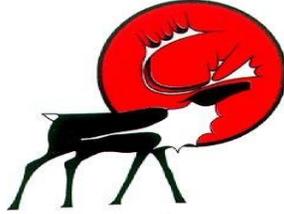


Gwich'inat Eenjit
Gàdatr'igwijiłcheii Gidilii

Gwich'in nan, nakhwek'yùu ts'àt gwitr'it
tthak nakhwidavee gwiheezàa eenjit



**Gwich'in Tribal
Council**

**GWICH'IN TRIBAL COUNCIL (GTC) COMMENTS ON COASTAL
PLAIN OIL AND GAS LEASING PROGRAM DRAFT ENVIRONMENTAL
IMPACT STATEMENT (LEASING EIS)**

SUBMITTED TO

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT (BLM)**

MARCH 13, 2019

1.0 Introduction

The Gwich'in Tribal Council (GTC) submitted comments to the Bureau of Land Management (BLM) regarding the scope of the Coastal Plain Oil and Gas Leasing Program Environmental Impact Statement on June 18, 2018. In our letter submission at that time we emphasized our fundamental concern about the threat to the Porcupine Caribou Herd posed by the prospect of the United States BLM proceeding to implement an oil and gas leasing program in the Coastal Plain area of the Arctic National Wildlife Refuge (ANWR) in Alaska. The serious, direct threat that a decision to implement the proposed oil and gas leasing program within the Coastal Plain region of the ANWR poses to the birthing and calving ground of the Porcupine Caribou Herd was THE significant issue that we identified pertaining to this proposed program.

Shortly after making our letter submission of June 18, 2018, the Gwich'in people from Canada and the United States met at the biennial *Gwich'in Gathering* held in Tsiigehtchic in the Northwest Territories in Canada. A *Resolution to Protect the Birthplace and Nursery Grounds of the Porcupine Caribou Herd* was passed at the 2018 *Gathering*. This Resolution reiterated a position that the Gwich'in people have held since the 1988 *Gwich'in Gathering* (which then was the first such *Gathering* that had been held in over 100 years), when the Gwich'in Elders gave direction to the Gwich'in people to seek permanent protection of the Porcupine Caribou calving grounds within the ANWR. The 2018 *Gwich'in Gathering* resolved:

That the United States President and Congress recognize the rights of the Gwich'in people to continue to live our way of life by prohibiting exploration and development in the calving and post-calving grounds of the Porcupine Caribou Herd.¹

The Gwich'in support sustainable development generally but continue to oppose development within the ANWR because of the important role of the Porcupine Caribou Herd birthing and calving grounds within the ANWR 1002 lands for the conservation of the Herd. Accordingly, the GTC and the Gwich'in people call for the U.S. BLM to adopt the “Alternative A – No Action” alternative identified in Chapter 2 Alternatives of the draft Coastal Plain Oil and Gas Leasing Program Draft Environmental Impact Statement (Draft Leasing EIS). This Alternative would result in no federal minerals in the Coastal Plain being offered for future oil and gas lease sales after the BLM’s Record of Decision (ROD) for the Leasing EIS is signed. We acknowledge that the Draft Leasing EIS has stated that, “Alternative A will not comply with the directive under PL 115-97 to establish and administer a competitive oil and gas program for leasing, developing, producing, and transporting oil and gas in and from the Coastal Plain.” In

¹Gwich'in Niintsyaa 2018: *Resolution to Protect the Birthplace and Nursery Grounds of the Porcupine Caribou Herd*, passed unanimously on the 26th day of June, 2018 in Tsiigehtchic, Northwest Territories, Canada.

view of this, the draft Leasing EIS has effectively rejected Alternative A that it presents and uses, “...to provide a baseline for comparing impacts under the action alternatives.”²

In the covering letter released with the Draft Leasing EIS the BLM’s acting state Director indicated that the BLM welcomed comments on the document that specifically addressed several matters. These include:

- Identification of new information that would have a bearing on the analysis; and
- Identification of new impacts, alternatives, or potential mitigation measures.

The GTC will present such new information in this submission that we present in support of the call made by the Government of Canada for the BLM to establish a supplementary Leasing EIS to ensure that all relevant information is considered before a BLM decision is made to finalize the Leasing EIS. This information relates to recorded Gwich’in Traditional Knowledge about the Porcupine Caribou and the need for further research to be done to address gaps that exist in such recorded knowledge, prior to a BLM ROD on the proposed ANWR Coastal Plain oil and gas leasing EIS. The draft Leasing EIS is devoid of consideration of such traditional knowledge which is and must be an essential source of information to consider for a complete Leasing EIS. Placing equal weight on such traditional knowledge in relation to available scientific knowledge in assessing the environmental impacts of the proposed oil and gas leasing program for the ANWR Coastal Plain area is one of the important areas identified by the GTC in its Draft Leasing EIS scoping process letter submission as needing to be considered. Upon such consideration, together with other factors, it will become apparent why it is necessary for the BLM to decide to initiate a supplementary EIS. It is necessary in order to ensure that an up to date and comprehensive body of recorded Gwich’in traditional knowledge about the Porcupine Caribou is available for consideration by the BLM in reaching a ROD on the content of its Coastal Plain Leasing EIS.

In support of this call, this GTC submission is structured as follows. It begins following this Introduction with an overview of the special relationship between the Gwich’in people and the Porcupine Caribou and the Herd’s importance to the Gwich’in people’s culture, health, subsistence and traditions, and an identification of the major gaps and deficiencies of the Draft Leasing EIS. This will be followed by reference to 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* (the 1987 Agreement), as a basis for action by the U.S. BLM to fully address and consider the Gwich’in Porcupine Caribou traditional knowledge information identified by the GTC before reaching a ROD on the Leasing EIS for the proposed Coastal Plain

²U.S. Department of the Interior Bureau of Land Management, *Coastal Plain Oil and Gas Leasing Program Draft Environmental Impact Statement*. Volume 1: Executive Summary, Chapters 1-3, References, Glossary, December 2018, ES-2.

oil and gas leasing program. The content of a Phase 1 Gwich'in Knowledge of Porcupine Caribou Study that will accompany this submission will then be summarized, followed by a Conclusion and Recommendations section.

2.0 Overview of the Gwich'in-Porcupine Caribou Special Relationship and Draft Leasing EIS Comments

The traditional territory of the Gwich'in people extends across northeastern Alaska in the United States and through the northern areas of the Yukon Territory and of the northwest part of the Northwest Territories in Canada. A unique, complex and special multi-dimensional relationship exists between the Gwich'in people and the Porcupine Caribou, that is reflected in the fact that the traditional territory of the Gwich'in people largely mirrors the migration range of the Porcupine Caribou. Every summer the Porcupine Caribou birth and calve in the Alaskan and Yukon Territory Coastal Plain area. During the winter months they migrate south into the northern mountainous areas of the Yukon Territory and the Mackenzie River area and Peel River basin. Moreover, the draft Leasing EIS notes that based on the most recent data cited that “Canadian users accounted for 85 percent of the harvest and Alaska users were 15 percent of the harvest.”³ Therefore, the most relevant and essential body of traditional knowledge about the Porcupine Caribou that must be considered in assessing the potential environmental impact of the proposed Coastal Plain oil and gas leasing program is Gwich'in traditional knowledge held by the Gwich'in Canadian harvesters of Porcupine Caribou.

Due to the special relationship between the Gwich'in people and the Porcupine Caribou, the Gwich'in people have a deep and thorough knowledge about the species. This “traditional knowledge” is based on experience and teachings that are passed down from one generation of Gwich'in to another from traditional knowledge holders. The term “traditional” has a special meaning in this context in that it refers to the Gwich'in way of doing things. That is, traditional Gwich'in hunting practices are based on Gwich'in rules and on Gwich'in culture. The term traditional in this sense is rooted in history and experience, but it does not mean that traditional is historical or out of date. On the contrary, “Traditional knowledge is the modern body of information that is held by Gwich'in knowledge holders, based on experiences and teachings dating back millennia.”⁴

The GTC Leasing EIA scoping process letter submission of June 18, 2018 identified Traditional Knowledge (TK) as an essential information source for assessing the potential and likely impact of the proposed oil and gas leasing program. It also stressed that, “it is essential that the EIS

³ U.S. Department of the Interior Bureau of Land Management, *Coastal Plain Oil and Gas Leasing Program Draft Environmental Impact Statement*. Volume 1, 3-168.

⁴See “Executive Summary” in K. Benson, *Gwich'in Knowledge of Porcupine Caribou: State of current knowledge and gaps assessment*, Gwich'in Tribal Council Department of Cultural Heritage, March 2019, ii.

place as much analytical weight and emphasis on recorded, traditional knowledge (TK) about the Porcupine caribou Herd, as is placed on ‘scientific knowledge.’ ” The draft Leasing EIS released in December 2018 does not reflect consideration of recorded traditional knowledge, let alone consideration of recorded traditional knowledge of the Gwich’in harvesters who account for 85 percent of the harvesters of Porcupine Caribou. This is a clear and glaring deficiency in the draft Leasing EIS. It must be rectified before the BLM could be in a position to reach a ROD on the Leasing EIS for the proposed oil and gas leasing program for the Alaskan Coastal Plain region of the ANWR. As indicated in Section 4.0 of this submission, the current state of recorded Gwich’in traditional knowledge of the Porcupine Caribou is incomplete. This fact underlies the GTC’s support for initiating a supplemental EIS for the proposed oil and gas leasing program.

The absence of consideration of Gwich’in TK in the draft Leasing EIS also highlights the broader issue deficiency of the document in not addressing transboundary implications of the proposed oil and gas leasing program. The vertical borders on the map imposed by newcomers bear no resemblance to either traditional Gwich’in traditional territory, or to the territory over which the Porcupine Caribou range during their annual and seasonal migration to and from their birthing and calving areas in the Alaskan Coastal Plain. Porcupine Caribou do not recognize international borders. Nor will the potential effects of implementing the proposed oil and gas leasing program be confined within or constrained by the Canada-U.S. international border. Therefore, transboundary effects must be considered to provide a complete and accurate environmental impact assessment of the proposed project. The draft Leasing EIS released in December 2018 does not do this. Doing so is also arguably a requirement pursuant to the 1987 international agreement between Canada and the United States.

3.0 Treaties, International Agreements and Transboundary Effects

Chapter 1 of the draft Leasing EIS deals in a very cursory way in section 1.9 with International Agreements. Reference is made very briefly to 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*. It is noted that the purpose of the 1987 Agreement was to conserve the herd and its habitat through international cooperation and coordination. The terms of the 1987 Agreement provide a further basis for the BLM to commit to embarking on a supplemental EIS relating to the proposed oil and gas leasing in the ANWR Coastal Plain region. The draft Leasing EIS does not address the implications of the terms of this Agreement as it could and should apply to the approach taken by the BLM to compiling the oil and gas Leasing EIS.

The Gwich’in call upon the United States Government through the BLM to abide by the terms of the 1987 Agreement. It begins in the Preamble to the Agreement with a statement that the parties to it recognize that, “...caribou in their large free-roaming herds comprise a unique and irreplaceable natural resource of great value which each generation should maintain and make

use of so as to conserve them for future generations.” Among the Conservation components of the Agreement are statements that “the Parties will take appropriate action to conserve the Porcupine Caribou Herd and its habitat” and will “ensure that the Porcupine Caribou Herd, its Habitat and the interests of users of Porcupine Caribou are given consideration in evaluating proposed activities within the range of the Herd.” Clearly, the oil and gas leasing program in the ANWR Coastal Plain region qualifies as a “proposed activity” within the range of the Herd that the 1987 Agreement requires that the Parties give effective consideration in assessing these activities to their potential effect on “the Porcupine Caribou Herd, its habitat and the interests of users of Porcupine Caribou.” Merely noting the existence of the 1987 Agreement in the draft Leasing EIS is a wholly inadequate and incomplete approach to addressing the obligations of the United States under the 1987 Agreement.

Moreover, consideration of the transboundary effects of the proposed oil and gas leasing in the ANWR should also extend to an analysis of the potential effects on the Aboriginal and treaty rights of the Gwich'in harvesters of Porcupine Caribou who account for 85 percent of the harvesting of this resource. Under s. 35 (1) of the *Constitution Act, 1982*, Aboriginal and treaty rights are recognized and affirmed. The Gwich'in Comprehensive Land Claim Agreement (GCLCA) signed in 1982 between the Gwich'in and the Government of Canada and the Government of the Northwest Territories established mechanisms through which the Gwich'in people manage and control land and resources within the Gwich'in Settlement Area (GSA). This modern treaty provides for Gwich'in harvesting rights both within the GSA and in the Gwich'in Primary Use Area and Secondary Use Area within the Yukon Territory, under the terms of the Yukon Transboundary Agreement (YTA), which is Appendix C to the GCLCA.

These harvesting rights of the Gwich'in under the GCLCA are treaty rights protected by s. 35 of the *Constitution Act, 1982*. While the scope of these rights under this Act apply within the borders of Canada, a complete assessment of the transboundary effects of the proposed Alaskan Coastal Plain oil and gas leasing program would need to encompass analysis and identification of the potential effects of the program on the continued availability of the Porcupine Caribou Herd for the Gwich'in harvesters on the Canadian side of the border. Porcupine Caribou harvesting rights could be rendered ineffective if the effect of the proposed oil and gas leasing program in the ANWR were to result in changes in the health and size of the Herd and in its migration patterns that could result in there no longer being Porcupine Caribou available for the Gwich'in harvesters to harvest.

Not only the Gwich'in on the Canadian side of the border have and continue to be concerned about the health and well being of the Herd. Before the signing of the GCLCA in 1992, the Gwich'in, through their role at that time as a member of the Dene Nation and Metis Association of the Northwest Territories, joined with the Government of Canada, the Governments of the Yukon and of the Northwest Territories and with the Inuvialuit Game Council and with the then

Council of Yukon Indians (CYI), to conclude the Porcupine Caribou Management Agreement (PCMA). The purpose of the PCMA was for the parties to work together for "...the continued well being of the Porcupine Caribou Herd and the maintenance of its habitat." The parties to the PCMA have worked together to achieve these objectives through the mechanism of the PCMA and the Porcupine Management Board that was established pursuant to it. All of the parties to the PCMA have combined to respond to the proposed oil and gas leasing program in the ANWR by working together to defend the Herd and to take steps in response to the proposal to achieve effective conservation and management of the Porcupine Caribou population throughout its range. The BLM Leasing EIS consideration of the potential transboundary effects of the proposed oil and gas leasing program will need to consider the likely effects of the project on the Porcupine Caribou Herd and the resulting interests of all of the parties to the PCMA.

Finally, the Gwich'in and other modern treaty holders in Canada's North are working with the Government of Canada to rebuild their Indigenous Nations and the nation to nation relationships between themselves and the Crown and Canada, based on the treaty relationships established with the Crown and the Government of Canada. Protecting and preserving their traditional subsistence harvesting rights was the original impetus for the signing of Treaty 11 in 1921. Author Rene Fumoleau who has written about the history of Treaty 11 has stated that at the time that Treaty 11 was concluded, "All the witnesses stress the fact that it was only after complete freedom to hunt, to trap and to fish had been promised to the Indians, that they accepted the treaty."⁵

Protecting and preserving Gwich'in traditional harvesting rights as guaranteed through Treaty 11 and through the subsequent modern treaty, the GCLCA, remains a priority for the Gwich'in people today. Oil and gas leasing and development in the ANWR Coastal Plain region of Alaska could seriously harm and endanger the ability of the Gwich'in, who account for 85 percent of the harvest of Porcupine Caribou, to effectively exercise their treaty harvesting rights. This in turn would undermine both the Gwich'in goal of rebuilding the Gwich'in nation based on Gwich'in traditions and traditional practices and the goal of building an enduring nation to nation relationship with Canada based on the foundation of our established treaty relationships. These are profoundly significant potential ultimate transboundary effects of proposed oil and gas leasing and subsequent development in the ANWR Alaskan Coastal Plains region. They must be researched and examined and addressed in the context of the BLM Leasing EIS.

4.0 Gwich'in Porcupine Caribou Traditional Knowledge

Gwich'in traditional knowledge of Porcupine Caribou is noted above and was referenced by the GTC in its June 18, 2018 letter submission to the BLM as an essential ingredient in the analysis

⁵Rene Fumoleau, *as long as this land shall last: A History of Treaty 8 and Treaty 11, 1870-1939* (Calgary: University of Calgary Press, 2004), 219.

of the potential effects of the proposed oil and gas leasing program on the Porcupine Caribou Herd and its Gwich'in and other harvesters. As a first step in addressing this, the GTC initiated through its Cultural Heritage Department a Phase 1 study of Gwich'in recorded traditional knowledge of Porcupine Caribou. This study is entitled *Gwich'in Knowledge of Porcupine caribou*⁶ and accompanies this submission to the BLM. It will be posted on the draft Leasing EIS website comments section along with this GTC submission. The Phase 1 study consists of a literature search analysis of the existing state of recorded Gwich'in traditional knowledge regarding Porcupine Caribou. As noted above, this traditional knowledge stems from the special and enduring relationship that the Gwich'in have with Porcupine Caribou resulting from the fact that Gwich'in have been hunting Porcupine Caribou for thousands of years.

Unlike “scientific data” that resides in journals, the Gwich'in traditional knowledge resides in the minds and memories of Gwich'in harvesters and has been passed down intergenerationally through stories, experiences and teachings. The challenge in accessing this Gwich'in TK about the Porcupine Caribou is to record this knowledge and the first step in doing so is to determine what the current state of recorded Gwich'in knowledge of Porcupine Caribou is. That is what is accomplished in the Phase 1 study that the GTC initiated and is providing to the BLM as part of its comments on the draft Leasing EIS.

In this GTC submission document, some of the highlights from the Phase 1 study will be identified and summarized and linked to the recommendations that the GTC is presenting to the BLM, regarding how to ensure that Gwich'in knowledge of the Porcupine Caribou is fully considered and integrated into the Leasing EIS analysis. The study content addresses three main areas:

- 1) Gwich'in and the Porcupine Caribou Herd: Culture, Practice and Continuities;
- 2) Porcupine Caribou: Health, Behaviour and Interactions; and
- 3) Identification of threats to the Porcupine Caribou, of gaps in the existing body of recorded Gwich'in knowledge of the Porcupine Caribou, and a discussion of the research methodology employed in conducting the study.

Given the gaps existing in the body of recorded Gwich'in knowledge of the Porcupine Caribou identified in the Phase 1 study, a follow-up Phase 2 Porcupine Caribou Primary Research Study is also needed to fill in these knowledge gaps. Once this study is completed – which could take up to one year, a comprehensive and up-to-date record of Gwich'in traditional knowledge of the Porcupine Caribou will be available for ensuring full incorporation into the analysis of the potential environmental effects of proceeding with the proposed oil and gas leasing program. Ensuring the availability of this knowledge for analysis will be essential for assessing the

⁶ K. Benson, *Gwich'in Knowledge of Porcupine caribou: State of current knowledge and gaps assessment*, March 2019.

transboundary effects of the proposed oil and gas leasing program on the Porcupine Caribou and on the Gwich'in harvesters in Canada that comprise 85 percent of the total population of Porcupine Caribou harvesters.

Some of the notable key findings from the Phase 1 study include the following. First, Porcupine Caribou meat has and continues to be an important component of a healthy diet for the Gwich'in people. The study notes that, "...caribou meat is so deeply connected to the idea of being Gwich'in that it is considered almost irreplaceable in a healthy lifestyle."⁷ Moreover, the study also notes the evident healing properties of Porcupine Caribou meat for the Gwich'in people, stating: "In modern times, various health departments urge Gwich'in families to consume a traditional diet including caribou, as it is a healthy addition to a modern diet. This messaging is an attempt to reduce the consumption of some of the less healthy foods which have been brought in and adopted by Gwich'in after they settled into modern towns and the wage economy, leaving the traditional life spent on the land."⁸

The study also provides important evidence of how the Gwich'in traditional harvesting of Porcupine Caribou is intimately linked with and determining of core elements of Gwich'in culture. This underscores and illuminates the special, enduring and complex relationship that has existed between the Gwich'in and the Porcupine Caribou since time immemorial. The study notes how "taking care of the caribou is a part of Gwich'in culture."⁹ Gwich'in take care of the Porcupine Caribou in many ways, by sharing their harvest with others, by using as much of the carcass as they can and avoiding waste, and by preserving meat and fat for the future. The Gwich'in traditional management practices feature prominently respect for the Caribou and for the natural environment, cooperation among hunters, leadership by wise and knowledgeable hunters that apply and ensure maintenance of traditional Gwich'in harvesting practices during the hunt, and teamwork in the implementation of these traditional practices during the hunt.

The centrality of respect in Gwich'in traditional harvesting practices and in Gwich'in culture is well summarized in the study by the following statement:

Respectful behaviour towards caribou is the core of traditional human-caribou interactions and the basis for a long and sustainable relationship... Respect for the caribou encompasses all the traditional rules of hunting as described above, including sharing, wasting, not chasing, and so on. For younger Gwich'in, respectful hunting also includes participating in the wildlife co-management process and following the regulations set up within that structure.¹⁰

⁷K. Benson, *Gwich'in Knowledge of Porcupine caribou: State of current knowledge and gaps assessment*, March 2019, 3.

⁸*Ibid.*, 40.

⁹*Ibid.*, 13.

¹⁰*Ibid.*, 70.

The Phase 1 study also emphasized the difficulties and uncertainties associated with determining if the Porcupine Caribou Herd is changing in size over time. This is significant as the BLM draft Leasing EIS references historical, non-traditional Herd counts in its discussion of the size of the Herd. To fully capture the importance of Gwich'in knowledge as a basis for assessing and determining changes in the size and distribution of the Porcupine Caribou Herd, the observations presented in the study are quoted here at length. These observations suggest that reliance on reports from wildlife biologists are not necessarily valid or reliable indicators:

When talking about changes in the Porcupine caribou herd, both the number of caribou – population – and the location where the caribou can be found – distribution – are considered together, as the Gwich'in are circumspect in making too many generalizations about topics that are not suited to traditional knowledge. Since caribou move so much, if they are not found by hunters in an area where they were found before, or in herds of the size anticipated based on previous years, Gwich'in harvesters can't be sure if the caribou have simply moved further away, or the population has changed.

Unfortunately, determining if the caribou herd is changing in size is very difficult. The majority of Gwich'in hunters do not have faith in the population numbers which wildlife biologists report from airline counts and collaring experiments.¹¹

In support of these observations the study notes significant variations and oscillations in the relative degree of scarcity and prevalence of Porcupine Caribou in specific locations over time. Reference is made to such variations as evident going back and forth between the two extremes of prevalence and scarcity starting from the 1920s right up to the 2010s.¹²

Some information particularly relevant to assessment of the potential effects on Porcupine Caribou of potential oil and gas leasing and associated development is presented in the report as evident potential threats to the Porcupine Caribou and to the Gwich'in-Caribou relationship. Drawing on historical evidence presented to the Mackenzie Valley Pipeline Community Hearings in the 1970s, the Phase 1 study emphasizes that "Pipeline development could alter the caribou's migration, making the harvest of caribou much more difficult for Gwich'in."¹³ Specific evidence is presented as to lasting effects on caribou migration years after drilling operations ceased. There is also significant potential noted for major influences on Porcupine Caribou migration and movement patterns resulting from potential pipeline ruptures or oil spills and even from the presence of linear infrastructure such as pipelines. These findings underscore the necessity for careful consideration of Gwich'in Porcupine Caribou knowledge in assessing the potential environmental effects of the proposed ANWR Coastal Plain region oil and gas leasing program.

¹¹Ibid., 79.

¹²Ibid., 79-85.

¹³Ibid., 110.

Finally, as noted above, the Phase 1 study has identified significant and important gaps in the existing body of recorded Gwich'in Knowledge of Porcupine Caribou. These main gap areas are identified in Table 1. The gaps must be filled through a follow-up Porcupine Caribou Traditional Knowledge Primary Research Study, to ensure that a comprehensive and up to date body of recorded Gwich'in traditional knowledge of the Porcupine Caribou is available for consideration in the process of determining the potential environmental effects of the proposed oil and gas leasing program in the Porcupine Caribou birthing and calving areas of the ANWR Coastal Plain region.

Table 1
Current Gap Areas in Recorded Gwich'in Porcupine Caribou Knowledge¹⁴

<i>Roles and social behaviour</i> of caribou within a herd.
<i>Let the leaders pass.</i> Clarification of the specifics of the traditional rule indicating that harvesters should allow leaders to pass.
<i>Adaptability.</i> How adaptable are caribou in the face of development and climate change?
<i>Heath differences.</i> What are the differences in caribou's health between seasons and genders?
<i>Parasites.</i> What parasites are typically found on caribou? What are the life-cycles of these parasites? How are these changing and how do they affect caribou?
<i>Traditional caribou management.</i> How were caribou traditionally managed? What are the best ways for all stakeholders to work together to ensure traditional caribou management happens in the current context?
<i>Range and migration.</i> What are the changes in the caribou's range and migration routes?
<i>Land.</i> How has the land changed?
<i>Climate change.</i> How is climate change affecting caribou?
<i>Cumulative effects.</i> How will the cumulative effects of climate change and development affect caribou?

¹⁴Ibid., 118-120.

5.0 Conclusion and Recommendations

The Gwich'in Tribal Council (GTC) submitted comments to the Bureau of Land Management (BLM) regarding the scope of the Coastal Plain Oil and Gas Leasing Program Environmental Impact Statement on June 18, 2018. In our letter submission at that time we emphasized that our fundamental concern was about the threat to the Porcupine Caribou Herd posed by the prospect of the United States BLM proceeding to implement an oil and gas leasing program in the Coastal Plain area of the Arctic National Wildlife Refuge (ANWR) in Alaska. The serious, direct threat that a decision to implement the proposed oil and gas leasing program within the Coastal Plain region of the ANWR poses to the birthing and calving ground of the Porcupine Caribou Herd was THE significant issue that we identified pertaining to this proposed program. It remains so for the Gwich'in people and the BLM draft Leasing EIS reveals insufficient consideration of this factor.

The position of the Gwich'in people was clearly expressed in the resolution passed on June 26, 2018, at the *Gwich'in Gathering* in Tsiigehtchic in the Northwest Territories of Canada:

That the United States President and Congress recognize the rights of the Gwich'in people to continue to live our way of life by prohibiting exploration and development in the calving and post-calving grounds of the Porcupine Caribou Herd.¹⁵

The Gwich'in favour “Alternative A” that is contained in the BLM draft Leasing EIA, despite the fact that the draft Leasing EIA is presented in the document as not feasible and is used merely as a baseline for assessing the potential effects of the other identified “action alternatives.” We contend that the analysis presented in the draft Leasing EIS is incomplete and inadequate. It does not at present and must include careful consideration of Gwich'in Traditional Knowledge of Porcupine Caribou, which this submission document has underscored the relevance, significance and essential nature of, for reaching an accurate appreciation of the potential environmental effects of proceeding to implement the proposed oil and gas leasing program in the ANWR Coastal Plain region. The draft Leasing EIS must also consider the transboundary effects of proceeding with the proposed leasing program and carefully consider and articulate the obligations of the United States Government, pursuant to 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*.

In order to address these recommendations, the Gwich'in recommend that the BLM establish a supplementary Leasing EIA process and extend the time frame for completing that supplementary process for sufficient time to allow for the completion of a Phase 2 Gwich'in

¹⁵Gwich'in Niintsyaa 2018: *Resolution to Protect the Birthplace and Nursery Grounds of the Porcupine Caribou Herd*, passed unanimously on the 26th day of June, 2018 in Tsiigehtchic, Northwest Territories, Canada.

Porcupine Caribou Traditional Knowledge Primary Research Study. Upon completion of this study, we propose that the BLM and the Gwich'in collaborate in assessing and interpreting the potential effects of the proposed oil and gas leasing program that arise from consideration of the up to date and complete body of Gwich'in Knowledge of Porcupine Caribou. Failure to consider Gwich'in traditional knowledge of the Porcupine Caribou, in balance with and parallel with consideration of other data sources, would render the BLM's Leasing EIS incomplete. It also likely would be invalid as an analysis of the potential environmental effects of proceeding with the proposed oil and gas leasing program for the ANWR Coastal Plain region – the birthing and calving grounds of the Porcupine Caribou Herd, 85 percent of the harvesters of which are Gwich'in harvesters on the Canadian side of the Canada-U.S. border.