

THE WILDLIFE SOCIETY

ALASKA CHAPTER

The Alaska Chapter of The Wildlife Society strives to enhance the ability of wildlife professionals to conserve biological diversity, sustain productivity, and ensure responsible use of wildlife resources in Alaska for the benefit of society.



March 12th, 2019

Acting Secretary David Bernhardt
Department of the Interior
Attn: Coastal Plain Oil and Gas Leasing Program EIS
222 West 7th Ave. #13
Anchorage, Alaska 99513
Blm_ak_coastalplain_EIS@blm.gov

Re: Alaska Chapter of The Wildlife Society Comments on the Draft Environmental Impact Statement on the Coastal Plain Oil and Gas Leasing Program

Dear Acting Secretary Bernhardt,

This letter represents the Alaska Chapter of The Wildlife Society's public comments on the Draft Environmental Impact Statement (DEIS) on the Arctic National Wildlife Refuge Coastal Plain Oil and Gas Leasing Program. The Wildlife Society (TWS) was founded in 1937 and is a non-profit scientific and educational association of over 15,000 professional wildlife biologists and managers, dedicated to excellence in wildlife stewardship through science and education. Our mission is to inspire, empower, and enable wildlife professionals to sustain wildlife populations and habitats through science-based management and conservation. Our professional membership represents and serves the community of scientists, managers, educators, technicians, planners, and others who work actively to study, manage, and conserve wildlife and its habitats worldwide. The Alaska Chapter of TWS has about 200 members in Alaska representing wildlife scientists and resource managers including those working for state and federal agencies, Native organizations, universities, non-profit groups, and consulting biologists.

The Arctic National Wildlife Range was established in 1960 to preserve unique wildlife, wilderness, and recreational values. In the Alaska National Interest Lands Conservation Act of 1980 (ANILCA), Congress enlarged the Range to 19.6 million acres, renamed it the Arctic National Wildlife Refuge, and designated 8 million acres of mountains, foothills, and coastal plain as Wilderness. ANILCA established the following purposes for the Arctic Refuge:

1. To conserve fish and wildlife populations and habitats in their natural diversity including, but not limited to, the Porcupine Caribou Herd, polar bears, grizzly bears, muskoxen, Dall sheep, wolves,

wolverines, snow geese, peregrine falcons and other migratory birds, Dolly Varden, trout, grayling, whitefish, and burbot.

2. To fulfill the international treaty obligations of the United States with respect to fish and wildlife and their habitats.
3. To provide, in a manner consistent with the purposes set forth in subparagraphs I and ii, the opportunity for continued subsistence uses by local residents.
4. To ensure, to the maximum extent practicable and in a manner consistent with the purposes set forth in paragraph I, water quality and necessary water quantity within the Refuge.

Section 1002 of ANILCA required the Secretary of the Interior to assess the petroleum and wildlife values of a 1.5-million-acre portion of the Arctic Refuge coastal plain often referred to as the 1002 Area. Section 1003 of ANILCA reserved the decision of whether to allow oil and gas leasing and production or development leading to production within that area to Congress. The necessary assessments of the 1002 Area are complete and indicate it may contain substantial amounts of oil and gas, and that it is also of vital importance to many wildlife species.

Decades of biological study and scientific research have confirmed that the coastal plain of the Arctic Refuge is a vital component of the biological diversity of the refuge. Within the narrow (15-40 miles) coastal plain, there is a unique compression of habitats which concentrates a wide array of wildlife native to the Arctic, including polar bears, grizzly bears, wolves, wolverines, caribou, muskoxen, Dolly Varden char, Arctic grayling, and many species of migratory birds. In fact, according to the U.S. Fish and Wildlife Service, the Arctic Refuge coastal plain contains the greatest wildlife diversity of any protected area above the Arctic Circle.

At the request of Congress, the National Research Council (NRC) of the National Academy of Sciences evaluated the cumulative environmental effects of oil and gas activities on Alaska's North Slope and published a report in 2003. Led by Dr. Gordon Orians, University of Washington, this report was prepared by a panel of prominent scientists following an extensive review of the literature and consultations with experts. It remains the best, most comprehensive synthesis of the effects of oil development on wildlife and the landscape of Arctic Alaska. Among the report's "major findings" (Chapter 11) are the following:

- Three-dimensional seismic surveys require a high spatial density of trails. "Seismic exploration can damage vegetation and cause erosion, especially along stream banks."
- The effects of roads, pads, pipelines, and other infrastructure extend beyond the physical footprint itself and distances at which impacts occur vary according to the environmental component affected. "Effects on hydrology, vegetation, and animal populations occur at distances up to several kilometers..."
- "Roads have had effects as far-reaching and complex as any physical component of the North Slope oil fields."

- Denning polar bears are among the animals that “have been affected by industrial activities on the North Slope.”
- Readily available food supplies in the oil fields attract higher-than-normal densities of predators, which then prey on birds and their eggs and young. The reproductive success rate of some bird species in the developed parts of oil fields “has been reduced to the extent that it is insufficient to balance mortality.”
- The spread of industrial activity, especially to the east where the coastal plain is narrower than elsewhere [i.e., the Arctic Refuge], “would likely result in reductions in reproductive success” for caribou.

The NRC stated that “The effects of North Slope industrial development on the physical and biotic environments and on the human societies that live there have accumulated despite considerable efforts by the petroleum industry and regulatory agencies to minimize them...Continued expansion is certain to exacerbate some existing effects and to generate new ones...”

Based on limited knowledge and understanding of the cumulative effects of oil and gas exploration and development on Alaska’s North Slope, and the difficulty of accurately predicting the timing or extent of potential development scenarios, it is challenging to quantitatively predict the long-term, cumulative effects on the wildlife and ecosystem processes of the Arctic Refuge’s 1002 Area. Thus, it is unlikely that a mitigation plan could be developed with any degree of certainty. We believe it is prudent to more fully understand these effects before risking leasing and development of other, more sensitive areas. The NRC report identified a list of gaps in current knowledge regarding effects of oil and gas development on wildlife.

Studies of wildlife and vegetation on the 1002 Area of the Arctic Refuge during past decades have provided considerable baseline information on structure and function of an arctic tundra ecosystem that has been relatively undisturbed by human activities. Few arctic areas have baseline data as extensive as the 1002 Area. There are considerable scientific and cultural values in maintaining undisturbed arctic regions where effects of long-term global changes can be identified and distinguished from localized human influence. This is particularly the case today where climate change is accelerating faster in the Arctic than anywhere else on Earth.

The Wildlife Society believes that the 1002 Area of the Arctic National Wildlife Refuge is an area critical to the abundance and diversity of wildlife in the entire Refuge, as well as some populations of both national and international importance. Furthermore, this area possesses significant cultural, aesthetic, recreational, and scientific values in its present state. Industrial activities that are expected to occur as a result of petroleum exploration and development are likely to have significantly negative effects on these values, including introduction of invasive species and habitat fragmentation. Adverse effects on some wildlife species of petroleum at existing oil fields on the North Slope have not been avoided, and the unique aspects of wildlife resources and the environment of the 1002 Area are such that mitigation of the

impacts of oil and gas development may not be possible. Additionally, the long-term cumulative effects on wildlife resources are unknown.

Specific concerns re: the DEIS for the Coastal Plain Oil and Gas Leasing Program

In the limited time available to review the DEIS, the Alaska Chapter of TWS identified the following concerns:

- **It is important that the DEIS explicitly address the conflicting Refuge purposes.** The DEIS does not explicitly address or resolve potential conflicts between the proposed leasing program and the original four purposes (identified above) for which the Arctic Refuge was established. These conflicts must be explicitly discussed and resolved. Specifically, the DEIS must address how the original Refuge purposes for wildlife, fish, and water conservation, treaty obligations, and subsistence uses will be maintained through petroleum exploration and development.
- **The DEIS needs to address in detail the geographical variation across the landscape of the North Slope.** Nearly all of the current petroleum exploration and development to the west of the Refuge (e.g., Prudhoe Bay and the northeastern NPR-A) have occurred in a landscape much different than the Refuge coastal plain. The narrow, compressed coastal plain of the Refuge makes large-scale resource development much more problematic as there are many fewer options for wildlife to avoid development infrastructure. This is particularly an issue for the Porcupine Caribou Herd. In addition, the lack of water in lakes, which is much different from the vast wetlands to the west where oil and gas activities are expansive, has significant implications for the feasibility, design and cost of an industrial-scale oil and gas program on the Refuge coastal plain, as well as for impacts on fish, wildlife and the natural landscape. These differences must be clearly addressed in the DEIS.
- **The DEIS should outline an explicit plan to acquire more comprehensive baseline information for the coastal plain of the Arctic Refuge.** The DEIS draws on incomplete and old baseline data. This inadequacy should be addressed with additional surveys, monitoring, research, and synthesis. Specific priorities include: analyzing detailed caribou movements and habitat use; assessing population dynamics and habitat use for the Southern Beaufort Sea subpopulation of polar bears; updating wetlands inventories and bird surveys; and predicting how these populations will respond to petroleum exploration and development in the narrow landscape of the coastal plain, how they will respond to accelerating climate change, and the interaction of these two forces. These analyses are needed not only to meet the legal requirements of NEPA but are necessary to predict potential cumulative impacts to Refuge resources and to develop an adequate research and monitoring plan for the Refuge coastal plain.
- **The DEIS must rigorously describe the 2,000-acre limitation on development of the coastal plain of the Arctic Refuge.** The DEIS does not adequately address how the area to be covered by

production and support facilities will be limited to 2000 acres as required in P.L. 115-97. This is especially important in view of the NRC's finding that the impacts of Arctic development extend far beyond the physical footprints of the necessary facilities and infrastructure. The DEIS provides a limited interpretation of this restriction, with a number of associated structures (e.g., gravel mines, ice roads and elevated pipelines) not counting toward the cap. Additionally, the DEIS would allow further construction outside the 2000 acres if the original developed areas are reclaimed. However, there is limited evidence of the efficacy of this approach and no clear definition of the standards by which adequate reclamation would be determined based on scientific information.

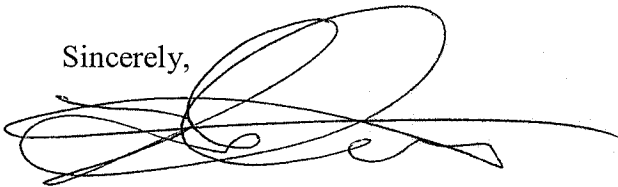
- **The DEIS must clearly develop science-based justifications for its conclusions.** The DEIS lacks adequate scientific justifications for its conclusions. Literature citations are incomplete and the DEIS relies too heavily on the 2015 Arctic Refuge Comprehensive Conservation Plan (CCP). That plan did not explicitly address petroleum exploration and development in a comprehensive manner.
- **The DEIS must conduct a thorough, quantitative, cumulative effects analysis of oil and gas exploration and development on the coastal plain of the Arctic Refuge.** The Arctic Refuge is one of the wildest, most ecologically intact and important protected areas in the world. The DEIS fails to thoroughly assess cumulative effects of a leasing program and subsequent development in the context of oil and gas activity, as well as a changing climate, across Arctic Alaska and the circumpolar Arctic. The DEIS provides only a cursory analysis of individual industrial and climate impacts and does not explicitly assess how these impacts may be additive and interactive across the Arctic landscape and beyond. For example, there is an inadequate cumulative effects analysis for caribou and polar bear populations that use the coastal plain of the Refuge. Polar bears—listed as “threatened” under the Endangered Species Act—are already struggling with deteriorating sea ice and increasingly are forced to den on land on the eastern Beaufort Sea coast, including the coastal plain of the Arctic Refuge. In fact, three-fourths of the Refuge coastal plain is designated as critical habitat for polar bears, which are highly vulnerable to disturbance due to oil and gas activities.
- **The DEIS must develop and explicitly describe a comprehensive monitoring plan and conservation strategy for the coastal plain of the Arctic Refuge and describe how this monitoring program will be coordinated with monitoring across the entire North Slope. The monitoring plan must be capable of determining adverse effects of oil and gas development on the wildlife, plants, waters and frozen soils of the coastal plain and substantiating beneficial effects of any mitigation measures proposed in the DEIS.** Other than the Arctic National Wildlife Refuge, there are no landscape-scale protected areas on the coastal plain of our nation's only Arctic ecosystem. Climate change is occurring much more rapidly in the Arctic than anywhere else in the U.S. Without a comprehensive monitoring plan and a network of protected areas to serve as a baseline for scientific monitoring, scientists will be unable to evaluate the effects of climate change on arctic fish and wildlife or the ecosystems that support them. It would

be highly risky to commit the entire coastal plain of America's only Arctic ecosystem to industrial development without a master plan for conservation and monitoring. The DEIS is seriously flawed unless it can explicitly address this important issue. We recognize that there will be significant impacts from development infrastructure on fish and wildlife resources, their habitats, and the human uses of those resources, including subsistence use and wilderness recreation. Without a scientific benchmark to serve as a control and a comprehensive monitoring plan, industrial development of the entire arctic coastal plain (including the Arctic Refuge) would be very risky for conservation of Refuge resources and would not provide an opportunity for adequately assessing potential environmental effects and for comparing costs vs. benefits of development.

In summary, the Alaska Chapter of The Wildlife Society recommends maintaining the coastal plain of the Arctic National Wildlife Refuge in an undeveloped state for the conservation of Refuge resources, as identified in the original purposes for which the Refuge was established, and for long-term studies of the effects of climate change in the Arctic on wildlife resources and ecosystem processes.

Thank you for considering our comments on the Coastal Plain DEIS.

Sincerely,

A handwritten signature in black ink, appearing to read 'Nathan Svoboda', with a long horizontal line extending to the right.

Nathan Svoboda
President
Alaska Chapter of The Wildlife Society