have been no more recently observed instances of cannibalism.

⁸ Even bowhead whales, a species highly adapted to living within sea ice, have been reported to drown when unexpectedly entrapped in heavy and continuous sea ice. (Nerini et al. 1984; Tomlin 1957).

global climate change and asserts that because ringed seals are the polar bear's primary prey a decline in the ringed seal population will have a corresponding affect on polar bear survival and reproduction. 72 Fed. Reg. at 1,074. Setting aside the question of whether FWS's conclusions about the impacts of climate change on ringed seals are accurate,⁹ it is clear from the proposed rule that FWS has down-played or ignored evidence that polar bears have access to and are able to rely on a variety of highly adaptable prey species, a capability that has evolved to compensate for cycles of low abundance for specific prey species.

Polar bears are known to switch prey when ringed seals are at low abundance levels. In the Western Hudson Bay, polar bears switched from a diet of 80% ringed seals concurrent with an earlier ice breakup to a greater proportion of bearded and harbor seals which are less reliant on ice. Similar polar bear-prey responses to changing ice conditions have been observed in the Davis Strait. (Iverson et al. 2006, Stirling and Parkinson 2006). The adaptability of polar bears to changing conditions is further demonstrated by the recent upward trend in the number of polar bears feeding on bowhead whale carcasses along the Beaufort Sea coast, which have become more available as both the bowhead whale population and native harvest of bowhead whales has increased. The value of this alternative food is apparently great, since nearly every polar bear seen near the carcasses is large and in good condition. (Miller et al. 2006). Similar observations have been reported by Inupiat hunters who commonly see polar bears feeding on gray whale and other marine mammal carcasses washed ashore. *See Exhibit E at 3* (testimony of Richard Glenn); *see also id.* at 2 ("Our traditional and historical knowledge taught us that polar bears are extremely adaptive and opportunistic."). The adaptability of polar bears to their environment, which is confirmed by centuries of Inupiat traditional knowledge and raised by many other commenters, must be fully considered before a defensible final decision on the proposed listing can be made.

B. THE PROPOSED LISTING DOES NOT ADDRESS THE LIMITS OF CURRENT EMISSIONS SCENARIOS TO PREDICT THE FUTURE

Given that FWS has determined that other risk factors cannot be used to support a listing decision, the proposed rule is entirely premised on FWS's belief that current projections about the rate and extent of summer sea ice decline are sufficiently reliable to conclude that the polar bear is "likely" to become an endangered species in the "foreseeable future," which FWS has defined to be the next 45 years. 72 Fed. Reg. at 1,070.¹⁰ There is increasing scientific data that

⁹ Detailed information regarding the status of ringed seals, bearded seals and walrus in the Alaska Arctic is provided in § III.C of AOGA's April 2006 comment letter to FWS, which is attached hereto as Exhibit A.

¹⁰ Under the ESA, a species is "threatened" if it is "*likely* to become an endangered species within the *foreseeable future* throughout all or a significant portion of its range." 16 U.S.C. § 1532(20) (emphasis added). Together the terms "likely" and "foreseeable future" create an express statutory requirement that threatened listings be supported by a reasonable expectation or probability (rather than a conjectural or hypothetical possibility) that a species will indeed become endangered in the foreseeable future. *See Oregon Natural Resources Council v. Daley*, 6 F. Supp. 2d 1139, 1152 (D. Or. 1998) (ESA requires a determination as to

the climate is changing and that anthropogenic greenhouse gas emissions are a contributing factor. However, there are still substantial uncertainties associated with the ability to reliably predict future emission levels, which, in turn, hampers the ability to predict the precise future course and specific impacts of climate change, especially at the regional level. Yet, FWS has entirely failed to account for the limitations on predicting emissions levels inherent in the specific climate studies cited in the proposed rule – specifically with regard to how those studies are designed and what they are intended to show.¹¹ As a result, the proposed rule significantly overestimates the studies’ ability to predict what is “likely” to happen in the future.

To support its conclusions regarding future summer sea ice decline, FWS relies primarily on two recent scientific articles addressing climate change and, strangely, a BBC news report. *See* 72 Fed. Reg. at 1,071-72 (citing Holland et al. (2006), Johannessen et al. (2004), and “Serreze (2006)”).¹² In addition, the proposed rule, as well as the Status Review, rely more generally on projections made by the Intergovernmental Panel on Climate Change (“IPCC”) in 2001 and the Arctic Climate Impact Assessment (“ACIA”). *See, e.g.*, 72 Fed. Reg. at 1072; Status Review at 60 (indicating ACIA describes “changes that will likely occur” in the Arctic). Like many scientific analyses of global climate change, each of the studies cited in the proposed rule makes theoretical projections about potential impacts by running hypothetical greenhouse gas emissions scenarios through computerized climate response models. As is also typical, each of these studies uses emissions scenarios developed by the IPCC for its 2000 Special Report on Emissions Scenarios (commonly referred to as the “SRES scenarios”).¹³ *See* Holland et al.

the likelihood – rather than merely the prospect – that a species will or will not become endangered in the foreseeable future).

¹¹ Significantly, FWS has not specifically asked for public comment on the extent and timing of sea ice recession. 72 Fed. Reg. at 1,064. Nor is there any indication that peer reviews of the draft Status Review critically assessed the specific climate studies underlying the proposed rule. Despite the fact that FWS indicates the draft Status Review was reviewed by climate scientists, the summary of peer review comments does not reveal any serious attention to FWS’s use of the climate studies.

¹² FWS cites to Holland et al. (2006) for the proposition that “near ice-free September conditions may be reached as early as 2040” and to Johannessen et al. (2004) for the premise that “accepted models project almost no sea ice cover during summer in the Arctic Ocean by the end of the 21st century.” 72 Fed. Reg. at 1,071-72. In addition, FWS cites to “Serreze (2006)” to support an assertion that the National Snow and Ice Data Center has “cautioned that the Arctic will be ice-free by 2060 if current warming trends continue.” *Id.* at 1,072. However, “Serreze 2006” is not a peer reviewed article, but rather an excerpt from a BBC interview.

¹³ In total, the IPCC developed approximately forty SRES scenarios based on emission levels associated with different demographic, social, economic, technological, and environmental developments. (Nakićenović 2000). The IPCC recommends that a range of SRES scenarios be used in any analysis to account for the uncertainties associated with the forces driving emissions. (Nakićenović 2000) (indicating “six scenario groups” and “four cumulative emissions categories” represent the “smallest subsets of SRES scenarios that capture the range of uncertainties associated with driving forces and emissions”). Consequently, FWS’s reliance on

(2006) (running SRES A1B); Johannessen et al. (2004) (running SRES A2 and B2); ACIA 2005 (running SRES A2 and B2).¹⁴

Significantly, but unacknowledged by FWS, the 2001 IPCC report emphatically and repeatedly stated that the SRES scenarios are not intended to be either “predictions or forecasts” of future emission levels but are simply designed to present “alternative images of how the future *might* unfold.” (Nakićenović 2000) (emphasis added). As the IPCC explains, “[f]uture levels of global [greenhouse gas] emissions are a product of very complex, ill-understood dynamic systems, driven by forces such as population growth, socio-economic development, and technological progress among others, *making long-term predictions about emissions virtually impossible.*” (Nakićenović 2000) (emphasis added). The IPCC, therefore, identifies the broad range of social, economic, and political assumptions underlying the SRES scenarios as “*key uncertainties*” which lead to the “largest uncertainties” in projecting climate change. (IPCC 2001 (Summary for Policy Makers at 31)).

Nor would it be accurate to assume that a particular emissions scenario is more likely because it is described as “mid-range” or “middle-of-the-road.” *See, e.g.,* Holland et al. (2006) (describing A1B), Johannessen et al. (2004) (describing A2 and B2). The IPCC explicitly warns readers that it has not attempted to assign probabilities to individual emissions scenarios. (Nakićenović 2000). Instead, the IPCC states that the location of a particular SRES scenario on the spectrum of scenarios “provides a useful context for understanding the relative position of a scenario but does not represent the likelihood of its occurrence.” (Nakićenović 2000). As the IPCC emphasizes “[t]here is no single most likely, “central,” or “best-guess” scenario, either with respect to SRES scenarios or to the underlying scenario literature. (Nakićenović 2000) (italics in original). Consequently, any suggestion that a given SRES scenario is more likely, more reasonable, or more conservative because it happens to fall within the middle of the range ignores the IPCC’s own admonitions regarding how the scenarios should be understood.

In sum, while the ability to model climate response has improved over time, the ability to develop more accurate emissions scenarios, upon which the climate models are based, has not.¹⁵

studies that look at one or two SRES scenarios falls far short of IPCC’s minimum standards and undermines the predictive value of the studies relied upon in the proposed rule. Additional limitations of the SRES scenarios are discussed in § V of AOGA’s April 2006 comment letter on the listing petition. *See* Exhibit A.

¹⁴ The same holds true for climate studies projecting future sea ice cover cited in the Status Review. *See, e.g.,* Status Review at 67 (indicating Gregory et al. (2002) and Zang and Walsh (2006) also relied on SRES scenarios).

¹⁵ The most recent report from the IPCC again recognizes the limited predictive value of the SRES scenarios. *See* (Alley et al. 2007) (describing advances in climate modeling abilities while noting that modelers still rely on the 2000 SRES scenarios, none of which project the most likely future outcome, or attempt to account for implementation of the United Nations Framework Convention on Climate Change, the emissions targets of the Kyoto Protocol or other international, domestic, regional, state or local climate change initiatives.).

Consequently, when Holland, Johannessen, or ACIA make “predictions” about Arctic summer sea-ice decline over the next 30, 50, or 100 years, they are simply expressing confidence in the accuracy of their modeling results *if* the future does indeed evolve in concert with the particular SRES scenario they have chosen to input into their particular computer model. None of the studies relied upon in the proposed rule purport to predict what future emissions levels will actually be or to improve on the SRES scenarios in any way. Indeed, ACIA itself emphasizes this point, stating that “the climate change scenarios are not predictions, but rather plausible, internally consistent descriptions of *possible* future climates.” (ACIA 2005 at 101 (emphasis added); ACIA 2004 at 27 (acknowledging that neither the A2 nor B2 SRES can be considered “the most likely outcomes”); *see also* Holland et al. 2006 (acknowledging that “future emissions scenario used to force the model affects the likelihood of abrupt sea ice reductions”); Status Review at 67 (“Extrapolation of linear trends into the future and different model assumptions, results in large uncertainties about the future of the Arctic sea ice.”).

Thus, as the IPCC cautions, “the possibility that a single [SRES] emissions path will occur is *highly uncertain*.” (Nakićenović 2000) (emphasis added). Because listing a species as threatened under the ESA hinges on the certainty of relevant predictions—*i.e.*, FWS must establish that the polar bear is “*likely*” to become an endangered species in the foreseeable future, *see* note 10, *supra*—this is a crucial limitation of the climate studies. Yet, it is one that the proposed rule fails to recognize or address. A proposed rule that is contradicted by the very studies it relies upon cannot be considered supported by the best scientific information available, as required by the ESA, and is therefore arbitrary and capricious under the APA. *Idaho Dep’t of Fish & Game v. Nat’l Marine Fisheries Serv.*, 850 F. Supp. 886, 898 (D. Or. 1994) (biological opinion violated APA where agency favored one set of model results over another set of equally uncertain model results without a reasoned analysis) *vacated as moot*, 56 F.3d 1071 (9th Cir. 1995); *see also State Farm*, 463 U.S. at 43 (an agency acts arbitrarily and capriciously when it ignores an important aspect of the problem or fails to consider all relevant factors).

C. THE PROPOSED RULE DOES NOT ANALYZE EXISTING MECHANISMS FOR RESPONDING TO GREENHOUSE GAS EMISSIONS

Presumably due to FWS’s decision not to address the causes of sea ice decline, the proposed rule does not identify, let alone discuss, the broad range of existing international, national, regional, and local climate initiatives that address carbon emissions. Instead the proposed rule summarily concludes that there are “no known regulatory mechanisms effectively addressing reductions in sea ice habitat at this time”. 72 Fed. Reg. at 1,086. Nor does FWS request public comment on the topic. 72 Fed. Reg. at 1,064. The Status Review is only marginally better, mentioning briefly the 1992 United Nations Framework Convention on Climate Change (“the UNFCCC”) and the 1997 Kyoto Protocol. *See* Status Review at 136-37. This falls well short of the analysis required by the ESA and the APA. 16 U.S.C. § 1533(a)(1)(D) (directing FWS to consider adequacy of existing regulatory mechanisms); *State Farm*, 463 U.S. at 43. Only after identifying and evaluating the full range of both domestic and international measures, programs, and policies that currently exist to address greenhouse gas emissions and climate change, can FWS make a reasoned determination as to their adequacy.

While FWS has failed to meet its statutory responsibility to fully assess existing regulatory and other mechanisms, the limited discussion of climate change policies in the Status Review, along with even a cursory review of some of the existing international and domestic initiatives for response to concerns about the possibility of climate change, further highlights both the inappropriateness of using the ESA listing process as a means to meaningfully protect the polar bear or its habitat from the potential effects of global warming. Accordingly, had FWS conducted the review of existing regulatory mechanisms required by the ESA, the agency likely would have come to a different conclusion about the value and legitimacy of the proposed listing.

III. IN THE EVENT THE POLAR BEAR IS LISTED AS A THREATENED SPECIES, FWS SHOULD CONSIDER THE FOLLOWING POINTS

For the reasons discussed throughout this comment letter, listing the polar bear as a threatened species is not warranted at this time. However, should FWS conclude otherwise, we are concerned that a final rule listing the polar bear will be used to block or unnecessarily restrict oil and gas activities in the Arctic.¹⁶ To avoid this unintended result: (1) any final rule should reiterate and reinforce findings in the proposed rule confirming that oil and gas activities do not threaten the polar bear species or its habitat and that potential impacts from industry activities are adequately regulated by existing mechanisms; (2) in order to avoid future confusion, as discussed in Section I, *supra*, any final rule listing the polar bear must address the underlying causes of current or potential sea ice recession and explain how the listing decision will be implemented; (3) any final rule should stipulate that, for reasons described below, designation of critical habitat is neither necessary nor appropriate and will offer no additional benefits to the polar bear beyond those provided by the regulatory restrictions already in place; and (4) a final rule should further acknowledge that the costs of designating critical habitat, like the proposed listing, will be disproportionately borne by the people and industries of the Alaska Arctic, who pose no current threat to polar bear habitat.

A. ANY FINAL RULE LISTING THE POLAR BEAR SHOULD REITERATE AND STRENGTHEN FINDINGS MADE IN THE PROPOSED RULE REGARDING THE NEGLIGIBLE IMPACT OF THE OIL AND GAS INDUSTRY

FWS has correctly concluded, both in the proposed rule as well as elsewhere, that human activities in the Arctic are not a threat to polar bears or their habitat. 72 Fed. Reg. at 1,080. This is particularly true when it comes to Alaska oil and gas exploration, development, and

¹⁶ Such efforts have already been initiated. Earlier this year, CBD filed suit challenging incidental take regulations for the Alaska oil and gas industry promulgated under the MMPA. *Center for Biological Diversity, et al. v. Kempthorne*, Case No. 07-cv-00894-EDL (N. D. Cal.; filed February 13, 2007). The complaint asserts, among others things, that FWS failed to consider the impacts of global warming and the proposal to list polar bears as a threatened species when making its impact determination.

production.¹⁷ As the proposed rule states, “[d]ocumented impacts on polar bears by the oil and gas industry during the past 30 years are minimal” and “[h]istorically, oil and gas activities have resulted in little direct mortality to polar bears.” 72 Fed. Reg. at 1,079; *see also* Status Review at 175-77.

The proposed rule is consistent with FWS’s negligible impact finding for incidental take regulations promulgated under the Marine Mammal Protection Act (“MMPA”). 71 Fed. Reg. 43,926, 43,943 (August 2, 2006). Based on extensive data, FWS determined that any “potential impacts” related to the Alaska oil and gas industry are expected to be “short-term” with “no long-term impact on individuals and no impacts on the polar bear population.” *See* 71 Fed. Reg. at 43,926, 43,936, 43,942. Specifically, FWS has stated as follows:

[b]ased on the best scientific information available, the results of monitoring data from our previous regulations, the results of our modeling assessments, and the status of the population, we find that any incidental take reasonably likely to result from the effects of oil and gas related exploration, development, and production activities during the period of the rule, in the Beaufort Sea and adjacent northern coast of Alaska will have no more than a negligible impact on polar bears

71 Fed. Reg. 43,943. In making this finding, FWS comprehensively considered: (1) the distribution of the polar bear species; (2) the biological characteristics of the species; (3) the nature of oil and gas industry activities; (4) the potential effects of industry activities and potential oil spills on the species; (5) the probability of oil spills occurring; (6) the documented impacts of industry activities and oil spills on the species; (7) mitigation measures that will minimize effects; and (8) other data provided by monitoring programs that have been in place since 1993. *Id.*

As FWS recognizes, the indiscernible impact of the Alaska oil and gas activities on polar bear populations is due in large part to the success of regulatory mechanisms currently in place, as well as the industry’s commitment to polar bear conservation. *See, e.g.*, 72 Fed. Reg. at 1,080, 1,088. There are several statutory schemes that protect polar bears from the effects of oil and gas activities. Chief among these is the MMPA.¹⁸ 16 U.S.C. §§ 1361-141h. The goal of the MMPA

¹⁷ Other potential human threats to polar bears include harvest and concentrations of contaminants. FWS had determined that neither of these threatened polar bears in all or a significant portion of their range. 72 Fed. Reg. at 1,085, 1,094. We support these findings and incorporate by reference the analysis addressing these topics in AOGA’s and API’s April 2006 comment letters on the listing petition. *See* Exhibits A and B.

¹⁸ Other relevant regulatory mechanisms applicable to the Alaska oil and gas industry include the National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.*; the Outer Continental Shelf Lands Act, 43 U.S.C. § 331 *et seq.*; the Coastal Zone Management Act (“CZMA”), 16 U.S.C. § 145 *et seq.*; the Alaska National Interest Lands Conservation Act (“ANILCA”), 16 U.S.C. § 3101 *et seq.*; and the Marine Protection, Research, and Sanctuaries Act (“MPRSA”), 33 U.S.C. § 1401 *et seq.*

is to protect and conserve marine mammals, including polar bears. 16 U.S.C. § 1361. To accomplish this goal, the taking of marine mammals is prohibited, subject to certain statutory exceptions, and, as under the ESA, taking is defined broadly to include the “harassment” of marine mammals. 16 U.S.C. §§ 1371, 1362(13). The MMPA also places a strong emphasis on habitat and ecosystem protection. 72 Fed. Reg. at 1,087.¹⁹ Operating conditions imposed pursuant to the MMPA on the Alaska oil and gas industry include, among others, measures to protect polar bear denning activities, seasonal restrictions on industrial activities, development of site-specific polar bear interaction plans, and, where appropriate, enhanced monitoring or flight restrictions. 72 Fed. Reg. at 1,088.

The effectiveness of the MMPA, as well as the commitment of Alaska’s oil and gas industry to polar bear conservation, is evident from both the high level of compliance with polar bear mitigation and avoidance programs and the funding of important polar bear studies. Polar bear studies funded by the oil and gas industry include programs undertaken by USGS in Alaska and the Canadian Fish & Wildlife Service to annually identify and map polar bear den locations, and to conduct annual population surveys. Information from the polar bear location database, which is annually updated with data from winter surveys of polar bear dens, are used to communicate known den locations to North Slope personnel in an effort to avoid human-bear interactions. In addition, North Slope workers are routinely provided with annual training in polar bear awareness, with select groups of workers receiving additional training from USGS biologists on approved hazing techniques. A trained polar bear monitor is placed at exploration drilling sites located in areas of potential polar bear habitat and security personnel monitor polar bears that are observed within the vicinity of oil field operations. Polar bear encounter reports are annually submitted to FWS so that the effects of oil and gas activities on polar bears may be assessed.

These strict operational protocols, which have been designed, as required by the MMPA, with the involvement of federal, state and local governments, and native organizations, are credited with largely preventing interactions likely to harm polar bears. In fact, as FWS acknowledges, there have been only a small number of incidental interactions with polar bears and no instances of lethal take associated with the industry during the period covered by the MMPA regulations. 72 Fed. Reg. at 1,079 (indicating MMPA regulations, and particularly the Letter of Authorization process, have increased polar bear awareness and minimized encounters), 1,080 (noting that even before passage of the MMPA lethal take of polar bears by the oil and gas industry was extremely rare, limited to two documented instances of take in defense of human life). Moreover, the sustained and continuing growth of polar bear populations in Alaska for the past 30 years has coincided with the development of the oil and gas industry on the North Slope.

¹⁹ Higher levels of protection and regulation are applicable to at-risk species or populations designated as either a “strategic stock” or as “depleted.” A “strategic stock” is a marine mammal population (i) for which the level of direct human-caused mortality exceeds the potential biological removal level, or (ii) based upon the best available scientific information, is declining and is likely to be listed as a threatened species under the ESA. 16 U.S.C. § 1362(19). A “depleted” stock is a marine mammal population that is below its optimum sustainable population. *Id.* § 1362(1). At present, neither polar bears, nor their prey, are listed under the MMPA as either a “strategic stock” or as “depleted.”

As a result, FWS, both in the current proposed rule and in the final rule issuing the MMPA incidental take regulations, has repeatedly found that the existing regulatory mechanisms applicable to the Alaska oil and gas industry are adequate to protect the polar bear species. As the proposed rule explains:

based on mitigation measures in place now and likely to be used in the future, historical information on the level of oil and gas development activities occurring within polar bear habitat..., the lack of direct quantifiable impacts to polar bear habitat from these activities noted to date, and because of the localized nature of the development activities, or possible events such as oil spills, they do not threaten the species throughout all or a significant portion of its range.

72 Fed. Reg. at 1,080; *see also* 71 Fed. Reg. at 43,936 (“Using current mitigation measures, Industry activities have had no known effects on the polar bear population during the period of these regulations. We anticipate that, with continued mitigation measures, the impacts to denning and non-denning polar bears will be at the same low level as in previous regulations.”).

API, AOGA, NOIA and IAGC support FWS’s determination that the highly-regulated Alaska oil and gas industry does not pose a threat to polar bears that would justify listing the species under the ESA. For this reason, and for the reasons discussed throughout this comment letter, we do not believe that listing the polar bear species is warranted. However, in the event FWS decides to formally list the polar bear, the final rule should reiterate and reinforce the agency’s finding that the Alaska oil and gas industry does not currently pose a threat to the polar bear species or its habitat. In addition, because of the clear relevance of FWS’s negligible impact determination, we request that FWS include the full administrative record for the August 2006 MMPA regulations as a part of the administrative record in this matter. Doing so will ensure that the final listing decision and the administrative record supports FWS’s conclusions and contains all relevant information regarding the minimal impact that oil and gas activities have had historically, have currently, or are expected to have in the future.

B. THERE IS NO RATIONAL BASIS FOR DESIGNATING CRITICAL HABITAT

FWS has concluded that critical habitat for the polar bear is not determinable at this time, but has solicited public comment on the issue. 72 Fed. Reg. at 1,062, 1,092. We believe that there is no rational basis for designating either onshore or offshore areas under Alaska or United States jurisdiction as critical habitat. However, we also believe that FWS has a statutory obligation to conduct a full and fair analysis of the issue and that the agency should begin doing so as soon as is practicable. This will allow FWS to make a reasoned decision regarding critical habitat on its own terms and to avoid otherwise inevitable litigation. When undertaking this analysis, we request that FWS keep in mind the following.

1. Both Marine and Terrestrial Polar Bear Habitat in the United States Are Already Sufficiently Protected

As discussed in Section III.A, *supra*, human activities in the Alaska Arctic are already highly regulated to prevent potential adverse impacts to the polar bear species, including adverse impacts on polar bear habitat. Many of the same international and domestic measures that protect polar bears also protect their habitat in Alaska. The United States is currently a signatory to several international agreements that protect polar bear habitat, including the 1973 Agreement on the Conservation of Polar Bears, which pays specific attention to habitat components such as denning and feeding sites as well as migration routes. 72 Fed. Reg. at 1,082. On the domestic side, polar bear habitat is directly protected by the MMPA and indirectly by the CZMA, ANILCA, and the MPRSA. *Id.* at 1,087-89 (summarizing habitat protection provided by federal statutes). Specifically, the MMPA authorizes FWS to issue regulations and impose mitigation measures targeted at protecting essential polar bear habitat – such as mating grounds and other areas of significance – from human impacts. *Id.* at 1,088, 16 U.S.C. § 1361. Simultaneously, the CZMA protects polar bear habitat in northern and western Alaska by requiring projects to be consistent with the North Slope Borough and Alaska Coastal Management Programs, land designations made under ANILCA provide various levels of protection for polar bear habitat, and the quality of marine habitats, upon which polar bears rely, are protected by the MPRSA. 72 Fed. Reg. at 1,089. FWS has determined, both in the proposed rule and in promulgating regulations under the MMPA, that the existing regulatory mechanisms are adequate to protect polar bear habitat. 72 Fed. Reg. at 1,080, 1,088; 71 Fed. Reg. at 43944. Accordingly, any additional protection stemming from designation of critical habitat would be duplicative and, thus, unnecessary.

2. Areas Currently Occupied by Polar Bears in the United States Do Not Meet the Statutory Criteria for Critical Habitat

In order to qualify as critical habitat under the ESA, a specific area must possess those physical and biological features that are (1) essential to the conservation of the species *and* (2) which may require special management considerations or protection. 16 U.S.C. § 1532(5)(A)(i); *Home Builders Ass'n of Northern California v. U.S. Fish & Wildlife Serv.*, 268 F. Supp. 2d 1197, 12148 (N. D. Cal. 2003) (finding Congress' use of conjunctive "and" was intentional). Habitat currently occupied by the polar bear in the United States does not meet either of these requirements.

First, it will be difficult, if not impossible, for FWS to establish that polar bear habitat in the United States is *essential* to the conservation of the species as a whole. Both onshore and offshore areas under the United States' jurisdiction comprise only a small portion of the polar bear species' current range. Moreover, as FWS acknowledges, the future value of polar bear habitat in the United States cannot be determined due to the complexities involved in identifying which specific areas will become essential to the conservation of the species as a result of global climate change. 72 Fed. Reg. at 1,096. This is particularly true when it comes to onshore areas, which are not only adequately protected but are also in no danger of disappearing. If FWS cannot demonstrate that designation of specific areas in the United States is indispensable to the

conservation of the species, then FWS cannot designate these areas as critical habitat. *Home Builders*, 268 F. Supp. 2d at 1214.

Second, even if FWS is able to demonstrate that habitat in the United States is essential to the conservation of the polar bear species, there are *no special management considerations* that can be applied to protect these areas from the sole threat FWS has identified to support its listing decision— *i.e.*, sea ice recession. 72 Fed. Reg. at 1094-95. FWS has admitted as much. As the proposed rule and FWS's public statements make clear, there are no management activities that FWS can undertake in Alaska and no restrictions that can be placed on the use of polar bear habitat that can or will reverse the projected future effects of global climate change. 72 Fed. Reg. at 1,071. Instead, as FWS has acknowledged, effective regulation of global climate change is a political issue appropriate for the Legislative Branch; it is not a problem that can be or should be addressed piecemeal through administrative application of the ESA.

Therefore, because there are no foreseeable land management measures that will prevent the projected decline in sea ice, and because human activities within polar bear habitat are already adequately regulated to protect polar bears and their habitat, special management considerations and protections cannot be developed under 16 U.S.C. § 1532(5)(A)(i)(II) for offshore and onshore areas under United States jurisdiction.

3. The Economic Costs of Designating Critical Habitat Exceed the Negligible Benefits Such a Designation Would Bring to the Species

The ESA requires FWS to consider economic impacts of designating critical habitat. 16 U.S.C. § 1533(b)(2). In addition, unless excluding an area would result in extinction of the species, the ESA allows FWS to decline to designate critical habitat or to exclude certain areas from a critical habitat designation when the costs of designating outweigh the benefits. *Id.* When calculating costs, FWS must conduct a “full analysis of all economic impacts, regardless of whether those impacts are attributable co-extensively to other causes.” *See New Mexico Cattle Growers v. U.S. Fish & Wildlife Serv.*, 248 F.3d 1277, 1285 (10th Cir. 2001); *Home Builders Ass'n of Northern California v. U.S. Fish & Wildlife Serv.*, 2007 WL 2021248 (N. D. Cal. Jan. 24, 2007) (slip opinion). In the present instance, designation of critical habitat would provide virtually no benefit to the polar bear species while imposing substantial costs on business entities, communities, and individuals operating in the Arctic who pose no demonstrable threat to the polar bears or their habitat.

As emphasized above, polar bear habitat is already adequately protected from the impacts of human activities occurring in the Alaska Arctic by an overlapping web of regulatory restrictions. *See, e.g.*, 72 Fed. Reg. 1,081 (noting the “lack of direct quantifiable impacts to polar bear habitat” from oil and gas exploration, development, and production). In addition, as also discussed above, FWS has admitted that designation of critical habitat, like the proposed listing itself, will not lead to land management or other measures that will affect sea ice recession. Thus, designation of critical habitat will offer no additional benefits to the polar bear beyond those provided by the regulatory restrictions already in place.

Conversely, designating critical habitat will have a demonstrable economic impact on the Alaska oil and gas industry, affect subsistence economies in both the United States and Canada, and place additional, unnecessarily administrative burdens on federal agencies. The potential economic impacts to the oil and gas industry serve as a case in point. Conducted largely on federal lands, oil and gas activities in Alaska will likely face increased costs resulting from ESA consultation requirements, additional regulations, and potential litigation.

Under the ESA, FWS must conduct a thorough analysis quantifying the broad range of economic impacts before designating critical habitat. Given the negligible benefits designation of critical habitat will have for the polar bear species, it is clear that such an analysis will indicate that the costs of designating critical habitat far outweigh any conceivable benefit such a designation will have for the polar bears.

C. FWS HAS FAILED TO COMPLY WITH EXECUTIVE ORDER 13211

Executive Order 13211 requires federal agencies to prepare Statements of Energy Effects when undertaking a "Significant energy action," including actions that are likely to have a significant adverse effect on the supply, distribution or use of energy. The proposed rule concludes that a polar bear listing "is not expected to significantly affect energy supplies, distribution or use" and, accordingly, FWS has prepared no Statement of Energy Effects. However, FWS's terse statement serves to once again emphasize the false premises upon which the proposed rule is based. The petition to list polar bears under the ESA, and related statements of the advocacy groups supporting it, are clear that the intent of the listing is to influence domestic climate policy and industrial emissions in the Lower 48 states, and to impede oil and gas exploration, development and production in Alaska. We agree, as FWS has stated, that existing regulatory regimes ensure North Slope oil and gas activities will have no more than a negligible impact on polar bears. However, we strongly disagree that a polar bear listing will have less than a significant adverse impact on the Alaska oil and gas industry. Simply denying that a listing will result in such outcomes, without analysis or explanation, does not comply with the purpose or intent of Executive Order 13211, or constitute rational decision making.

D. FWS HAS FAILED TO COMPLY WITH THE INFORMATION QUALITY ACT AND INFORMATION QUALITY GUIDELINES

The Information Quality Act (IQA), 44 U.S.C. §3516 note, requires that agencies ensure the quality of information and data upon which regulatory action is taken. FWS has implemented IQA by adopting Information Quality Guidelines. The information and data set forth in the proposed rule clearly fall within the scope of IQA and FWS guidelines as it is "information disseminated by the agency to the public . . . [that] represents an official view of the FWS or DOI . . ." See FWS Information Quality Guidelines, II-4. The IQA implementing guidance from OMB to FWS and other agencies also recognizes that special care must be given to "influential" agency rulemakings. Clearly, the proposed polar bear ESA listing must be deemed "influential" in having a clear and substantial impact on important public policies.

The IQA and the FWS Information Quality Guidelines ensure the quality, objectivity, utility and integrity of information used by FWS in regulatory proceedings. IQA limits FWS to action

that can be supported by objective information and data. As we have discussed in numerous instances above, there are many instances where scientific conclusions underlying the proposed rule are based upon information, including non-validated and non-verified computer models, that do not meet the government's minimum and statutorily required IQA standards.

IV. CONCLUSION

For the reasons stated herein, listing the polar bear as a threatened species is not warranted and the costs of designating critical habitat far outweigh the benefits, if any, of the proposed listing. The best available science indicates that polar bears are one of the most successful top predators in the world – occupying their entire historic range at sustaining population levels. Moreover, the IPCC modeling of emission scenarios on which the proposal primarily relies indicates that there is significant uncertainty in the ability to predict potential sea ice recession in the regions that would be affected by the proposal. The proposal's failure to adequately address these facts, in addition to the other defects described in these comments, would make any final listing decision at this time arbitrary and unreasonable, and contrary to ESA.

However, even more is at stake, given that FWS has not shown that the proposed rule will provide any meaningful protection to polar bears from the possible future threats on which the proposed rule is based. Instead, the proposed rule will result in a number of other potential consequences, including:

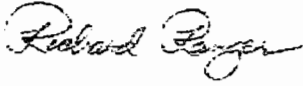
- imposition of unjustified regulatory and economic burdens on indigenous groups inside and outside the United States, the oil and gas industry on the North Slope, and the State of Alaska;
- litigation over whether the ESA can be administered to regulate emission sources and force federal climate policies;
- litigation over the designation of critical habitat for the polar bear species;
- a spate of similar petitions to list species based on speculative projections of global warming (and related litigation); and
- increased litigation to block development based on those listings.

None of these things will provide any discernable benefit to the polar bears, and all of them will unnecessarily tax agency and stakeholder resources while threatening to upend the ESA. As FWS has acknowledged, the ESA is not an appropriate or effective statutory tool to address the potential effects of climate change on future Arctic sea ice recession.

Thank you for considering these comments.

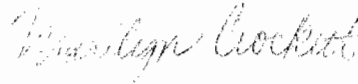
Sincerely,

American Petroleum Institute



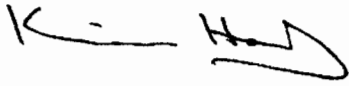
Richard Ranger
Upstream Manager

Alaska Oil and Gas Association



Marilyn Crockett
Deputy Director

National Ocean Industries Association



Kim Harb
Director, Policy & Government Affairs

International Association of Geophysical Contractors



Chip Gill
President

Attachments

Cc: The Honorable Dirk Kempthorne, Secretary, U. S. Department of Interior
H. Dale Hall, Director, U. S. Fish and Wildlife Service
Tom Melius, Director, Region 7 (Alaska), U. S. Fish and Wildlife Service
The Honorable Ted Stevens, United States Senate
The Honorable Lisa Murkowski, United States Senate
The Honorable Don Young, United States House of Representatives
The Honorable Sarah Palin, Governor, State of Alaska
Denby Lloyd, Commissioner, Alaska Department of Fish and Game
John Katz, Director State & Federal Relations, Office of the Governor, State of Alaska

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