

March 7, 2019

Nicole Hayes  
Bureau of Land Management  
Attn: Coastal Plain Oil and Gas Leasing Program EIS  
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CC: Joseph Balash, U.S. Department of the Interior  
Steve Wackowski, U.S. Department of the Interior  
Greg Siekaniec, U.S. Fish & Wildlife Service

**Re: Substantial deficiencies in the Draft Environmental Impact Statement on the Coastal Plain Oil and Gas Leasing Program**

Dear Ms. Hayes:

We are writing as scientists and resource managers to express our opposition to oil and gas leasing in the Arctic National Wildlife Refuge and our concerns with the Bureau of Land Management's (BLM) Draft Environmental Impact Statement (DEIS) on the proposed leasing program. Based on our interdisciplinary experience and knowledge of the ecological risks involved, we find that the DEIS falls far short of a thorough, scientific analysis of impacts as required under the National Environmental Policy Act (NEPA).

When President Eisenhower established the original Arctic National Wildlife Range in 1960, he had the foresight and wisdom to protect an entire ecosystem, both south and north of the Brooks Range, including the Arctic Coastal Plain. Decades of study within the Arctic Refuge have confirmed that the Coastal Plain, specifically, is vital to the biodiversity of the entire refuge. The highly compressed habitats of the narrow Coastal Plain (15–40 miles wide) concentrate a wide array of wildlife native to the Arctic, including polar and grizzly bears, wolves, wolverines, caribou, muskoxen, Dolly Varden char, Arctic grayling, and more than 140 species of migratory birds. According to the Fish and Wildlife Service, the Arctic Refuge Coastal Plain contains the greatest wildlife diversity of any protected area above the Arctic Circle.

In the time available to review the DEIS, we have identified the following deficiencies:

- 1) **Assess impacts, including cumulative effects.** The agency's position is that Congress has required a leasing program on the Arctic Refuge Coastal Plain, but this does not relieve the agency of the responsibility to fully assess the impacts of a leasing program and subsequent exploration and development under NEPA and other existing laws. 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 and other industrial activity, as well as a changing climate, across Arctic Alaska, Canada and the circumpolar Arctic. The DEIS provides only a cursory analysis of individual industrial and climate

impacts and does not delve deeply enough into how these impacts may be additive and interactive across the Arctic landscape and beyond.

- 2) **Address conflicting refuge purposes.** The DEIS does not address or remedy the conflict between the oil and gas program and the other purposes for which the refuge was established. Those other purposes—including to conserve fish and wildlife populations and habitats in their natural diversity, ensure water quality and necessary water quantity, and fulfill international treaty obligations—must be fully addressed in the DEIS and honored on the ground. For instance, while oil and gas activity would require millions of gallons of water for facilitating drilling and building ice roads, the DEIS does not provide a comprehensive assessment of projected overall water use. The DEIS then fails to explain how potentially massive water withdrawals would impact the scarce water resources on the Arctic Refuge Coastal Plain (including springs, icings, lakes, rivers and streams, and coastal lagoons) and their ecological and habitat functions. Notwithstanding the legislative addition of an oil and gas program to the refuge’s purposes, the DEIS must explain how the original refuge purposes of water and fish and wildlife conservation will be upheld in the face of fossil fuel development.
- 3) **Obtain adequate baseline information.** The DEIS draws on incomplete, outdated and otherwise inadequate baseline data, and this flaw can only be addressed through additional surveys, monitoring, research, and data analysis and synthesis. Priority needs include: understanding physical parameters (such as snow depths and drifting patterns, seasonality of river flows, and changes in hydrological systems from melting Brooks Range glaciers); updating wetlands inventories and bird surveys; assessing population dynamics and habitat use for the Southern Beaufort Sea subpopulation of polar bears; monitoring muskox use of the refuge; and analyzing existing data sets, such as caribou movements. These data and analyses are needed not only to meet the legal requirements of NEPA, but they also are necessary to support sound planning and ultimately to protect and avoid or mitigate impacts to refuge resources as required under existing law. Filling these data gaps is also essential for impact assessments and adaptive management in the event that an oil and gas program is carried out on the Arctic Refuge Coastal Plain.
- 4) **Explain the 2,000-acre limitation.** The DEIS does not adequately address how the area to be covered by production and support facilities will be limited to 2,000 acres as required in P.L. 115-97. This is especially important in view of the National Academy of Science/National Research Council<sup>1</sup> finding that the impacts of Arctic development extend far beyond the physical footprint of the necessary facilities and infrastructure. The DEIS applies a very narrow interpretation of this limit: e.g., gravel mines, ice roads and elevated pipelines would not count toward the cap, even though such infrastructure is directly related to production and support of an oil and gas program. Moreover, the DEIS would allow more construction *beyond* 2,000 acres if previously disturbed acres are “reclaimed,” despite a dearth of scientific evidence that reclaimed acres would function in the same way as non-disturbed areas. Nor has the agency explained how it will track and enforce the 2,000-acre limitation on the ground. These are serious flaws in the DEIS and must be rigorously addressed in a comprehensive manner.

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<sup>1</sup> National Research Council. (2003). Cumulative Environmental Effects of Oil and Gas Activities on Alaska’s North Slope. National Academies Press, Washington, DC.

- 5) **Offer a reasonable range of alternatives.** Besides the “no action” alternative, the DEIS fails to offer a reasonable range of alternatives. As drafted, two of the three action alternatives would offer 100 percent of the entire 1.56-million-acre Coastal Plain, and the third, offer 66% for leasing. Notwithstanding the 2,000-acre limitation, each action alternative could give rise to a sprawling industrial complex that would mean major impacts to caribou calving and post-calving grounds, designated critical habitat for polar bears, and overwintering fish habitat, and risks long-term harm to habitats for numerous migratory bird species.
- 6) **Acknowledge differences in North Slope landscapes.** Although there is oil exploration and development to the west in the Central Arctic (e.g., Prudhoe Bay and the northeastern NPRA), there are major differences in these landscapes compared to the Arctic Refuge Coastal Plain. As noted above and in the National Academy of Sciences/National Research Council report, fish and wildlife habitats on the Coastal Plain within the Arctic Refuge are compressed between the Brooks Range and Beaufort Sea in a narrow band carved by a dozen major rivers and streams. This fact has significant implications for impacts on fish, wildlife, and the landscape and the avoidance and mitigation of those impacts. Moreover, the Arctic Refuge Coastal Plain is a heterogeneous area dominated by foothills, hilly coastal plain, riparian floodplains, and a relative lack of water in lakes, which is strikingly different from thaw-lake plains to the west where oil and gas activities are underway. This has huge implications for the feasibility, design, and cost of an industrial-scale oil and gas program on the Coastal Plain, as well as for impacts on fish, wildlife and the natural landscape.
- 7) **Account for impacts of carbon emissions.** Although the DEIS estimates the carbon emissions resulting from the production and consumption of oil and gas resources developed on the Coastal Plain, it fails to fully assess the importance of those emissions on global climate change, which already is dramatically affecting Arctic ecosystems. More oil and gas development will only exacerbate these changes, which will in turn impact the ecosystem of which the Arctic Refuge is part. Moreover, degradation of permafrost, increased thermokarsting, altered precipitation patterns and hydrology, shortened winter seasons, and other manifestations of a changing climate will only complicate any human activity and infrastructures in the Arctic.
- 8) **Loss of environmental baseline.** Starting with an intensive grid of seismic exploration tracks, oil and gas activity within the Coastal Plain will—without question—compromise the value of the Arctic Refuge Coastal Plain as a benchmark against which scientists can measure environmental change in an Arctic landscape free of direct industrial influence. This in itself is an irreplaceable loss of international significance, and it should be acknowledged in the DEIS.
- 9) **Describe a comprehensive monitoring plan.** The loss of the Arctic Refuge Coastal Plain as an internationally significant environmental baseline would only be magnified if a Coastal Plain oil and gas program is not accompanied by a rigorous, comprehensive monitoring and evaluation program to document, avoid, adapt to, and mitigate impacts. The DEIS is seriously flawed in that it does not describe and commit to a transparent, publically-accessible, intensive, comprehensive monitoring plan that will both precede and extend beyond the life of any oil and gas activity on the Coastal Plain. Monitoring and evaluation are essential for protecting and mitigating impacts to natural resources

within the Arctic Refuge, but will also inform development activities throughout the circumpolar Arctic.

- 10) **Provide science-based justifications for conclusions.** Finally, the DEIS largely lacks adequate scientific justifications for its conclusions. For example, in the section on the impacts of oil spills on birds, the DEIS does not provide a single literature citation or reference, making it difficult for the public to follow the agency's logic. Elsewhere in the DEIS, the agency heavily cites the 2015 Comprehensive Conservation Plan (CCP), which was not intended to consider oil and gas activity as part of its analysis, leaving this DEIS deficient in supporting its conclusions. While the DEIS appendices provide some additional information, such as what species are found in the Arctic Refuge, they do not offer any further analyses that actually address impacts. This lack of scientific support leaves the public unable to verify the conclusions drawn in the DEIS, undermining the very purpose of an Environmental Impact Statement under NEPA.

As scientists and resource managers, we are opposed to oil and gas exploration, leasing, development, production, and transportation on the Coastal Plain of the Arctic Refuge because we believe such development is ecologically unsound and cannot be accomplished while also honoring the original purposes for which the Arctic Refuge was established and is still managed today. Even so, we note that P.L. 115-97 requires the first Coastal Plain lease sale within four years of the date of enactment: There is no reason for BLM to approach the task it was given by Congress in a rushed timeframe with inadequate preparation, incomplete information, and an ineffective public process. The Arctic National Wildlife Refuge, including the Coastal Plain, is one of the world's premier protected areas. The Arctic Refuge and the American public deserve better.

Thank you for your consideration.

Sincerely,

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