June 19, 2018

Nicole Hayes
Attn: Coastal Plain Oil and Gas Leasing Program EIS
Bureau of Land Management
222 West 7th Ave., Stop #13
Anchorage, Alaska 99513 USA
Sent via email: Blm_ak_coastalplain_EIS @blm.gov


Dear Ms. Hayes,

We provide these scoping comments for the Vuntut Gwitchin First Nation “hereafter Vuntut Gwitchin” in response to your public notice for the proposed Coastal Plain Oil and Gas leasing program within the “1002 lands” of the Arctic National Wildlife Refuge.

The traditional territory of the Vuntut Gwitchin First Nation of Old Crow, Yukon, Canada, is located in the heart of the range of the Porcupine Caribou herd. Vadzhaii (caribou) are the heart of Vuntut Gwich’in culture and subsistence economy. For millennia, this shared transboundary resource has sustained our physical, cultural and spiritual survival.

The Porcupine Caribou herd migrates each spring to the critical calving and nursery grounds in the Refuge Coastal Plain where most calves are born. The Vuntut Gwitchin view the prospect of oil and gas exploration and development in the Arctic Refuge Coastal Plain with deep alarm. Oil and gas disturbance, noise, smells, pollution, roads, pipelines, and massive infrastructure threaten the intricate wholeness and habitat integrity of the calving and post-calving grounds, migratory movements, and the long-term stability of the Porcupine Caribou herd. A threat to the health of the herd is a threat to our community and our way of life.

To be clear, the Vuntut Gwitchin First Nation opposes all oil and gas activities in the Coastal Plain of the Arctic National Wildlife Refuge.

The mandate from our Elders, gathered in 1988 in Arctic Village, is to permanently protect the sacred Calving Grounds.1 2 We have worked very hard for many decades to bring our concerns forward to the U.S. Government and the public.

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1 Gwich’in Niintsyaa, 1988. Resolution to prohibit development in the calving and post-calving grounds of the Porcupine Caribou Herd. (reaffirmed biennially)
2 Gwich’in Niintsyaa, 2016. Resolution to Protect the Birthplace and Nursery Ground of the Porcupine Caribou Herd.
The Vuntut Gwitchin and the entire Gwich’i Nation spanning the US and Canada for decades have called for permanent protection for the refuge Coastal Plain “1002 lands,” to protect the Porcupine Caribou herd that provides cultural sustenance and food security for our people. This area is so important to us we call it the Sacred Place Where Life Begins, Iizhak Gwants’an Gwandaii Goodlit. For this reason, we asked the U.S. Fish and Wildlife Service to recommend Wilderness designation for the Coastal Plain in its Arctic Refuge Comprehensive Conservation Plan, and were relieved when the final plan recommended permanent protection.  

The controversial provision to authorize the Coastal Plain oil and gas leasing program, which was inserted into the unrelated Tax Act (PL 115-97, Dec 22, 2017) without opportunity for public review or hearings, is a great concern to the Vuntut Gwitchin Government.  

The aggressive timeline of the Interior Department/BLM to complete the Coastal Plain Oil and Gas Leasing Program EIS in 12 months indicates a lack of apparent regard for a robust, transparent regulatory process, and does not ensure adequate baseline environmental information for assessing potential impacts. Such haste to make a leasing decision by summer 2019 – combined with lack of plans for meaningful consultation with us – contravenes our human rights protected under domestic and international laws.

The Vuntut Gwitchin First Nation opposes all attempts to allow any oil and gas activities on the Coastal Plain. Should the Interior Department undertake the Coastal Plain Oil and Gas Leasing Program pursuant to the Tax Act, this letter outlines many significant issues that must be addressed in the EIS to properly implement its obligations under the National Environmental Policy Act, and other US and international laws.

The Coastal Plain Oil and Gas EIS, and any other subsequent actions, must be fully scoped to address the shared Vuntut Gwitchin First Nation interests that may be impacted by any oil and gas activity in the Porcupine Caribou herd calving and post-calving grounds.  

We request BLM hold a public scoping meeting and hearing in Old Crow, Yukon to inform our community about the proposed Refuge Coastal Plain Oil and Gas Leasing Program, and to hear concerns directly from the Vuntut Gwitchin Government and Vuntut Gwitchin First Nation citizens situated in a context where we can meaningfully share traditional knowledge from our

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2 Note: Gwitchin use the general term “Calving Grounds” or “Birthplace” for the Porcupine Caribou Herd as meaning calving and post-calving grounds, the birthplace and nursery grounds.


5 See Tentative Schedule

community. We also request consultation and additional public meetings and hearings at each stage of the EIS process, and for any subsequent oil and gas activities.

Vuntut Gwitchin have a rich oral tradition and history in our language that holds cultural knowledge and contextual ideas and meanings through time from generation to generation from far, far back in history.6 Gwich’in translation at meetings, and of information and documents throughout the EIS process, is required to adequately communicate with Elders and others in the community.

**Vuntut Gwitchin and Caribou**

The Vuntut Gwitchin First Nation community of Old Crow on the banks of the Porcupine River is the only Yukon community located north of the Arctic Circle. The Vuntut Gwich’in, “People of the Lakes,” is one group of the Gwich’in Nation that spans from Alaska to the Northwest Territories. The name “Vuntut Gwitchin” derives from the heartland of the people - the Old Crow Flats, an internationally recognized wetland complex significant for its waterfowl, fish, muskrats and moose, and where each family group in Old Crow has their own trapping area that has been passed down from generation to generation.

The Vuntut Gwich’in continue to use the land and its resources as we have for thousands of years. With a vast traditional territory, approximately 50,000 square miles, the Vuntut Gwich’in rely heavily on the land for sustenance. We maintain an intimate relationship with the Porcupine Caribou herd using them for food, shelter and medicines.7

According to scientists, caribou have continually lived on our lands for over 400,000 years; archeological evidence shows indigenous people have been in relationships with caribou for 12,000 to 29,000 years.8 The Vuntut Gwitchin traditional territory remained free of glaciers during major Pleistocene ice ages and its surface is an ancient refugia,9 as is the Arctic Refuge Coastal Plain.10

There is no telling exactly how long our relationship with the caribou actually is, but they have clearly been integral to Vuntut Gwich’in as far back as our stories stretch, which is well beyond any written history of humankind.11 Stories tell of a Gwich’in man who left a nomadic group to join the caribou, turning into one of them. Upon his return many years later he returned to his

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people as a man and taught them how to make the incredible caribou fences that corralled the caribou, providing much food for our people and changing the way we lived.

The placement of Gwich’in villages was along the migratory routes of the Porcupine Caribou herd. Our entire way of life (physical, mental, emotional, and spiritual) relies on this herd as they continue to bring our people and families together out on the land, keeping us healthy in every regard. The calving grounds, the Refuge Coastal Plain, are the beating heart of the Gwich’in Nation. As the world barrels into technological advancements and crowds into cities like never before, the Gwich’in continue to honor our most fundamental and sacred relationship with the land and animals.

If the caribou’s calving grounds are developed for oil and gas, the indigenous peoples of these lands entire way of life that stretches into time immemorial will surely dwindle for the possibility of a decade’s worth of oil production. Caribou are vital to our social and physical health, and caribou remain central to our subsistence way of life and economy.

An important part of traditional indigenous subsistence economies is sharing in reciprocal networks of exchange. The Vuntut Gwitchin have weathered incredible waves of change in only a few generations with government and industrial intrusions that altered our traditional nomadic ways of following the caribou. Our children were pushed into residential schools, and our people were forced from nomadic lives to remain sedentary in villages. Technology replaced traditional ways. Formal religion washed over communities. An entirely new way of life forced us to organize in modern ways in an effort to ensure traditional values passed on to the future generations.

The world at large surely does not understand what the youth of our indigenous communities today face as they are being pulled by the gravity of two very different worlds, one of ancient tradition and value, the other an entirely different value system and convenience. This affects every aspect of our people’s social and physical health today. Expensive store-bought food will not demand physical exercise to obtain, it will not bring us out on to our lands, it will not nourish us, it will not promote our culture, it will not bring our people together, it will not educate our youth, it will not bring us meaning, and it cannot replace the Porcupine Caribou herd. In every realm feasible the Gwich’in deserve the right to re-establish our traditional values in a new way of life that was forced upon us, in fact this is our human right.

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The Coastal Plain's Critical importance to the Porcupine Caribou Herd

Oral History and Traditional Knowledge

The Vuntut Gwitchin Government has made a deep commitment to documenting oral history and traditional knowledge about our lands, the broader ecosystem and our way of life including the Arctic Refuge. Over thousands of years, we have used this “traditional knowledge” to sustain ourselves and as an integrated system of knowledge, practice and belief and is a dynamic practice with long and deep roots in a specific cultural and local ecological system.

We have documented Gwich’in traditional knowledge about caribou that is detailed, covers vast areas and a long time span. This includes information on migration and movements such as timing and location, snowfall, snow and ice cover, river crossings, forest fires, landscape factors, and disrespectful treatment of migrating caribou and caribou disturbances. We have caribou biology knowledge on diet, what plants they eat or walk by, the vulnerability of plants such as lichens to recover from overgrazing, vehicle disturbance or fire, and the importance of the calving and post-calving grounds. Vuntut Gwitchin have lived in harmony with caribou for many, many generations.

The Porcupine Caribou herd is the only arctic caribou herd with a population that is still growing, a testament to the protection levels that governments have, up until this date, provided to the herd. In Canada, published reports show every caribou herd, except the Porcupine Caribou herd, is declining or gone. In every other case, development with many disturbances causing stresses and cumulative effects apparently not addressed by industry or regulators is the primary cause identified, along with climate change and other factors.

Across northern Canada, some caribou populations have declined over 70% in the past two decades as new areas of their habitat are impacted by increasing mining development. In these areas, indigenous people face difficulty sustaining their way of life. For some herds at very low population levels, management efforts have primarily focused on reducing subsistence harvest.

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levels instead of avoiding adverse impacts of resource development. Relevant findings from this study include:

“Although consideration of environmental impacts is required at later stages of assessment, the cumulative effects of development during earlier stages represent a significant adverse effect. Early and advanced exploration phases, which include constructed infrastructure (camps), air and road traffic, as well as human activity, can all take place without free, informed, and previous consent of Indigenous communities. Advanced exploration projects can continue on for many years; once active, there are very few mechanisms to stop their full development. Even during full environmental assessment, there are few examples where approval has not been granted even when communities have raised concerns about significant adverse effects or opposed the project entirely....”

“With few exceptions, elders and other traditional knowledge holders in the Yukon, Northwest Territories, and Nunavut highlight that caribou habitat, caribou health, movements, and population dynamics are negatively affected by resource development including mining .... Of greatest concern is the impact of noise, dust on forage, and the blockage of caribou routes by linear features (that is, roads). The lack of respect or spiritual consideration for the animals and land can also lead caribou to move away .... Much of this documented knowledge is empirical, in which harvesters who have consistent hunting territories and systematic methods of rigorous observation have given detailed narrative accounts of changes in body condition and fecundity..., habitat conditions..., distribution..., and population dynamics....”

Meaningful consultation and involvement of the Vuntut Gwitchin First Nation is a necessary component of respectful use of traditional knowledge for assessment and decision-making, and is important in evaluating the existing human and natural environment and how it will be impacted by the proposed oil and gas leasing, exploration and development in the Refuge Coastal Plain. Vuntut Gwich’in traditional knowledge is extensive and nuanced, and comes from a richer time scale and intimacy with the natural world in contrast to relatively shorter time frames and field seasons of western science. The Vuntut Gwich’in hold traditional knowledge that requires meaningful consultation and incorporation into the decisions and analyses for every aspect of the Refuge Coastal Plain Oil and Gas Leasing Program EIS, and any connected leasing of oil and gas activities at all stages.

**Special Importance of the Coastal Plain for Porcupine Caribou**

The Porcupine Caribou herd is healthy with a population size of 218,000 animals, according to the most recent census. All other herds in Canada are declining, facing local extirpation or gone. World-wide most wild caribou herds have been devastated by human development.

The Porcupine Caribou herd is already experiencing the effects of climate change across its range. Protection of the entire Refuge Coastal Plain is the best plan for long-term survival of the herd. It is important to protect all calving, post-calving, insect relief, and movement routes to ensure the stability of the herd.

The Porcupine Caribou are in relationship with the plants, land, and predators. It is only with the incredible precision of natural selection and time that the flora and fauna have established

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an intricate interweaving, all anchored in this very special and fragile area, which contrastingly serves as the wellspring of strength for the arctic ecosystems. From the specific *Eriophorum* cotton grasses that populate this coastal plain and serve as the most efficient flora for nutrient recovery vital after birth, to the relief from bugs from windswept terrain in the narrow coastal plain along the Beaufort Sea, and a viewshed that provides ample time to avoid predators during calving and post-calving time. Studies show the Coastal Plain has fewer predators than other areas. At this time most wolves, bears, and golden eagles are generally still in dens higher in the Brooks Range raising their own young. The Coastal Plain area is truly their refuge.

The Porcupine caribou have most of their calves in the “1002 lands” – the Coastal Plain of the Arctic National Wildlife Refuge. This area is essential for the herd. Even in years when they don’t calve on the Coastal Plain, due to snow or weather conditions, they go there for post-calving. 19 It is also generally well known by those interested in the welfare of the Porcupine herd that pregnant females and cows with nursing calves throughout the post post-calving time are highly sensitive to disturbance from noise, vehicles and human activity. 20 A considerable body of scientific research has convincingly demonstrated that human-caused disturbance displaces these animals away from such disturbance. 21 The National Research Council (2003) concluded there have been major cumulative impacts to caribou as a result of disturbance and habitat fragmentation from roads and pipelines in the Prudhoe Bay oil field complex.

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Research also indicates that the reproductive success of caribou is highly correlated with nutritional status, and that status is disproportionately determined by access to the best quality forage during the calving and post-calving periods. The annual migration route of female caribou is directed to the most abundant source of highly nutritious new plant growth for quality forage on the herd’s vast range. This is predominantly to be found on the Refuge Coastal Plain. This allows caribou to provide rich milk to their calves for rapid growth and ability to move quickly from predators, keep up with the herd, and survive.22

Vegetation disturbances and degradation caused by seismic exploration, overland vehicle travel, direct habitat loss from excavation or gravel fill, spills, air and water pollution, would further affect the permafrost and natural plant diversity and abundance of caribou forage including the highly nutritious *Eriophorum* sedge tussocks, willows, forbes, and lichens. Fragmentation of the landscape from roads, pipelines, and other infrastructure and activities could impair functional access to this vital food source and habitat over time with far-reaching impacts on herd productivity.

**Vuntut Gwitchin and Canada’s Land Protections**

The Vuntut Gwitchin First Nation, Inuvialuit, and Canadian Government have protected the Porcupine Caribou calving grounds in northern Yukon in two wilderness National Parks, Ivavik National Park (Inuvialuit) and Vuntut National Park (Vuntut). The Vuntut Gwitchin also have protected Porcupine caribou habitats at Ni’iinlii Njik (Fishing Branch), Van Tat K’atr’anahtii (Old Crow Flats), Ch’ilii Chik (Whitefish Wetlands) and Daadaii Van (Summit Lake & Bell River).

The Vuntut Gwitchin Final Agreement was signed on May 29, 1993, and came into effect on February 14, 1995 after a decade’s long negotiation process. The Vuntut Gwitchin Final Agreement created three Special Management Areas – Vuntut National Park, Fishing Branch Ecological Reserve and the Old Crow Flats area. Vuntut was designated under Canada’s National Parks Act, Fishing Branch was designated under Yukon’s Parks Act, while the Old Crow Flats Area is managed in accordance with an agreed-to Management Plan. The Final Agreement also identified ten heritage routes (for example Old Crow to Rampart House) and five sites (such as caribou fences) to which specific provisions in the Final Agreement apply.23

The Vuntut Gwitchin land claims and history of establishing protected areas goes back over 40 years ago with the controversial proposal to construct a gas pipeline from Prudhoe Bay. At the same time as the Trans-Alaska Pipeline for crude oil was proposed from Prudhoe Bay to Valdez or overland the lower 48, Arctic Gas (a consortium of 27 oil companies) proposed a separate gas pipeline energy corridor for Prudhoe Bay east across the Arctic Refuge Coastal Plain, northern Yukon and NWT to the Mackenzie River valley and then to lower 48 markets.


In 1974, Justice Thomas R. Berger was tasked with an inquiry into this proposed Mackenzie Valley Pipeline.\textsuperscript{24} For the next three years he travelled across the Canadian Arctic, “to hear what they had to say.” He held formal hearings in Yellowknife in which 300 experts testified on northern conditions, northern environment, and northern indigenous peoples. Then he took the inquiry to 35 communities – to every city, town, village, and settlement – with people speaking 7 different languages; and listened to the evidence of nearly 1,000 northerners.

Justice Berger’s report is prescient today as we contemplate the “advance of the industrial system” in the Arctic Refuge Coastal Plain. And his approach and analysis is still relevant today, such as finding value to hold hearings in all northern communities “where the people could speak for themselves.” Foremost were the concerns he heard from the Native people on land claims settlement, rights to the land and its values and Native identity.

His recommendations were carried out:

- “There should be no pipeline across the Northern Yukon. It would entail irreparable environmental losses of national and international importance.”\textsuperscript{25}
- “If we are to protect the wilderness, the caribou, birds and other wildlife, we must designate the Northern Yukon, north of the Porcupine River, as a National Wilderness Park. Oil and gas exploration, pipeline construction and industrial activity must be prohibited within the Park. The native people must continue to have the right to hunt, fish and trap within the Park. The Park must indeed be the means for protecting their renewable resource base.”

Berger’s recommendations pointed to limitations of stipulations and mitigation measures for large scale industrial transformations across sensitive habitats such as Porcupine Caribou Herd calving grounds,\textsuperscript{26}

“There is a myth that terms and conditions that will protect the environment can be imposed, no matter how large a project is proposed. There is a feeling that, with enough studies and reports, and once enough evidence is accumulated, somehow all will be well. It is an assumption that implies the choice we intend to make. It is an assumption that does not hold in the North.

It is often thought that, because of the immense geographic area of the North, construction of a gas pipeline or establishment of a corridor could not cause major damage to the land, the water or the wildlife. But within this vast area of tracts of land and water of limited size that are vital to the survival of whole populations of certain species of mammals, birds and fish at certain times of the year. Disturbances of such areas by industrial activities can have adverse biological effects that go far beyond the


\textsuperscript{25} This Coastal Route included crossing the Arctic Refuge Coastal Plain.

\textsuperscript{26} Berger (1977) 1988, pp 17-18.
areas of impact. This concern with critical habitat and with critical life stages lies at the heart of my consideration of environmental issues.”

His report concluded:27

“The gas pipeline and corridor development... passing through the restricted calving range of the Porcupine caribou herd, would have highly adverse effects on the animals during the critical calving and post-calving phases of their life cycle. The preservation of the herd is incompatible with the building of a gas pipeline and the establishment of an energy corridor through its calving grounds. If a pipeline is built along the Coastal Plain, there would be serious losses to the herd. With the establishment of the corridor I foresee that, within our lifetime, this herd will be reduced to a remnant. Similarly, some of the large populations of migratory waterfowl and sea birds along the Coastal Route, particularly the fall staging snow geese, would likely decline in the face of pipeline and corridor development.”

So for generations the Vuntut Gwich’in have been deeply engaged in the fight to protect the Porcupine Caribou herd calving and post calving grounds from threats of oil and gas pipelines and industrialization, first Arctic Gas pipeline,28 then threats to remove protections afforded the Arctic Refuge, and here and now.

The US National Research Council (2003) studied cumulative effects of Alaska North Slope oil fields and described major social impacts to the Gwich’in Nation due to the repeated and continuing attempts to develop oil and gas in the Arctic Refuge because they believe this would harm the reproductive potential and migratory patterns of the Porcupine Caribou herd and thereby their cultural survival—even when there was no industrial activity allowed in the area.29

Shared Resources and Impacts from Coastal Plain Oil and Gas

The Gwich’in Nation homelands span Northeast Alaska, Yukon and Northwest Territories and consist of 15 Gwich’in villages with approximately 9000 citizens.

The Vuntut Gwich’in while now centered in Old Crow, Yukon Canada are connected through family ties and heritage with lands now separated by the US/Canada border. For example, our Elders and people have stories and ties to caribou fences (corrals built of wood used for harvesting caribou) on both sides of the border.30

Our wealth of traditional knowledge describes significant cultural and traditional land use sites, archeological, anthropological, historical, and ecologically important areas in both Alaska and the Yukon.

The Vuntut Gwich’in depend upon the integrity, health and resilience of the land and shared wildlife resources of the Refuge Coastal Plain, particularly the Porcupine Caribou herd as well as other transboundary fish, migratory birds, and other wildlife. We share community connections to the Porcupine Caribou herd for our identity, cultural purposes and food security in relationships among Gwich’in families in other communities and spanning the border.

The Vuntut Gwitchin First Nation has traditional knowledge and other special expertise relevant to the EIS analysis of existing conditions and potential oil and gas impacts to Arctic Refuge purposes including Porcupine Caribou populations, habitat use, and disturbance, anadromous fish, subsistence, international treaty obligations; special refuge values that would be affected by oil and gas include archeological, cultural, ecological, historical, and wilderness. We also have expertise on industrial impacts and climate change impacts on the land and water, Porcupine Caribou herd, other fish and wildlife and their habitats, subsistence hunting and fishing and other harvesting.

We share Porcupine Caribou and other wildlife conservation and management commitments with respect to upholding the International Porcupine Caribou Agreement, the Migratory Birds Convention and Protocol, and Ramsar Wetlands Convention.

Shared migratory birds range from ducks, geese and shorebirds, to peregrine falcons. A transboundary population of lesser snow geese nest on Banks Island, Canada, stages on the Arctic Refuge coastal plain where they fatten up for the long migration then head back over the Canada up the Mackenzie and winter mainly in the southern central flyway US states, but also into some of the northern Mexico states. The staging snow geese are sensitive to disturbance, e.g. aircraft overflights, as amply documented by Fish and Wildlife Service studies.

We also share anadromous fish moving from the Mackenzie to the nearshore estuary waters of the Arctic Refuge Coastal Plain to the Colville River, and share salmon in the Porcupine River and Yukon River watershed.

Furthermore, International Human Rights law supports consideration in the EIS of the effects of any oil and gas exploration and development in the Refuge Coastal Plain that may impair subsistence harvests of Gwich’in communities on both sides of the international boundary. Canada and the United States are both party to the International Covenant on Civil and Political

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34 Garner and Reynolds, 1986.
Rights. This convention provides in Article 1(2), “In no case may a people be deprived of its own means of subsistence.” Furthermore, Article 27 provides that “In those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with the other members of their group, to enjoy their own culture, to profess and practice their own religion, or to use their own language.” Canada and the United States have both also endorsed the United Nations Declaration on the Rights of Indigenous Peoples. Article 25 of that Declaration provides, “Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard.” Further, Article 29(1) provides (in part) that “Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources.”

Oil and Gas Impacts

The BLM has not provided any information about how it will establish the regulatory process to implement its responsibilities under the Tax Act for the Coastal Plain Oil and Gas Leasing Program and the oil and gas exploration, development, and other activities that flow from it. What is proposed will not affect a “mere” compact 2,000 acres of Refuge Coastal Plain but would make permanent commitments to industrialization from seismic lines, wells, water withdrawals, gravel mines, water reservoirs, ports, causeways, airports, roads and pipelines that could span throughout the 1.6 million Coastal Plain area— the biological heart of the Refuge.

The Interior Department must provide adequate baseline human and natural environmental information in an integrated, systematic way that incorporates traditional knowledge and western science, identifies information gaps, and has public review (including meaningful consultation with indigenous peoples and organizations) prior to BLM launching any evaluation of alternatives or impact analysis.

The EIS must address the full range of direct, indirect and cumulative impacts from oil and gas leasing and subsequent oil and gas activities to the human and natural environment, not as simply isolated species and components but with respect to the integrated human and ecological system existing today and in the future without oil and gas activities.

BLM must analyze the impacts of the Refuge Coastal Plain oil and gas leasing program, as well as all eventual activities it sets in motion. These included geological and geophysical and scientific field studies, seismic surveys, exploration, development, production, transportation, and plans for dismantling, rehabilitating/remediation, and restoring to original conditions.

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There are many stressors throughout various oil and gas development phases or stages, but in reality they are not sequential and overlap in time and space including access via aircraft, ships, barges, overland vehicles on tundra, ice roads, snow and vehicles on permanent roads; field studies, seismic, exploratory drilling, development, permanent facilities for processing, roads and pipelines and transportation of oil and gas to distant markets.

There would be potential social costs to human and public health, culture, traditions, lifestyles and heritage resources. Potential environmental impacts include greenhouse gas emissions, air and water pollution, spills, contamination, and waste disposal and nexus with fish, wildlife and human health including from consuming contaminated or tainted animals or plants.

Climate change and stressors

Scientists around the world agree that the global climate is warming, especially in the arctic regions of the north which is warming twice as fast and will eventually unlock detrimental amounts of mercury from permafrost, more greenhouse gasses, and possibly diseases, setting off cascading effects of degrading lands, banks, and altering life as we know it. With migrating flora and fauna there is no telling what cumulative effects could be. Nonetheless, the EIS must consider the full range of climate change stressors and potential changes to the human and natural environment over the next 50-100 years prior to evaluating impacts from all oil and gas activities, operations and infrastructure from all stages of development occurring into the next century.

For the Porcupine Caribou herd it is vital that their complete range is protected to help insulate them from drastic changes and serve as a refuge to help them survive these turbulent transitions. This precaution is necessary in the face of a wealth of traditional and scientific knowledge that clearly establishes the ability for the survival rates of calves to sharply decline and affect overall population rates from industrial development as witnessed by all other Canadian herds and shown across North America.

The vitality of the Porcupine Caribou herd, and the potential irreversible loss of a globally significant caribou herd, directly affects the long-term sustainability of Vuntut Gwitchin culture and existence in the north Yukon. The decision to value commercial gains of the oil and gas industry over human rights and indigenous culture cannot be taken lightly, and must include full and extensive exploration of the traditional knowledge, way of life, and ecological values that will be impacted.

Sincerely,

Rosa Brown
Lands Manager,
Vuntut Gwitchin Government