



June 18, 2018

Bureau of Land Management, Alaska State Office
Attention: Coastal Plain EIS
222 West 7th Avenue, #13
Anchorage, AK 99513-7599

This is a submission from the Government of Canada (Canada) in response to the “Notice of Intent to Prepare an Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program, Alaska” published in the U.S. Federal Register on 20 April 2018.

Canada is concerned about the potential transboundary impacts of oil and gas exploration and development planned for the Arctic National Wildlife Refuge (ANWR) Coastal Plain, including impacts on shared species that migrate between our countries, as well as impacts on our Indigenous peoples, including their customary and traditional use of Porcupine Caribou. Canada is particularly concerned that oil and gas exploration and development (including pre- and post-lease activities such as seismic and drilling exploration and transportation of oil and gas from the Coastal Plain) will negatively affect the long-term reproductive success of the Porcupine Caribou herd. This may occur by direct effects such as behavioral changes and physiological stress, and by affecting the habitat that the herd relies on for calving, post-calving, migration and insect relief.

Canada and the United States have a long and successful history of cooperation and coordination for activities that can have transboundary impacts. We have four agreements relating to migratory species that are directly relevant to this issue:

- Porcupine Caribou - the 1987 *Agreement Between the Government of Canada and the Government of the United States of America on the Conservation of the Porcupine Caribou Herd* (Porcupine Caribou Agreement);
- Polar bears - the 2008 *Memorandum of Understanding between Environment and Climate Change Canada and the United States Department of the Interior for the Conservation and Management of Shared Polar Bear Populations* and the multilateral 1973 *Agreement on the Conservation of Polar Bears*; and
- Migratory birds - the 1916 *Convention for the Protection of Migratory Birds in the United States and Canada*.

In terms of the Porcupine Caribou herd, our countries have recognized under the Porcupine Caribou Agreement the importance of cooperation and coordination for the long-term conservation of the herd and its habitat, a shared natural resource. Article 3(c) of the agreement provides that activities requiring a Party's approval having a potential impact on the conservation of the herd or its habitat be subject to impact assessment and review consistent with domestic laws, regulations and processes. With regard to any impact assessment of oil and gas exploration and development, Canada notes that Section 1005 of the *Alaska National Interest Lands Conservation Act* requires the U.S. Secretary of the Interior to consult with the appropriate agencies of the Government of Canada, particularly with respect to the Porcupine Caribou herd.

Given these provisions, and the importance that Canada and the United States mutually ascribe in taking appropriate actions to conserve migratory species and their habitat, Canada would therefore request that it be notified and engaged throughout the Environmental Impact Statement (EIS) process. Canada would also like to request that public information sessions be held in Canada during the EIS process. There has already been significant, demonstrated interest of Canadian stakeholders in this process.

While Canada welcomes the opportunity to contribute to the EIS process, it nevertheless views the process as distinct and separate from the treaty-based mechanisms for cooperation and consultation that Canada and the United States have concluded to protect migratory species. Canada has separately sent a diplomatic note to the U.S. Department of State outlining our interest in and expectation of working with the United States to further convey our views through collaborative consultation and cooperation.

Scoping Input

Consistent with established *National Environmental Policy Act* practice, we trust that the EIS process will incorporate a detailed consideration of transboundary impacts, with particular consideration for impacts on the Porcupine Caribou herd and other shared migratory species.

Below, please find our recommendations for issues that should be included within the scope of the EIS.

General Topics

Within the EIS, Canada recommends that the following broad topics be fully described:

- The Coastal Plain environment and valued ecosystem components;
- Potential impacts to key species of the proposed leasing, as well as impacts of pre- and post-lease activities such as seismic and drilling exploration, development, and transportation of oil and gas in and from the Coastal Plain and additional induced development (i.e. development that becomes likely and economically feasible when infrastructure established as part of the current leasing options). This would include describing the impacts of malfunctions, such as spills;

- Clear statements on the significance of those potential impacts;
- Project (i.e. the leasing) alternatives or alternative means for the project;
- Critical thresholds or limits to development, and the legislative framework to support them;
- Additive, multiplicative, and synergistic cumulative effects of this proposed leasing and induced development on key species (in relation to existing natural and anthropogenic stressors); and
- The requirements for effectiveness monitoring (of any proposed mitigations relevant to this phase of the process) including listing accountable agencies for any monitoring.

Content Common to all Key Species

For Porcupine Caribou, polar bear, and migratory birds, Canada requests the EIS examine at least the following facets:

- A complete description of the use and importance of the Coastal Plain in ANWR to movements of each species (and each life stage), during each season of the year, and across multiple years (including decades – such as on the scale of time as major climate forcing cycles such as the Pacific Decadal Oscillation). Descriptions should include scientifically defensible methods of delineation and rating of areas for importance;
- The likely effects of development on space use and movement by each of the key species should be examined, including abandonment or stranding of specific seasonal habitats;
- In addition to those spatial and temporal use analyses, an examination of how that use may change in the future with changes to spring snow melt and plant phenology, changes in precipitation, temperature, permafrost, and offshore ice conditions and extent (as it influences on-shore use by the species);
- An examination of scenarios of potential development / leasing and how that may affect each species within the spatial and temporal bounds and environmental changes listed above. This analysis should be comprehensive, including energy balance changes and impacts to reproduction, predator-prey dynamics, contaminants (including dust), increased mortality, and other direct and indirect effects on the key species and issues;
- An analysis of how any of the potential, predicted changes from development may impact subsistence harvesting of the above-mentioned species. This analysis should not be limited to only the harvesters that may access those species during the time they are in the Coastal Plain (i.e. transboundary effects on subsistence harvesting should be fully analyzed); and
- A comprehensive, up-to-date review of the potential impacts of oil and gas development in an arctic environment, including suggested mitigations and documentation of their effectiveness, including from grey literature.

Species-specific Content

Within the general umbrella of topics covered above, species-specific analyses should include:

Porcupine Caribou

- A description of the reproductive biology and ecology of the Porcupine Caribou herd including comparisons to other migratory herds (specifically including the central arctic caribou herd), to point out similarities and differences, and the importance of calving grounds to migratory tundra caribou populations;
- Consideration of a full-development scenario for the Coastal Plain and how it would affect the Porcupine Caribou herd demographics rates, including recruitment, adult female survival, and the growth rate of the population (λ) and an examination of the likely mechanisms of change. As part of this consideration, the following questions should be addressed:
 - How will recruitment metrics such as gestation, age at first parturition, and calf survival change?
 - How will metrics for adult cows, such as body condition, reproductive status, and survival be altered as a direct result of impacts?
 - Can any lag effects on cow or calf vital rates be anticipated (e.g. will there be carry-over effects from exposure to development on the calving grounds that affect vital rates in other parts of the seasonal cycle)?
 - Can a change in age structure within the herd be anticipated?
 - How might these parameters vary in the context of climate variability and change, including changes to forage quality? Could other seasons buffer the impacts caused by development?
 - At what herd size and trend would might the herd to be limited by the interaction between the development and the herd's inability to increase quickly (i.e., recruitment sink)?
 - How much would likely effects on the herd vary depending on herd size (large, medium, small) and trend (increasing, stable, decreasing)?
- A description and explanation of the strategy by Porcupine Caribou to choose specific, but varying calving areas each year, how that contributes to overall reproductive success, and what the effects of development may do to this strategy and herd success.

Polar Bears

- A description of the potential for human-bear interactions and incidental take of polar bears during exploration, development and production. Specifically, given an increased presence of humans on the landscape, coupled with polar bears spending increased time on land in association with sea ice loss caused by climate change, the potential for human-bear interactions is likely to increase. Unless steps are taken to reduce the frequency of conflicts, both human life and polar bear life will be put at risk. From a conservation perspective, additional human-caused polar bear mortality is a conservation threat in subpopulation that is predicted to decline due to deteriorating ice conditions; and

- A description of the potential loss of maternity denning habitat or direct reproductive success that may result from disturbance (including during seismic exploration), as well as describing the potential effects of disturbing denning females, particularly within the 32 km coastline buffer identified as critical habitat. An increasing proportion of polar bears in the Southern Beaufort Sea subpopulation are believed to den on land in association with sea ice loss.

Migratory Birds

- An examination of the impacts on shared populations, such as Snow Geese, with particular consideration of shared populations using the Coastal Plain that may have conservation concerns, including such species as Buff-breasted Sandpiper, Whimbrel, Ruddy Turnstone, Stilt Sandpiper, Pectoral Sandpiper, American Golden Plover, and Yellow-billed Loon.

Additional Considerations

Canada also requests that the following information be included in the EIS:

- A description of any mitigations or practices that will be required of any development in ANWR, understanding that project-specific mitigations will be determined in a separate regulatory process. For instance, road bed construction guidelines, ice-road requirements, predator management plans, traffic management plans, pipeline heights, well pad spacing seasonal restrictions or “stop work” situations, areas off limits to development within the Coastal Plain; and
- A thorough analysis of the likely components of projects that will fall outside the ‘2000 acre limit’ that is described in H.R. 1 (Public Law 115-97), Section 20001(c)(3). Specifically, how roads, gravel mines (borrow pits), exploration or delineation wells, water reservoir pits, or other features might be limited or accounted for in the footprint of induced development. Though gravel piers for pipelines are included, the footprint of the pipeline itself, how it fragments habitat or impedes movement should be included. The zone of influence of development, rather than just the physical structures, should be a part of the “footprint”.
- This analysis should specify how much of the Coastal Plain could be developed within a ‘2000 acre limit’ as variously defined.

To help ensure the EIS contains the best analyses, Canada is pleased to provide data relevant to the EIS process and welcomes requests for such data from the United States.

Canada would also like to note that the International Porcupine Caribou Board, formed under the Porcupine Caribou Agreement, is a key bilateral mechanism to advise the Governments of Canada and the United States on the impact of proposed development in the Coastal Plain and to share information and consider actions for the protection of the herd and its habitat. Canada thanks the United States for its work supporting the Board and welcomed the recent news that the two remaining vacancies for U.S. members may be filled by late June and that the board could meet before the end of September. Canada welcomes this and looks forward to the opportunity to discuss this issue with the United States.

Canada appreciates the opportunity to provide input into the scoping process for the EIS for the Coastal Plain Oil and Gas Leasing Program and thanks the Bureau of Land Management for considering these aspects throughout the process. We look forward to collaboration and consultation throughout the EIS process.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Kevin Thompson', with a stylized flourish extending to the right.

Kevin Thompson
Director General, North America Strategy Bureau