



PRE-HEARING WRITTEN SUBMISSION - 2016 DRAFT NUNAVUT LAND USE PLAN

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1. Introduction

This is the pre-hearing joint written submission of Nunavut Tunngavik Inc. (NTI) and the three Regional Inuit Associations (RIAs) on the Draft Nunavut Land Use Plan 2016 (DNLUP 2016) and the land use planning process. This joint submission reflects the views of NTI and the three RIAs. However, it does not preclude NTI and the RIAs from providing further submissions separately or together on any matters related to DNLUPs or the land use planning process.

NTI and the RIAs have participated throughout the land use planning process and contributed to Nunavut Planning Commission (NPC) community tours, technical meetings and the pre-hearing conference and have provided various written submissions.

NTI and the RIAs are participating in this process to assist the NPC in achieving the goal of establishing a Nunavut Land Use Plan (NLUP) that reflects the priorities and values of Inuit. To reach this important goal, NTI and the RIAs believe that the DNLUP 2016 must be extensively revised. The current DNLUP does not adequately address Inuit concerns, goals and objectives.

NTI and the RIAs continue to emphasize that Inuit at the community level are not sufficiently aware of the contents of the DNLUP 2016. The lack of resources for communities to review the DNLUP 2016 and inflexible timelines will result in few written submissions being provided to NPC by community participants. The adequacy of the land use planning process is a pressing issue.

With over 100 participants attending the public hearing scheduled for March 2017 in Iqaluit, it remains unclear whether the public hearing process will allow for Inuit views to be heard adequately and fairly. Silence on the part of the community participants with respect to specific NPC proposals in the DNLUP 2016 should not be taken as approval by those communities of those proposals. It may simply signal a lack of opportunity to be engaged in the process.

At the conclusion of the March 2017 public hearing in Iqaluit, it may be necessary to adjourn rather than close the hearing, enabling it to be reopened for further and more adequate consultations at the community or regional level.

2. General Comments and Recommendations

2.1 Over-arching Priority Areas for 1st Generation NLUP

2.1.1 Key Priorities for the NLUP

Article 11 of the *Nunavut Agreement* specifies that land use plans must address competing priorities simultaneously. More specifically, Section 11.2.2 of the *Nunavut Agreement* requires that the planning process result in a land use plan that provide for the conservation, development and utilization of land in a way that reflects the priorities and values of Inuit and residents generally. The primary focus of a 1st generation NLUP must be to address the key priorities of Inuit and residents of Nunavut Settlement Area (NSA) in a way that balances conservation and development.

The key priorities of Nunavut communities as described by NPC in section 1.4.2.1 of the DNLUP are:

- 1) Access to country foods such as caribou, fish and sea mammals that are vital for food security.
- 2) Access to safe drinking water.
- 3) A stronger economy that provides business and employment opportunities especially for youth.

NTI and the RIAs agree that these are key community priority areas based on a review of community consultation reports prepared by NPC for each community visited during the NPC's community tour from November 2012 and March 2014.

The focus of the 1st generation NLUP should be on addressing these key issues identified through consultations with Inuit and residents. These priorities align with NPC's Goal 2 (Protecting and Sustaining the Environment) and Goal 5 (Encouraging Economic Development). NTI and the RIAs recognize that not all of NPC's broad goals and objectives can realistically be fully addressed in a 1st generation NLUP.

2.1.2 Inuit Owned Lands (IOLs)

NTI and the RIAs are primarily managing IOLs to provide economic and cultural opportunities to Inuit. In some cases, IOLs have been closed to economic activities to address conservation issues. For example, the Kitikmeot Inuit Association (KitIA) has closed the IOL parcels associated with the Hiukitak River in response to community requests.

Land use planning on IOLs must take into account Inuit goals and objectives for Inuit Owned Lands (section 11.8.2 of the *Nunavut Agreement*). For surface IOLs, the RIAs are the organizations that speak for Inuit goals and objectives, while for subsurface IOLs it is NTI.

Of particular importance are the goals and objectives for subsurface IOLs. In most cases, subsurface IOLs were selected to support the exercise of mineral rights. NTI is of the view that, as a rule, the proposed NPC designations should not detract from the development of mineral rights on subsurface IOLs. In the majority of cases, designations with prohibitions on subsurface IOLs are not compatible with Inuit goals and objectives for those lands. In addition, constraining activities on subsurface IOLs directly detracts from promoting economic development in Nunavut, which is identified in the DNLUP 2016 as one of the key priority of Inuit and is an NPC Goal.

For these reasons, NTI requests that proposed designations with prohibitions exclude IOL subsurface parcels. Exceptions may be possible in instances where the RIAs are in agreement with the prohibitions. Specific recommendations are made about IOLs when the proposed designations are discussed in Section 3 of this submission.

NTI has entered into various exploration agreements on sub-surface IOLs. NTI has submitted to NPC an expert report that outlines instances where NPC proposed designations overlap with exploration agreement areas. Generally, NTI recommends that IOL subsurface parcels that are covered in part, or entirely, by a Mineral Exploration Agreement be excluded from current designations that prohibit mineral exploration and development.

In summary, NTI and the RIAs are opposed to land use planning designations on IOLs that do not respect NTI and RIA priorities for IOL parcels and do not align with the key priorities of Inuit and residents as identified in the DNLUP 2016.

2.2 Acceptability of the DNLUP 2016

NTI and the RIAs are of the view that considerable revisions are required to achieve the goal of an acceptable DNLUP. A major concern is that the DNLUP 2016 is not focused enough on the key priority areas identified by Inuit and residents, which are access to country food, access to safe drinking water and increased economic opportunities. Proposed designations and direction in the DNLUP 2016, which do not contribute to furthering key priorities of Inuit and residents, or that actively detract from key priorities, should be amended or removed. NTI and the RIAs make recommendations to address this concern in Section 3 of this submission. The DNLUP 2016 should not be a tool to address every issue raised by organizations participating in

the land use planning process that are not connected to key priorities raised by Inuit and residents of Nunavut.

The NLUP must strike the right balance between promoting conservation measures and economic opportunities. NTI and the RIAs believe that the right balance has not been struck. For example, there has been a considerable increase in proposed prohibitions of activities on IOLs, which in most cases are earmarked to stimulate economic opportunities for Inuit. Between the DNLUP 2014 and DNLUP 2016, there has been a 168% increase in incursions on IOLs through the expansion of areas designated as protected for caribou.¹ This shows a lack of balance between the promotion of conservation and economic development in the DNLUP 2016. In the final NLUP, a more balanced approach is required.

Consistency of the final NLUP with the *Nunavut Agreement* and *Nunavut Planning and Project Assessment Act* (NUPPAA) is essential. NTI and the RIAs have undertaken a review of the DNLUP 2016 with respect to inconsistencies with NUPPAA and those findings are presented at Section 3.6 of this submission. These inconsistencies must be overcome in the final NLUP.

The rationale for decisions taken in the DNLUP 2016 should be clearly articulated in the Options and Recommendations document, which was released by the NPC as a companion document to the DNLUP 2016. Unfortunately, there are significant and unacceptable omissions and gaps in the Options and Recommendations document. For example, submissions made by NTI and the RIAs, as well as the Government of Nunavut (GN) regarding polar bear denning areas were not listed in the Options and Recommendations document as being considered in the land use planning decision taken. It is not clear whether this means that NPC made land use planning decisions without relevant information or whether the Options and Recommendations document is incomplete. Either case points to a lack of transparency and accountability on the part of NPC, which is inconsistent with NPC's Goal 1 of Strengthening Partnerships and Institutions. The Options and Recommendations document accompanying a final NLUP should be thorough and provide more detailed analysis of how and why land use planning decisions were taken. This would support NPC's Goal 1 of Strengthening Partnerships and Institutions.

2.3 Quality of the Land Use Planning Process

2.4.1 Community consultation process

¹ The DNLUP 2014 placed 2,474,054 hectares of IOLs in caribou protected area designations and the DNLUP 2016 places 6,633,540 hectares in caribou protected area designations. These numbers have been adjusted to take into account NPC's Errors and Omissions Document.

NTI and the RIAs have raised many concerns regarding the land use planning process in previous submissions and at NPC technical meetings. The land use planning process being followed continues to be problematic.

The *Nunavut Agreement* requires at subsections 11.2.1 (c) and (d) that:

(c) the planning process shall ensure land use plans reflect the priorities and values of the residents of the planning regions;

(d) the public planning process shall provide an opportunity for the active and informed participation and support of Inuit and other residents affected by the land use plans; such participation shall be promoted through various means, including ready access to all relevant materials, appropriate and realistic schedules, recruitment and training of local residents to participate in comprehensive land use planning;

The NPC conducted two community tours from November 2012 to March 2014. However, those consultations were directed towards the content of the DNLUP 2011/2012. Since that time, two substantially different drafts have been released by NPC (DNLUP 2014 and DNLUP 2016). The requirement for informed participation and support of Inuit and other residents is on-going. As NPC develops new and more specific planning proposals, it must check back with communities to ensure that the proposals address the previously identified community priorities.

NTI and the RIAs recognize that significant resources are required to conduct community consultations across Nunavut on a regular basis. In part, the unprecedented large scope of creating a NLUP results in constraints regarding consultations. However, the scope of the NLUP cannot be an excuse for failing to meet *Nunavut Agreement* consultation requirements.

In October and November of 2016, NPC conducted Regional Community Meetings that provided community participants with information on the DNLUP 2016. NTI and the RIAs participated in the Regional Community Sessions and believe that they were a good start in engaging with communities on the DNLUP 2016. They did, however, fall short of ensuring active and informed participation of Inuit in the land use planning process. The Regional Community Sessions were organized to provide five community participants from each Nunavut community with an overview of the DNLUP 2016. NPC then expected that the five community participants to return to their communities to inform the broader community about the DNLUP 2016. Community participants were expected to organize and facilitate community meetings, collect community views and provide NPC with written submissions by January 13, 2017. Many community participants expressed how onerous the NPC request was and that it could not be fulfilled without further support and time. NTI's request that community participants be given an extension of time to file written submissions was rejected by NPC. On account of NPC's

decision, it is likely that there will be few community-based written submissions provided to NPC on the DNLUP 2016.

2.4.2 Inuit Participation in the Public Hearing Process

In cases where a community, community organization or community participant has been unable to provide a written submission to NPC, this must not preclude the opportunity to provide oral comments at the public hearing on any topic. The ability for Inuit to provide oral submissions without constraint is a key obligation for the public hearing in the *Nunavut Agreement*. Section 11.4.17 a) states:

In conducting its hearings, the NPC shall:

(a) At all times, give weighty consideration to the tradition of Inuit oral communication and decision-making;

In addition to being able to provide oral comments at the public hearing, Inuit participants have the right to ask questions of NPC regarding the content of the DNLUP 2016 regardless of whether they have provided those questions in writing to NPC in advance. The public hearing will be the first opportunity since the Regional Community Sessions in the fall of 2016 for community participants to interact with NPC staff in-person. Inuit oral communication requires both the ability to provide comments and to ask questions.

Given NPC's constraints in conducting more extensive community consultations on the DNLUP 2016, it is unclear whether community participants will have had the opportunity to fully review the DNLUP 2016 or be able to comment on all aspects of the DNLUP 2016 including the proposed designations. Silence on the part of the community participants with respect to specific proposals in the DNLUP 2016 should not be taken as approval by those communities of the proposals. There must be evidence of community support for specific designations, particularly for Protected Area designations, which prohibit most activities, before these designations can be included in the final NLUP.

3. Specific Subject Areas

3.1 Periodic Review of the NLUP

(DNLUP 2016, Section 1.4.1 Incremental Planning, p. 19)

3.1 Periodic Review - Summary of Issue

Currently, the NPC does not commit to undertake a public review of the NLUP within a specified timeframe. This creates uncertainty as to when designations and direction within the NLUP will be publically reviewed and amendments considered. The DNLUP 2016 states at p. 19 that:

The Commissioners of the NPC will consider undertaking a full review of the plan every five (5) years minimum, according to the NPC's Plan Amendment Internal Procedure as it may be amended from time to time. Input by stakeholders will play a significant role in future decisions on the timing and direction of future plan amendments. (emphasis added)

NTI and the RIAs remains unsatisfied that NPC has not committed to a public review of the NLUP on a regular basis and will only consider undertaking a full review every five years. The current language in the DNLUP 2016 could result in a public review not taking place for decades.

3.1 Periodic Review – Recommendations

1. NTI and the RIAs recommend that the NLUP state that NPC will complete a public review between five to ten years from the time the NLUP first comes into effect. The public review should be initiated by the fifth anniversary of the NLUP coming into effect.
2. NTI and the RIAs recommend that the NLUP state that specific designations may be reviewed on a more frequent basis. Designations that are likely to require more frequent review are those related to wildlife populations such as caribou.

3.1 Periodic Review – Rationale and Supporting Documents

Under NPC's Goal 1 - Strengthening Partnership and Institutions, NPC lists the objective that land use planning "requires comprehensive, transparent procedures for all aspects of land use planning". By refusing to commit to a set timetable for the public review of the NLUP, the NPC is failing to meet its transparency objective under Goal 1. The NLUP should be a dynamic document that is amended on an on-going basis to reflect changing priorities and realities in Nunavut. NPC must commit to conducting a full public review of the NLUP within a set period. NPC should not be relying on other parties to bring forward amendments in an ad-hoc manner as a mechanism to update the NLUP. The amendment process is not a substitute for a full public review of the NLUP.

In part, support for the NLUP is derived from the understanding that the proposed designations in the NLUP are temporary to address issues in the best way possible today. Without the assurance that the NLUP will be reviewed regularly and changed to take into account up-to-date information and community views, there is lack of confidence in the process going forward. This lack of confidence can be remedied by NPC guaranteeing that it will initiate a public review within a set time period. This step would increase the level of transparency and confidence in the land use planning process.

The importance of regular reviews for approved land use plans is highlighted in the article “Fix It Up: Why and How to Put Land Use Planning on Track for Success”, which states:

... review and amendment processes should guarantee that periodic changes will be made in a deliberate, transparent, and inclusive manner...An approved land use plan should, therefore be seen as a framework for change, not a straightjacket.²

Additionally, an examination of other northern land use planning processes shows that carrying out public reviews of land use plans in a timely manner is not an easy task. To date, there is not an example of a northern land use plan where a public review and amendment process has actually been undertaken within a ten-year time frame, which highlights the important to NPC committing to a set timeline within the NLUP. Examples of other land use planning review processes include:

- The Gwich'in Land Use Plan, approved in 2003 has undergone a public review. However, final approval has not been obtained for the revised Gwich'in Land Use Plan to date.
- The North Yukon Regional Land Use Plan, approved in 2009 and no public review has been announced.

3.1 Periodic Review - Notes

The definition of “Periodic Review” at p.10 of the DNLUP 2016 states that periodic review “means a complete public review of an approved land use plan including its regional and sub-regional components. The NPC intends to regularly undertake such a review.”

NTI and the RIAs support this definition that specifies that an NPC review of the NLUP will be a “complete public review”.

3.2 Protecting and Sustaining the Environment

3.2.1 Key Migratory Bird Habitat Sites

² Steven A. Kennet, “Fix It Up: Why and How to Put Land Use Planning on Track for Success” in Canada’s North: What’s the Plan, The Conference Board of Canada, 2010.

(DNLUP 2016, Section 2.1 p. 26-27, Table 1 p. 64-69)

3.2.1 Key Migratory Bird Habitat Sites – Summary of Issue

The proposed Migratory Bird Protected Areas and Special Management Areas in the DNLUP 2016 respond to a government priority for protecting bird habitat without verification with communities that they endorse the designations. Based on the key community priorities identified in the DNLUP 2016, the protection of additional migratory bird habitat is not a priority for a 1st generation NLUP as it does not relate to access to country food, access to safe drinking water or building a stronger economy. As discussed previously, Sub-section 11.2.1 (c) of the *Nunavut Agreement* states that “the planning process shall ensure land use plans reflect the priorities and values of the residents of the planning region”.

NTI and the RIAs believe that the current proposed migratory bird designations have not struck the right balance between NPC’s goals of Protecting and Sustaining the Environment and Encouraging Sustainable Economic Development. The proposed Migratory Bird Protected Areas with the use of extensive prohibitions on activities will prevent economic development in areas that have already been ear-marked for activities, particularly on IOLs. The designations may also discourage the protection of migratory bird habitat through legislation that would provide for the negotiation of economic benefits to Inuit through Inuit Impact and Benefit Agreements.³

Terms and conditions can be used to provide adequate protection to migratory birds as used in the Sahtu Land Use Plan. This would be a more flexible approach that would allow for the mitigation of impacts on migratory birds and the pursuit of economic activities simultaneously.

3.2.1 Key Migratory Bird Habitat Sites – Recommendations

1. NTI and RIAs recommend that the proposed Migratory Bird Protected Areas be placed in Special Management Areas where the setbacks in Table 2 of the DNLUP 2016 apply, and other terms and conditions may apply. Exceptions could be considered in cases where the community adjacent to the proposed designation and the RIA support a specific Protected Area designation.
2. For the few cases that a proposed Migratory Bird Protected Area includes a subsurface IOL parcel (see section below on *Subsurface IOLs*), NTI and the RIAs recommend that the

³In Nunavut, prior to the establishment of any conservation area including Migratory Bird Sanctuaries and National Wildlife Areas, the government department responsible must negotiate with Inuit an Inuit Impact Benefit Agreement (IIBA) pursuant to Article 8 and 9 of the Nunavut Agreement. An IIBA shall include any matter connected with the conservation area that would have a detrimental impact on Inuit, or that could reasonably confer a benefit on Inuit either on a Nunavut-wide, regional or local basis. Schedule 8-3 of the Nunavut Agreement includes matters considered appropriate for negotiation and inclusion within an IIBA.

bird area be designated a Special Management Area where the setbacks in Table 2 of the DNLUP 2016 apply, and other terms and conditions may apply.

3.2.1 Key Migratory Bird Habitat Sites – Rationale and Supporting Documents

Adequacy of Special Management Areas

Special Management Areas with term and conditions are used to protect migratory bird populations in the Sahtu Land Use Plan. For example, in the Sahtu Land Use Plan, the Shigago (Little Chicago) Area is zoned as a Special Management Area to address various values including migratory birds. In this case, the Sahtu Land Use Plan states:

CWS has identified four Important Bird Areas (IBA) as key migratory bird terrestrial habitat sites in the NWT. These IBAs represent important breeding habitat for globally and continentally significant concentrations of several species. The Middle Mackenzie River Islands is a globally significant IBA. It is located within the zone and is visited by birds such as the Greater White-fronted Goose, Canada Goose, Tundra Swans as well as many duck species during annual spring migrations. Between two and six percent of the global population of Snow Goose congregate in the Middle Mackenzie River Islands IBA.⁴

Land use prohibitions are not applied for migratory birds. Instead, terms and conditions are used, including:

1) Land use activities must be designed using the most current information for identified species of interest and species at risk as obtained from ENR, CWS, DFO, PCA, the SRRB and the local Renewable Resource Councils.

2) Impacts to wildlife, their habitat and migration patterns, and important community harvesting areas must be prevented or mitigated to the extent possible.

a. In particular, all reasonable steps should be taken to follow the horizontal setbacks and minimum flight altitudes identified in Table 4 when near habitat sites during sensitive periods described in that table, unless human safety is of concern, and measures are developed with the appropriate organizations and the RRC to mitigate impacts to these species and their habitat.⁵

⁴ Sahtu Land Use Plan, 2013, p. 81.

⁵ Ibid. at p.39.

The setbacks described in Table 4 of the Sahtu Land Use Plan are similar to those described in Table 2 of the DNLUP 2016. NTI and the RIAs recommend that the model provided by the Sahtu Land Use Plan, for the mitigation of impacts of migratory birds, be adopted in the NLUP.

Detrimental Economic Impact to Inuit of Protected Areas for Migratory Birds in the NLUP

The current proposed Migratory Bird Protected Areas in the DNLUP 2016 will result in detrimental economic impacts on Inuit. Particularly, prohibitions of activities on subsurface IOLs that were, in most cases, selected for their mineral potential will stifle economic activity. The use of Special Management Areas with terms and conditions to protect bird habitat is in keeping with NPC's Goal 5 - Encouraging Sustainable Economic Development and the objective of ensuring "that the goals of any proposed restrictions on land use are achieved with the least possible impact on undiscovered mineral resources, while taking into account environmental and social objectives".⁶

The designation of Migratory Bird Protected Areas in the NLUP does not, on its face, require government to negotiate an Inuit Impact and Benefit Agreement (IIBA) with Inuit under the *Nunavut Agreement*. The Government of Canada has not committed to providing legislated protection to the areas currently proposed as Migratory Bird Protected Areas in the DNLUP 2016 that would trigger the negotiation of IIBA provisions. If Migratory Bird Protected Areas are included in the NLUP, the Government of Canada may not pursue protection through legislation for these areas resulting in a substantial loss of economic benefit to communities adjacent to migratory bird areas. Community participants in the land use planning process should have a full understanding that protection of habitat through the NLUP may result in a loss of economic opportunities. This is of particular concern if migratory bird protection is not a community priority for this 1st generation NLUP.

Lack of Community Endorsement for current proposed Migratory Bird Protected Areas

Although NPC held four one-day Regional Community Sessions in Nunavut on the DNLUP 2016, it is unclear whether community participants and organizations have a good understanding of the specific proposals for Migratory Bird Protected Areas in the DNLUP 2016. The transcripts for Regional Community Sessions do not indicate that any feedback was provided by community participants to NPC regarding the proposed designations. The result is that there have not been extensive consultations on the 28 proposed Migratory Bird Protected Areas and 10 proposed Special Management Area in the DNLUP 2016. It is NTI's and the RIAs'

⁶ Nunavut Planning Commission Broad Planning Policies, Objectives and Goals, November 10, 2007, Approved by the Nunavut Planning Commission Regular Meeting #66, November 10, 2007, Cambridge Bay, Nunavut.

understanding that the Government of Canada will not pursue a specific designation, if a community does not support it.

One of the ramifications of a lack of community consultation is that community knowledge and Inuit Qaujimajatuqangit (IQ) have not been taken into account in developing the proposals as only Government of Canada scientific data has been considered. At a minimum, community consultations would have provided a check on the scientific data. In some cases, areas that were once migratory bird habitat have been destroyed by the over-population of those areas with migratory birds.⁷ For example, the area south of Queen Maude Gulf has been negatively impacted by lesser snow geese and Ross's geese nesting and foraging.⁸ More extensive community consultations on the proposed designations would provide vital information on the areas where designations are proposed.

Subsurface IOLs

An analysis of NPC's GIS layer for the Migratory Bird Protected Area designation shows that NPC has likely inadvertently included subsurface IOL parcels in designations that are intended to be marine designations that should not have a terrestrial component. These proposed marine Migratory Bird Protected Areas include:

- #2 Bathurst/Elu Inlets
- #18 Belcher Islands Polynyas
- #19 Buchan Gulf
- #20 Cape Searle/Reid Bay
- #33 Markham Bay

NTI and the RIAs recommend that NPC clarify that these proposed designations do not include subsurface IOLs.

In two cases, the proposed Migratory Bird Protected Area designations overlap directly with subsurface IOLs and should be designated as Special Management Areas. These two designations are:

- #32 Inglefield Mountains
- #37 Sleeper Islands.

⁷ Online at <http://www.cbc.ca/news/canada/north/exploding-arctic-snow-geese-numbers-stabilizing-but-still-high-1.3095247>

⁸ Kenneth F. Abraham, Robert L. Jeffries and Ray T. Aliasauskas, "The dynamics of landscape change and snow geese in mid-continent North America" in *Global Change Biology* (2005) 11, 841–855.

3.2.2 Caribou

(DNLUP 2016, Section 2.2 p. 27-28, Table 1 p. 70 and 79)

3.2.2 Caribou - Summary of Issue

NTI and the RIAs agree with the statements in the DNLUP 2016 about the significant value of caribou to Inuit. In moving forward on protection of caribou populations, NTI and the RIAs continue to promote a regional approach that takes into account the specific context in each region. The proposed approach of each region is outlined in the Rationale section below. NTI will be recommending to the RIAs that proposed caribou designations that overlap with existing Mineral Exploration Agreements be placed in Special Management Areas, with associated terms and conditions.

For caribou post-calving areas, NTI and the RIAs recommend the Special Management Area land use designation, with associated terms and conditions. Regarding freshwater crossings, the importance of which NTI and the RIAs also recognize, the provision of information rationalizing the permanence and extent of the proposed buffer is recommended.

3.2.2 Caribou - Recommendations

1. NTI and the RIAs recommend that caribou post-calving areas be placed in Special Management Areas with terms and conditions.
2. NTI and the RIAs recommend that NPC provide a compelling explanation as to why permanent 10 km buffers are considered appropriate for freshwater caribou crossings.⁹
3. NTI and the RIAs recommend that the approach of each RIA regarding caribou populations in its region be respected and accommodated.

3.2.2 Caribou - Rationale and Supporting Documents

Caribou Post-Calving Areas

NTI and the RIAs recommend that caribou post-calving areas be placed in Special Management Areas with terms and conditions. Further, NTI and the RIAs propose that related land use proscriptions focusing on caribou protection and mitigation should be regionally developed, in consultation with the relevant RIAs, Regional Wildlife Organizations (RWOs), and Hunters and Trappers Organizations (HTOs). NTI and the RIAs advise that these land use proscriptions

⁹ 10 km is referenced in keeping with the adjustment discussed in NPC's Errors and Omissions document distributed in December 2016 that states that "20 km" should state 10 km in the DNLUP 2016.

should seek to accommodate population-specific requirements. The reasoning behind this recommendation can be found appended to this submission (Appendix A).

For ease of reference, the following is an excerpt from Appendix A regarding caribou post-calving grounds:

While post-calving areas are important seasonal components of the ranges of mainland migratory caribou herds, the impact of activities on caribou during the post-calving period is likely reduced due to movement and dispersion. That being said, resource-selection models have suggested that anthropogenic disturbance during the post-calving period could significantly both reduce high-quality habitats, and increase low-quality habitats of barren-ground caribou (Johnson et al., 2005). The significance of post-calving areas warrants their management, but they should be managed with tools that are commensurate with the potential impacts of specific land use activities on caribou populations.

NTI's Department of Wildlife and Environment recommends that the post-calving areas of mainland migratory barren-ground caribou be designated as 'Special Management Areas', and that related land use proscriptions focusing on caribou protection and mitigation be regionally developed, in consultation with the relevant RIAs, Regional Wildlife Organizations (RWOs), and HTOs. These land use proscriptions should seek to accommodate population-specific requirements.

This recommendation is consistent with the GN's direction when it provided the spatial data that NPC has largely relied on to develop the boundaries for the land use designations for caribou. In its submission (GN, 2014), the GN provided management recommendations for each of the spatial data layers provided. For caribou calving areas and key access corridors, the GN recommended prohibiting industrial activities. For post-calving areas, the GN recommended:

"Seasonal restrictions (June 15 – July 15) on development activity when and where caribou are present. Restricted activities include, but are not limited to, air and vehicle traffic, loud or repetitive noise or vibration disturbances. All season roads are not permitted in these areas to prevent inappropriate access to these herds during vulnerable periods. Winter access roads would be allowed." (GN, 2014, p. 4)

This recommendation is also consistent with the expert report provided by the Kivalliq Inuit Association on November 15, 2016 (Poole & Gunn, 2016b). The expert report recognizes that migratory barren-ground caribou are most sensitive to disturbance, and at higher risk, during the calving and post-calving periods, and that limitations must consequently be placed on appropriate industrial developments within caribou post-

calving areas. The expert report recommends restricting activities within post-calving areas until the high-risk period is over.

Freshwater Caribou Crossings

NTI and the RIAs agree that freshwater caribou crossings require some form of protection. It is however difficult for NTI and the RIAs to concur with the land use designation recommended in the DNLUP 2016 without being provided with NPC's underlying rationale—especially since the buffers associated with the designation, as proposed, overlap with more than 1.6 million hectares of IOLs in both the Kitikmeot and Kivalliq regions.¹⁰ NPC's Options and Recommendations document does not mention or discuss the appropriate distance of buffers (see p. 43 of the Options and Recommendations document). The majority of the additional considerations listed in the Options and Recommendations document rather suggest that seasonal restrictions, more compact than the proposed buffer, can adequately protect freshwater caribou crossings.

Regional Recommendations for Caribou

Qikiqtani Inuit Association (QIA)

In October 2015, the QIA Board of Directors adopted a resolution endorsing protection of caribou calving grounds and the use of mobile protection measures in post-calving grounds in the Qikiqtani region. In a letter to the NPC dated March 24, 2015, QIA reiterated its support for caribou Protected Areas and stated that QIA would like to see caribou protection measures applied in all three regions. QIA also indicated that there is currently a lack of resources, capacity and research regarding the use of mobile protection measures in calving grounds.

KitIA

On May 5, 2016, the KitIA Board adopted a resolution stating:

- i) Support for reasonable mobile protection measures for concentrations of caribou, including calving caribou, where they may be, irrespective of the season;

¹⁰ This figure has been adjusted to taken into account NPC's Errors and Omissions document that states that the buffer for caribou fresh water crossings is 10km and that a number of marine caribou crossings were mislabeled as fresh water crossings.

ii) KIA commitment to lobby responsible agencies and proponents to bolster their investments in caribou monitoring, information sharing, and enforcement in order to ensure caribou are appropriately protected; and

iii) Support for the development of research initiatives geared to identifying adaptive management approaches that allow for the co-existence of caribou and development in the Kitikmeot Region.

In the preamble to the resolution, KitIA acknowledged that caribou calving grounds shift unpredictably on the mainland of the Kitikmeot region and that caribou populations have cycles of lower and higher numbers over history. KitIA will be providing NPC with further caribou related submissions.

Kivalliq Inuit Association (KivIA)

KivIA has not passed a board resolution regarding appropriate measures to protect caribou habitat in the DNLUP. In a previous technical submission to NPC, KivIA provided that:

- core calving areas on surface IOLs be identified using IQ and science and be closed to development using Protected Areas in the NLUP, and
- core calving areas on surface IOLs that overlap with areas of High Mineral Potential should be placed in seasonal Special Management Areas with stringent measures based on Mobile Protection Measures.

3.2.3 Polar Bear Denning Areas

(DNLUP 2016, Section 2.3 Polar Bear Denning Areas, p. 28)

3.2.3 Polar Bear Denning Areas - Summary of Issue

NTI and the RIAs do not agree with NPC's placement of polar bear denning areas in a Mixed Use Designation contrary to the recommendations of the Qikiqtaaluk Wildlife Board (QWB), NTI, the RIAs, the GN and other land use planning participants.

The NPC states in the DNLUP 2016 at p. 28 that polar bears are an important part of Inuit culture. In addition, NPC states in the Options and Recommendation document at p. 45 that polar bear habitat is a priority value of Nunavut residents. The placement of polar bear habitat in a Mixed Use Designation is not consistent with these statements.

NTI and the RIAs do not agree with the statement in the DNLUP 2016 at p.28 that "information provided to the NPC on polar bear denning areas was not sufficiently precise to allow the NPC to recommend land use designations in specific locations". The GN has provided NPC with

spatial data of polar bear denning habitat and a viable option for protecting polar bear denning sites through a Special Management Area designation with specific terms and conditions.

3.2.2 Polar Bear Denning Areas - Recommendation

1. NTI and the RIAs support the placement of polar bear denning areas in a Special Management Area with terms and conditions to protect polar bear dens.

3.2.3 Polar Bear Denning Areas – Rationale and Supporting Documents

The QWB, in a previous technical written submission to NPC, indicated that hunters argue that protecting denning sites is central to respecting the integrity of polar bear management.¹¹

There is no question that polar bears are vitally important to Inuit and are a significant component of the Inuit harvest in Nunavut. The GN, in its last written submission, recognized the role of polar bears culturally and ecologically and recommends that the polar bear denning areas be placed in a Special Management Area designation and recommends terms and conditions for protecting dens.¹² The GN also indicated that the spatial data provided to the NPC of polar bear denning habitat may be updated in the future, but that “there is no reason to believe that new information would result in drastic changes to these identified areas”.¹³ Given the viable option provided in GN submission for protecting polar bear dens, it remains unexplained why the NPC does not believe it can create a Special Management Area designation.

The NPC, in its Options and Recommendations document, fails to list the GN’s submission on polar bear denning areas or consider a Special Management Area designation as an option.¹⁴ The submission of NTI and the RIAs on polar bears is also omitted. It remains unexplained why these omissions have occurred.

NTI and the RIAs conclude that NPC’s decision to place polar bear denning area habitat in a Mixed Use Designation was taken without considering, or weighing adequately, all the relevant facts. The terms and conditions proposed by the GN for a Polar Bear Denning Area Special Management Area go much further in addressing the concerns raised by QWB and communities than the placement of the habitat in a Mixed Use Designation. Particularly, NTI and the RIAs support the GN’s proposal to:

- i. involve HTOs and RWOs in assessing the likelihood that there would be denning areas in a project area,

¹¹ QWB, June 22, 2015 submission to NPC.

¹² Government of Nunavut Submission, May 15, 2016 to NPC.

¹³ Ibid, pgs. 5 and 6.

¹⁴ See p. 45 of NPC’s Draft Nunavut Land Use Plan 2016 - Options and Recommendations document.

- ii. require a search for dens in areas where there is a high likelihood that dens will be found before any activities take place, and
- iii. require that a 1km radius exclusion zone be observed around every known, recorded polar bear den between 15 September and 15 April, or until it is documented and reported that the den has been vacated by the family group and left the exclusion zone.¹⁵

Overall, NTI and the RIAs support the terms and conditions put forward by the GN and recommend that they be suggested to HTOs and RWOs.

3.2.4 Walrus Haul-Outs

(Section 2.4 Walrus Haul-Outs, p.28 and Table #1, p. 70)

3.2.4 Walrus Haul-Outs - Summary of Issue

The NPC proposes to designate walrus haul-out sites as Protected Areas with a marine setback of five km where vessels may not approach at any time during the year. NTI and the RIAs support a protected area designation for walrus haul-out sites. Two issues arise from the designation. The first issue is whether there are more walrus haul-out sites that require protection, which have not been included in the current DNLUP 2016 designation. The second issue is whether the condition of a 5 km marine buffer prohibiting all vessel activity at all times of the year is an appropriate condition.

3.2.4 Walrus Haul-Outs – Recommendations

1. NTI and the RIAs recommend that the NPC include other walrus haul-out sites in the proposed Protected Area designation on the request of communities, HTOs or RWOs that are made in writing or presented orally at the final public hearing.
2. NTI and the RIAs recommend that before including additional walrus haul-out sites presented by the World Wildlife Fund (WWF) that these sites be verified and endorsed by communities, HTOs and RWOs.
3. NTI and the RIAs recommend that NPC change the year-round vessel prohibition within the 5 km marine setback to a seasonal restriction based on the presence of walrus.

3.2.4 Walrus Haul-Outs – Rationale and Supporting Documentation

¹⁵ This condition is similar to the approach taken through regulation in Alaska that is referenced at p. 7 of the joint submission of NTI and the RIAs on the DNLUP 2014 submitted to NPC on May 16, 2016.

Walrus populations are of great importance to Inuit. NPC has identified this in the DNLUP 2016 on p. 28, where it is stated that walrus are “an important part of the traditional subsistence economy for the Inuit of Nunavut”. NTI and the RIAs agree that reliable access to walrus is a high priority for Nunavut communities and one of the key priorities for the DNLUP 2016.

Additionally, NTI and the RIAs agree that walrus haul-out sites should be protected as they are sensitive sites that are vulnerable to disturbance. There are various sources of information that support this statement. The Qikiqtaaluk Wildlife Board (QWB) has stated that the walrus haul-out sites are very important to a number of Qikiqtani communities and are highly vulnerable to disturbance. The QWB explained in their written submission that the “slightest disturbance has the potential to scare walruses away from the site indefinitely” requiring that the sites be protected (QWB, June 22, 2015 submission to NPC). NTI and the RIAs consider the QWB submission to be an expert report on walrus haul-out sites that incorporates IQ and should be considered as an expert report by NPC.

A WWF expert report on walrus supported the position of the QWB regarding the sensitivity of walrus haul-out sites and the need to protect them. The WWF expert report at p. 1 stated:

*Walruses are sensitive to disturbance at their haul-out sites, and repeated disturbance can lead to haul-out abandonment. Protecting these sites is therefore important...*¹⁶

The WWF expert report also stated at p. 1 that the

The walrus haulouts identified and mapped by the NPC (as site #41 in the NLUP) is incomplete however, and is limited to Foxe Basin only. The NPC walrus haulout database is therefore missing a significant number of sites throughout eastern Nunavut.

NPC received similar information regarding missing walrus haul-out sites during the technical meetings. At those meetings, it was pointed out that there is on-going work on walrus between the Department of Fisheries and Oceans (DFO) and Nunavut communities on the identification and management of walrus habitat.

As the identification of walrus haul-out sites is an on-going process, NTI and the RIAs recommend that the NPC include other walrus haul-out sites in the protected area designation on the request of communities, HTOs or RWOs, which are made in writing or orally at the final public hearing. Additionally, NTI and the RIAs recommend that before including additional walrus haul-out sites presented by the WWF that these sites be verified and endorsed by

¹⁶ Jeff W. Higdon (for WWF-Canada, Iqaluit, Nunavut), *Walrus haulouts in the eastern Canadian Arctic: a database to assist in land use planning initiatives*, submitted to NPC on August 15, 2016 as an expert report.

communities, HTOs and RWOs. The WWF expert report called for community input regarding the proposed additional sites in its conclusions, stating:

The database should be carefully examined for mistakes and errors, and it should be treated as a living document that is regularly updated as new information becomes available. In addition, community knowledge should be considered an invaluable source for refining and updating this database.

While in support of the proposed 5 km marine setback, NTI and the RIAs question the permanence of the prohibition. The proposed year-round restriction requires further examination, particularly since the Options and Recommendations document provides no related rationale. A year-round prohibition on vessels would not only protect haul-out sites, but also impede activities of importance to Inuit (e.g. commercial fishing) at times when walrus would not foreseeably be disturbed. Activity near a haul-out is likely to lead to the disturbance of walrus, but only if and when walrus are present in the area. In the absence of walrus, activities near haul-outs should not be detrimental to walrus, assuming that they do not involve habitat destruction or activity that would impede walrus behaviour to resume at these locations as biologically required.

The DNLUP 2016 at p. 19 states that “Traditional rules for the timing and method of approaching haul-outs are known to nearby communities”. NTI and the RIAs support revising the marine set-back vessel prohibition to a more flexible condition that takes into account IQ regarding the timing and method of approaching haul-outs. A more flexible condition, guided by IQ and a community-level understanding of walrus behaviour, would be in keeping with NPC’s Goals to Sustain Nunavut’s Environment and Encourage Sustainable Economic Development.

3.2.5 Beluga Calving Grounds

(DNLUP 2016, Section 2.5 p. 29, Table 1 p. 79)

3.2.5 Beluga Calving Grounds - Summary of Issue

This designation addresses a recommendation by the community of Coral Harbour to protect two beluga calving sites near the community. These two beluga calving sites do not represent all beluga calving sites in Nunavut. The Department of Fisheries and Oceans identifies six stocks of beluga as relevant to Nunavut Waters (Eastern Beaufort Sea, Eastern High Arctic-Baffin Bay, Cumberland Sound, Western-Northern-Southern Hudson Bay, James Bay, and Eastern Hudson Bay).¹⁷ It is inaccurate to suggest that the DNLUP 2016 is addressing beluga calving sites

¹⁷ DFO. 2010. Stock definition of Belugas and Narwhals in Nunavut. DFO Can. Sci. Advis. Sec.

throughout Nunavut by creating this designation that only includes two sites connected to one community. These two beluga calving sites put forward by Coral Harbour should be included in Section 4.1 Areas Identified by Communities.

3.2.5 Beluga Calving Grounds - Recommendation

1. NTI and the RIAs recommend that the designation “Beluga Calving Grounds” be moved to a Special Management Area under the designation Community Areas of Interest. This area was put forward by Coral Harbour as a Community Area of Interest.

3.2.5 Beluga Calving Grounds - Rationale and Supporting Documents

NPC’s Options and Recommendations Document lists one document under “Considered Information” for creating the beluga calving designation, which is the submission of the Kivalliq Wildlife Board (KWB) (p. 46). The Options and Recommendation Document states:

The KWB (2016-03-04) note that the Coral Harbour HTO indicated that calving is a sensitive time for beluga whales, and that these areas should be protected from disturbance and habitat destruction (two locations near the east shore of Southampton Island).¹⁸

NTI and RIAs welcome NPC’s response to the KWB’s submission of creating a designation for the two Coral Harbour beluga sites. NTI and the RIAs support the creation of this Special Management Area that addresses the request of the Coral Harbour HTO. However, the KWB submission does not address beluga calving sites throughout Nunavut and the habitat requirements of beluga generally. Considering the limited scope of the KWB submission, NTI and the RIAs recommend that this Special Management Area be designated as a Community Area of Interest under Section 4.1 of the DNLUP 2016.

Sci. Advis. Rep. 2009/079.

¹⁸ See p. 46 of NPC’s Draft Nunavut Land Use Plan 2016 - Options and Recommendations document.

3.3 Encouraging Conservation Planning

3.3.1 Proposed National Parks

(DNLUP 2016, Sections 3.1.2 p. 32, Table 1 p. 70)

3.3.1 Proposed National Parks – Summary of Issue

The DNLUP 2016 suggests that the area east of Qausuittuq National Park is proposed as a National Park. To date, NTI and QIA are not aware that there is a formal proposal to expand Qausuittuq National Park or to create a new National Park. NTI and the RIAs do not believe that this area meets the definition of a “Proposed National Park” in the DNLUP 2016.

In addition, the area in question includes surface IOLs. To date it has not been determined what the community preferences are for the management of those IOLs. However, NTI and the RIAs agree that there is an interest in the proper management of the Peary caribou population in that area. Until the status and preferences for the area are clearer, NTI and the RIA recommend that the area be designated a Special Management Area.

3.3.1 Proposed National Parks – Recommendation

1. NTI and the RIAs recommend that the area adjacent to Qausuittuq National Park be designated as a Special Management Area with terms and conditions to protect the Peary caribou population.

3.3.2 Proposed Territorial Parks

(DNLUP 2016, Section 3.1.4 p. 32, Table 1 p. 78)

3.3.2 Proposed Territorial Parks – Summary of Issue

The definition of a “Proposed Territorial Park” at p. 11 of the DNLUP 2016 states:

Proposed Territorial Park means an area that has undergone a background and feasibility study, has community and regional Inuit association support and has been approved by Government of Nunavut to proceed in accordance to the legal obligations and processes as outlined under the NLCA and Umbrella IIBA for Territorial Parks in the NSA.

In a few cases, QIA has provided initial letters of support for background studies regarding territorial park projects. Initial letters of support have been provided for studies in Clyde River, Sanikiluaq and Axel Heiberg Island. However, formal support from QIA has not been obtained for any of the proposals listed in Table 1 from #145 to #151. NTI and RIAs do not believe that these proposals meet the definition of “Proposed Territorial Park” in the DNLUP 2016.

In regards to, the Aggutinni proposal, it contains subsurface IOLs and there is no agreement to have these within an area designated as a Protected Area with prohibitions.

NTI and the RIAs recommend that the areas listed as Proposed Territorial Parks in the DNLUP 2016 be placed in Special Management Areas.

3.3.2 Proposed Territorial Parks – Recommendation

1. NTI and the RIAs recommend that the areas listed as Proposed Territorial Parks in the DNLUP 2016 be placed in Special Management Areas with terms and conditions.

3.3.3 Proposed National Marine Conservation Areas (DNLUP 2016, Section 3.2 p. 33, Table 1 p. 71)

3.3.3 Proposed National Marine Conservation Areas – Summary of Issue

NTI and the RIAs support a National Marine Conservation Area designation for Lancaster Sound.

3.3.3 Proposed National Marine Conservation Areas – Recommendation

1. NTI and the RIAs recommend that NPC retain the Protected Area designation until Lancaster Sound is designated as a National Marine Conservation Area.

3.3.4 Conservation Areas – Migratory Birds Sanctuaries and National Wildlife Areas (DNLUP 2016, Sections 3.3.2 and 3.3.3 p. 33 -34, Table 1 p. 71-73)

3.3.4 Conservation Areas – Migratory Birds Sanctuaries and National Wildlife Areas Summary of Issue

The proposal to designate existing Migratory Bird Sanctuaries and National Wildlife Areas as Protected Areas within the DNLUP 2016 interferes with the implementation of the *2016 to 2023 Inuit Impact and Benefit Agreement for National Wildlife Areas and Migratory Bird Sanctuaries in the Nunavut Settlement Area* (MBS/NWA IIBA). Additionally, the proposed Protected Area designation that imposes different prohibitions than those established under the *Migratory Birds Convention Act* and *Canada Wildlife Act* will add an unnecessary level of complexity to the regulatory system.

3.3.4 Conservation Areas – Migratory Birds Sanctuaries and National Wildlife Areas – Recommendation

1. NTI and RIAs recommend that NPC provide for no additional prohibitions or conditions within Migratory Bird Sanctuaries and National Wildlife Areas.

3.3.4 Conservation Areas – Migratory Birds Sanctuaries and National Wildlife Areas – Rationale and Supporting Documents

NTI and the RIAs recommend the land use planning approach taken in the Sahtu Land Use Plan be replicated for the NLUP for legislated protected areas. In the Sahtu Land Use Plan, no additional prohibitions, or terms and conditions, are added over and above the existing regime. Specifically, the Sahtu Land Use Plan states:

*Established Protected Areas (EPA) is the designation given to all legislated protected areas once they are fully established. Once an area is designated as an Established Protected Area, the Plan no longer provides direction to these areas. Instead, they are managed according to their sponsoring legislation and management plans (where applicable). As such, EPAs are treated separately than the four zone types in the rest of the Plan.*¹⁹

Avoidance of potential conflict, and of duplication, are the reasons given for the approach in the Sahtu Land Use Plan. These reasons apply equally to land use planning for legislated protected areas in Nunavut.

Moreover, the current proposed Protected Area designation for MBSs and NWAs interferes with the implementation of the MBS/NWA IIBA. The additional prohibitions in the DNLUP 2016 for MBSs and NWAs affect the implementation of various provisions of the MBS/NWS IIBA including those related to RIA supported permit applications for activities within IOLs in MBSs and NWAs and co-management. For example, the proposed prohibitions for the Protected Area would disallow activities on IOLs that may be approved through existing legislation. The MBS/NWA IIBA outlines a process for RIA supported permit applications that would be undermined by the DNLUP 2016 proposal. Additionally, the role of Area Co-Management Committees (ACMCs) created by the MBS/NWA IIBA in advising on the management of wildlife habitat would be circumvented by the proposed Protected Area prohibitions.

NTI and the RIAs are of the view that the Government of Canada's submission regarding MBSs and NWAs of May 30, 2016²⁰ is not consistent with the consultations requirements contained in the MBS/NWS IIBA. The Government of Canada stated in its submission:

Consider maintaining the Protected Area designation (for areas including National Wildlife Areas, Migratory Bird Sanctuaries, Thelon Wildlife Sanctuary and Historic

¹⁹ Sahtu Land Use Plan, 2013, p. 28.

²⁰ Government of Canada, *Response to the Questions in the NPC's Paper Titled Considerations for Potential Refinements to the 2014 Draft Nunavut Land Use Plan*, January 2016, May, 30, 2016.

Sites), recognizing that the NLUP may impose prohibitions that exceed standards and protections provided by regulations.²¹

The Government of Canada's decision to support additional prohibitions within MBSs and NWAs ignores MBS/NWA consultation obligations that should have occurred before taking its position. These consultation obligations include:

- *Section 3.3.5 The Minister shall seek the advice of the relevant ACMCs on all significant policy matters directly affecting NWAs and MBSs. In all significant policy decisions, the Minister shall carefully consider Inuit Qaujimajatuqangit documented and presented to the Minister by an ACMC.*
- *Section 4.4.1 Prior to making any decision that could substantially affect IOL within or adjacent to an NWA or MBS, CWS shall consult the relevant RIA. The RIA shall document and present to CWS any Inuit Qaujimajatuqangit which it believes relevant to CWS's decision. CWS shall provide written reasons for its decision. CWS's reasons shall address any Inuit Qaujimajatuqangit documented and presented to it by the RIAs or ACMC.²²*

The policy decision to support additional prohibitions within MBSs and NWAs is a significant one affecting NWAs and MBSs and IOLs within and adjacent to MBSs and NWAs. Consultations with ACMCs and RIAs should have taken place regarding the promotion of additional prohibitions.

In summary, the MBS/NWA IIBA outlines a co-management approach in accordance with IQ, scientific information and applicable legislation. Applying additional prohibited uses in the DNLUP 2016 interferes with the implementation of the MBS/NWA IIBA and adds an unnecessary layer of complexity to the regulatory system. As stated in the MBS/NWA IIBA:

NWAs and MBSs make an important contribution to wildlife and wildlife habitat conservation in the NSA, Canada and the world. They shall be co-managed by Inuit and CWS in accordance with the NLCA, this IIBA, approved Management Plans, Inuit Qaujimajatuqangit, scientific information and, except where inconsistent with the NLCA, the Migratory Birds Convention Act, the Canada Wildlife Act, the Species at Risk Act and other applicable legislation.²³

²¹ Ibid. at p. 9.

²² 2016 to 2023 Inuit Impact and Benefit Agreement for National Wildlife Areas and Migratory Bird Sanctuaries in the Nunavut Settlement Area.

²³ 2016 to 2023 Inuit Impact and Benefit Agreement for National Wildlife Areas and Migratory Bird Sanctuaries in the Nunavut Settlement Area, Section 2.1.1, p. 8.

To support the implementation of the MBS/NWA IIBA and to provide for an integrated regulatory approach, the NLUP should not provide for additional prohibitions within MBSs and NWAs.

3.3.5 Historic Sites – National Historic Sites and Territorial Historic Sites (DNLUP 2016, Section 3.4 p. 34, Table 1 p.74)

3.3.5 Historic Sites – National Historic Sites and Territorial Historic Sites – Summary of Issue

It is unclear what level of protection is appropriate and supported by adjacent communities for the historic sites listed. In addition, there are concerns regarding the management of IOLs within historic sites.

The historic sites listed in the DNLUP 2016 are diverse and some may reasonably allow for activities such as tourism. Currently, the proposed Protected Area designation prohibits linear infrastructure that may be appropriate in certain cases where tourism or other activities are of interest.

3.3.5 Historic Sites – National Historic Sites and Territorial Historic Sites – Recommendations

1. NTI and the RIAs recommend that historic sites be designated as Special Management Areas with terms and conditions that protect the value of the sites. NTI and the RIAs provided recommendations regarding terms and conditions in its May 16, 2016 written submission to NPC.
2. NTI and the RIAs recommend that IOLs be excluded from any Protected Area designations related to historic sites.

3.3.5 Historic Sites – National Historic Sites and Territorial Historic Sites – Rationale and Supporting Documents

NPC's Options and Recommendations document does not identify community support for these Protected Area designations and historic sites are not identified as a key priority for a 1st generation NLUP. At this time, NTI and the RIAs do not believe there is sufficient justification for a Protected Area designation with prohibitions for historic sites.

In regards to IOLs that overlap with historic sites, the RIAs have not had an opportunity to review with communities the proposed designations and what activities are appropriate on the IOLs. In some cases, RIAs are aware that there are community concerns regarding the control and management of historic sites that overlap with IOLs. NTI and the RIAs recommend that IOLs be excluded from any designations with prohibitions.

NTI and the RIAs are engaged in discussions with the Government of Canada for an Inuit Impact and Benefit Agreement for National Historic Sites. These negotiations will involve discussions with communities regarding the management of the historic sites that will assist in clarifying what activities are appropriate within and adjacent to the current list of historic sites.

3.3.5 Historic Sites – National Historic Sites and Territorial Historic Sites – Notes

At p. 21 of the DNLUP 2016, it states that:

The NLUP does not apply within established National Parks, National Marine Conservation Areas, Territorial Parks, and National Historic Sites administered by Parks Canada.

The Wrecks of HMS Erebus and HMS Terror National Historic Site is administered by Parks Canada. Section 3.4 of the DNLUP 2016 should note that the NLUP will not apply to the Wrecks of HMS Erebus and Terror. The Wreck of HMS Erebus and HMS Terror National Historic Site should be removed from Table 1 (currently #64) of the DNLUP 2016.

In regards to Bloody Falls National Historic Site, Section 3.4.1 should explain that it is contained within Kugluk Territorial Park, which is listed as site #142 under Table 1 in the DNLUP 2016, and that the National Historic Site will not have a separate land use designation from that of the Territorial Park.

3.3.6 Heritage Rivers

(DNLUP, Section 3.5 p. 34, Table 1 p. 74 and 78)

3.3.6 Heritage Rivers – Summary of Issue

QIA, continues to state that before taking a final position it wishes to consult with the local communities regarding the designation of the Soper River as a Protected Area.²⁴ QIA, at this time, has not conducted those consultations.

3.3.6 Heritage Rivers – Recommendation

1. NTI and the RIAs recommend that the Soper Canadian Heritage Management Plan Area be placed in a Special Management Area designation until such time as consultations are completed and community preferences are established.

²⁴ See 3rd NPC Technical Meeting Transcript at p. 126.

3.4 Building Healthier Communities

3.4.1 Community Areas of Interest

(DNLUP 2016, Section 4.1.1 p. 36, Table p. 74-75)

3.4.1 Community Areas of Interest – Summary of Issue

Generally, NTI and the RIAs support the identification and management of community areas of interest using land use planning tools. However, NTI and the RIAs are aware that not all community proposals for community areas of interest have been considered by the NPC. Several proposals are not referenced in NPC's Options and Recommendations Document. In addition, there is a lack of clarity on how community proposals for Community of Areas are being assessed by NPC. NTI and the RIAs recommend that NPC develop criteria for the assessment of proposals and that these criteria be made public.

NTI and the RIAs do not agree that a Protected Area designation is necessary to address all the Community Areas of Interest. In some cases, the values that communities would like to see protected can be managed through the application of terms and conditions within Special Management Areas. The community proposals are all different and require that the land use designation specifications address the unique values brought forward. Specific terms, conditions and prohibitions should be developed for each Community Areas of Interest. This will be especially important in cases where communities have both conservation and economic goals for the area.

3.4.1 Community Areas of Interest – Recommendation

1. NTI and the RIAs support the identification and management of community areas of interest in the NLUP and recommend that a combination of land use designations be used to address community interests including Protected Areas and Special Management Areas.
2. NTI and the RIAs recommend the following designations for proposed Community Areas of Interest:
 - Hiukitak River – Protected Area²⁵
 - Duke of York Bay – Special Management Area
 - Foxe Basin Marine Area of Interest (Igloodik) – Special Management Area

²⁵ NTI notes that within the proposed designation there is a subsurface IOL parcel that overlaps with a pre-1999 Crown mineral lease that appears to be inactive (see NTI expert report on existing rights). NTI has made an exception regarding designations that overlap with subsurface IOLs in this case and supports KitlA's position that this Community Area of Interest should be designated as a Protected Area.

- Moffatt Inlet – Special Management Area
- Nettiling Lake - Special Management Area
- Walrus Island – Protected Area
- Corbett Inlet - Special Management Area
- Diana River – Special Management Area
- Char Fishing Rivers – Special Management Area
- Naujaat Areas – Special Management Areas – i) Terrestrial and ii) Marine

3. All community proposals for Community Areas of Interest should be listed and discussed in the Options and Recommendations document to retain a complete record of proposals and to meet transparency objectives.

3.4.1 Community Area of Interest – Rationale and Supporting Documents

NTI and the RIAs recommend that community proposals for Community of Areas Interest that were not included in a proposed land designation in the DNLUP 2016 be created as Special Management Areas. These include Corbett Inlet and the two Naujaat Areas. It is not clear in NPC's Options and Recommendations document why a Special Management Area designation has not been created for these areas and instead they are listed under Schedule B as Valued Ecosystem Components (VECs) or Valued Socio-Economic Components (VSECs). Classifying the areas of interest as VECs or VSECs does not provide the level of land use direction that the communities have requested.

Additionally, it is unclear why other community proposals that are similar in regards to the level of information provided are treated differently. For example, the Rankin Inlet HTO proposed two Community Areas of Interest: Diana River and Corbett Inlet. Diana River is proposed as Protected Area and Corbett Inlet as a VEC/VSEC. The land use planning reasoning provided in the Option and Recommendations document is the same, stating that the option “was chosen given the importance of the area to residents”.²⁶ However, one site will receive far more protection than the other without a clear rationale.

NTI and the RIAs recommend that NPC elaborate on the criteria used to assess community proposals and the level of protection required. The optimal situation is to provide land use direction to assist in protecting the community value without unnecessarily limiting economic opportunities that are also of interest to the communities.

²⁶ NPC's Options and Recommendations Document, p.66.

Proposed Community Areas of Interest Not Included

In the Options and Recommendations Document, it is stated that “important areas identified by communities are included in other key areas identified throughout this plan” and only areas that “do not have significant overlap with other areas” are presented.²⁷ There are a number of problems with this approach. The first is that, by not identifying the community proposals, there is no record of the community proposal and that shows a lack of transparency. This lack of transparency created conflicts with NPC Goal 1 Strengthening Partnership and Institutions. NTI and the RIAs recommend that all community proposals be identified in the Options and Recommendations document. For example, the Aqigiq HTO proposed that the Josephine River and Josephine Lake be a Protected Area with a 10 km buffer.²⁸ This proposal should be listed in the Options and Recommendations Document.

3.4.2 Areas of Equal Use and Occupancy (DNLUP 2016, Section 4.1.4 p. 37, Table 1 p. 75)

3.4.2 Areas of Equal Use and Occupancy – Summary of Issue

Both QIA and Makivik Corporation are engaging in consultations with communities regarding the proposed Protected Area designation for Areas of Equal Use and Occupancy. Until support for the Protected Area designation can be confirmed, it is premature to designate Areas of Equal Use and Occupancy as Protected Areas.

3.4.2 Areas of Equal Use and Occupancy – Recommendation

1. NTI and the RIAs recommend that Areas of Equal Use and Occupancy be designated as Mixed Use.

3.4.2 Areas of Equal Use and Occupancy – Rationale and Supporting Documents

Makivik Corporation in its letter to NPC dated March 1, 2016 indicated that the NPC did not hold direct community consultations in the communities of Inukjuak and Umiujaq and that the overall level of community consultation has been insufficient. Makivik Corporation also stated that the current designation of Protected Areas in the zones of Equal Use and Occupancy may prejudice the rights of Nunavik Inuit. During the Regional Community consultation held by NPC in Kuujjuak in November 2016, there was a commitment on the part of community participants to consult Nunavik communities about the proposed designation.

²⁷ Ibid, p. 63

²⁸ Aqigiq HTO submission to NPC, January 29, 2016.

QIA has also been consulting communities. Consultations have occurred in Sanikiluaq and Cape Dorset. In Sanikiluaq, community members indicated that more information is required regarding the views of the Nunavik communities on the lands in question. On a preliminary basis, Sanikiluaq community members are open to considering a protection oriented designation. In Cape Dorset, there was an interest in knowing what the preference was of the Nunavik communities for the lands.

Until such time as the results of all the consultations are known, NTI and the RIAs recommend that the Areas of Equal Use and Occupancy be zoned Mixed Use.

3.4.3 Unincorporated Communities – Bathurst Inlet and Umingmaktok (DNLUP 2016, Section 4.2 p. 36, Table 1 p. 75)

3.4.3 Unincorporated Communities – Bathurst Inlet and Umingmaktok – Summary of Issue

Unless an issue is raised at the community level, NTI and the RIAs have no apprehensions regarding the designation of the residential bases of Bathurst Inlet and Umingmaktok as Protected Areas.

3.4.4 Waste Sites /Contaminated Sites and Department of National Defence (DND) Establishments (DNLUP 2016, Sections 4.4.2, 4.4.3, 4.5 p. 38-39, Table 1 p. 75-77)

3.4.4 Waste Sites /Contaminated Sites and DND Establishments – Summary of Issue

A substantial amount of IOLs are contained within the proposed Contaminated Sites and DND Special Management Areas designations. NTI and the RIAs desire a land use planning approach that minimizes the impacts on IOLs within these designations. The current proposed approach in the DNLUP 2016 is an improvement over the previous draft. However, NTI and the RIAs are recommending adjustments to address concerns with access and use of IOLs.

3.4.4 Waste Sites /Contaminated Sites and DND Establishments – Recommendations

1. NTI and the RIAs recommend that the Special Management Areas should be reduced to the area of the landfills, once the clean ups are completed. The NLUP should indicate that the NPC will pursue plan amendments to reduce the size of the Special Management Areas once the sites are cleaned-up.
2. NTI and the RIAs recommend that minor variances should be available when sites have been cleaned-up for activities outside of landfills (when the NLUP has not yet been amended).

3. NTI and the RIAs recommend that the NLUP state that:
 - i) Indigenous and Northern Affairs Canada (INAC) and DND will provide NPC with annual updates regarding the sites that have been cleaned up; and
 - ii) Annual updates will be posted on NPC's website.
4. NTI and the RIAs recommend that INAC and DND indicate which sites that are currently proposed as Special Management Areas are considered to be cleaned-up. The DNLUP 2016 should be adjusted to reflect this information.
5. NTI and the RIAs recommend that the designation areas for FOX-3 Dewar Lakes North Warning System Site and CAM-M Cambridge Bay North Warning System Site be redesigned to reduce or eliminate impacts on IOLs.

3.4.4 Waste Sites /Contaminated Sites and DND Establishments – Rationale and Supporting Documents

Substantial amounts of IOLs are contained within the proposed Contaminated Sites and DND Special Management Areas. These are listed as #83 to #135 in Table 1 of the DNLUP 2016. NTI's Expert Report on IOL incursions lists the total amount of IOLs impacted as 75,848 hectares. For the majority of the proposed Special Management Areas, the following term is included:

All uses are prohibited except remediation and monitoring of the sites until cleanup operations are completed. Following remediation, no drilling, camps, or large landing pads will be permitted on landfills.

This condition raises questions regarding how the transition from the current proposed Special Management Areas to reduced Special Management Areas for landfills will be implemented. Addressing this issue will assist the NPC in meeting its Goal 5 - Encouraging Sustainable Economic Development, which commits to ensuring that "any proposed restrictions on land use are achieved with the least possible impact on undiscovered mineral resources, while taking into account environmental and social objectives". To achieve this goal, NTI and the RIAs recommend that the Special Management Area should be reduced to the area of the landfills once the clean ups are completed through a NPC plan amendment. The NLUP should indicate that NPC will pursue plan amendments to reduce the size of the Special Management Areas once the sites are cleaned-up. As the plan amendment process will take some time, NPC should indicate in the NLUP that NPC will provide notice when a clean-up is completed indicating that activities are permitted except on landfills.

In the event that a site has been cleaned up and amendment to the NLUP has not occurred to reflect the change, proponents should be able to apply and receive a minor variance and receive a positive conformity determination for activities outside of landfills within the Special Management Area. The wording of Section 6.3.3 of the DNLUP (minor variances) should be adjusted to allow for minor variances for “setbacks, seasonal restrictions *and activities outside of landfills within Contaminated Sites and DND designations*”.

In addition, the NLUP should require that, on an annual basis, INAC and DND provide an update on how many of the sites have been cleaned-up. NTI and the RIAs understand that a number of the sites have already been cleaned up, and the DNLUP 2016 should be adjusted to reflect this information. For sites that are already cleaned-up, the Special Management Areas should be reduced to the landfill areas.

Fox-3 and CAM-M Sites

The proposed Fox-3A Dewar Lakes North Warning System Site Special Management Area contains 4,264 hectares of sub-surface IOLs at the perimeter of the site. The designation boundaries could be easily changed to exclude the subsurface IOL.

The proposed CAM-M Cambridge Bay North Warning System Site Special Management Area contains 37,574 hectares of surface IOLs near Cambridge Bay. NTI and the RIAs recommend that the site boundaries be changes to reduce the amount of IOL included in the proposed designation.

3.5 Encouraging Sustainable Economic Development

3.5.1 Commercial Fisheries – Cumberland Sound Turbot Management Area (DNLUP, Section 5.4 p. 43, Table 1 p. 77)

3.5.1 Commercial Fisheries – Cumberland Sound Turbot Management Area – Summary of Issue

NTI and the RIAs support the proposed Cumberland Sound Turbot Management Area.

3.5.1 Commercial Fisheries – Cumberland Sound Turbot Management Area – Recommendation

1. NTI and the RIAs recommend that NPC retain the Special Management Area designation for the Cumberland Sound Turbot Area.

3.5.2 Terrestrial Linear Infrastructure (DNLUP, Section 5.5.2 p. 43-45)

3.5.2 Terrestrial Linear Infrastructure – Summary of Issue

NTI and the RIAs continue to stipulate that the Manitoba-Kivalliq road and hydro corridor be identified in the DNLUP 2016 in a designation that would allow for the road and hydro corridor project proposal to receive a positive conformity determination. In addition, NTI and the RIAs suggest that the Gray's Bay Road corridor be similarly identified in the DNLUP 2016.

In October 2016, the NTI and the Kitikmeot Inuit Association Board of Directors adopted a resolution endorsing full support of the Gray's Bay Road and Port Project.

3.5.2 Terrestrial Linear Infrastructure – Recommendation

1. NTI and the RIAs recommend a Special Management Area designation for the Manitoba-Kivalliq road and hydro corridor and the Gray's Bay Corridor in the DNLUP 2016 with appropriate terms and conditions to protect wildlife and their habitat and other values such as cultural sites. In regards to the Manitoba-Kivalliq road and hydro corridor, the Special Management Area should be located on post-calving caribou habitat.
2. NTI and the RIAs recommend that the DNLUP be changed to strengthen sections related to linear infrastructure by revising the description of Mixed Use Areas and removing the section on speculative linear infrastructure corridors.

3.5.2 Terrestrial Linear Infrastructure – Rationale and Supporting Documents

As indicated in the DNLUP 2016, linear infrastructure is a key element in accessing the natural resources of the Nunavut Settlement Area, encouraging economic development and supporting connections between communities. NTI and the RIAs maintain that the DNLUP 2016 does not support sufficiently current proposed linear infrastructure initiatives. In particular, the proposed Manitoba-Kivalliq Corridor and the Gray's Bay Corridor should be identified within the DNLUP 2016 in a way that allows for project proposals for these corridors to receive a positive conformity determination in the future.

There is considerable community support for the Manitoba-Kivalliq corridor as documented in the transcripts for the Rankin Inlet Regional Community session of October 24, 2016.²⁹ In addition, KivIA's expert report, *Linear Infrastructure Corridor, Kivalliq, Nunavut*, demonstrates that the route meets the threshold established by NPC for a linear infrastructure corridor.³⁰ At Annex A1 of the DNLUP 2016, NPC identifies various factors that should be considered in establishing a linear infrastructure corridor. The KivIA expert report explains how these are now met. Based on the level of community support and KivIA's expert report, NTI and the RIAs recommend that the corridor be established as a Special Management Area within the DNLUP 2016. The DNLUP 2016 has Special Management Areas for other infrastructure initiatives (e.g. alternative energy sources); this is a reasonable approach for linear infrastructure.

The Gray's Bay Corridor was submitted to the Nunavut Impact Review Board (NIRB) by MMG- Minerals and Metals Group (MMG) in September 2012 as a component of MMG's project proposal for the Izok Corridor Project. Recent correspondence (Dec 16, 2016) between the NIRB and MMG indicates the project is still active, but is challenged by the lack of infrastructure in the Kitikmeot region. NTI and the RIAs recommend that the Gray's Bay Corridor be established as a Special Management Area within the DNLUP 2016.

At the national level, there is support for the corridor. The Canada Transportation Act Review Report titled *Pathways: Connecting Canada's Transportation System to the World*, tabled in Parliament in February 2016, identifies significant transportation challenges in Nunavut and recommends that:

1. ...the Government of Canada develop and implement an infrastructure strategy for all modes of transportation in the North by: ...

²⁹ Draft Nunavut Land Use Plan Nunavut Planning Commission Regional Pre-Hearing Conference Transcript Session #3: Rankin Inlet, Nunavut, October 24, 2016 at p. 37 and Summary of Community Break Out Groups During Regional Pre-Hearing Conference, Kivalliq Session, Rankin Inlet, October 24, 2016 at p. 14.

³⁰ Linear Infrastructure Corridor expert report submitted by KivIA on November 15, 2016.

b. focusing federal corridor development efforts on transformative nation-building projects, based on territorial and CanNor recommendations, including immediate support for the following projects: ...

iii. the Coronation Yellowknife Corridor, connecting resource development projects in the Slave Geological Province to the Arctic coast in the North and Yellowknife in the South; the intention is to facilitate the development of a central Arctic transportation corridor for both Nunavut and the Northwest Territories, beginning with funding for the Grays Bay Road and Port Project;³¹

To support linear infrastructure initiatives in Nunavut, the DNLUP 2016 should be simplified and inconsistencies eliminated.³² NTI and the RIAs recommend the following be done to strengthen the linear infrastructure sections and eliminate inconsistencies:

- Revise the description of Mixed Use Areas at p. 22 that states “In Mixed Use Areas, all uses are considered to conform to the NLUP with the exception of highways and railways” to exclude the exception. The introduction of a non-conforming element in the Mixed Use designation for highways and railways raises implementation concerns. There are no references or designations related to this prohibition in Table 1 making it unclear what is the implementation obligation. In addition, deleting the wording “with the exception of highways and railways” will create consistency with section 5.5.12, which states that linear infrastructure (including highways) are allowed in Mixed Use Areas. Moreover, the current exception for highways and railways in the Mixed Use designation is unnecessary as there is protection of environmental and social values through the current proposed designations.
- Remove Section 5.5.1.3 in the DNLUP 2016. By adding Special Management Area - Linear Infrastructure Corridors in the DNLUP 2016, it is unnecessary to have a section on speculative infrastructure corridors.

3.5.3 Marine Shipping (DNLUP 2016, Section 5.5.2, p. 46-47)

3.5.3 Marine Shipping – Summary of Issue

³¹ Canada Transportation Act Review Report, *Pathways: Connecting Canada’s Transportation System to the World*, February 2016, p. 66.

³² See p. 6 of the Linear Infrastructure Corridor expert report submitted by KivIA for more details on inconsistencies.

A number of the marine shipping proposals are imprecise, creating uncertainty about implementation implications. Revisions to the marine shipping provisions are needed to ensure community resupply is not impeded. As all marine shipping issues cannot be resolved in a 1st generation NLUP, the role of the Nunavut Marine Council during the implementation period of the NLUP should be referenced in the DNLUP.

3.5.3 Marine Shipping – Recommendations

1. NTI and the RIAs recommend that the marine shipping provisions be revised to ensure that community resupply is not impeded.
2. NTI and the RIAs recommend that a role of the Nunavut Marine Council during the implementation period of the NLUP should be referenced in the NLUP.
3. NTI and the RIAs recommend that vague and confusing language regarding marine shipping (referred to in the next section) be removed or revised.

3.5.3 Marine Shipping – Rational and Supporting Documents

A number of provisions should be amended or removed as they are vague and confusing. One of the marine shipping provisions of concern states the following:

For all types of marine corridors, there are seasonal setbacks listed in Table 1 for the ecological and cultural heritage sites. These setbacks have supporting references that can be found in Tables 2 and 4. Vessels must obey these setbacks, subject to safe navigation, as per NUPPAA .³³

As the term “marine corridor” is not defined, it is not clear what types of marine corridors are being referred to in this provision. Does “marine corridor” mean the same thing as Marine Shipping Corridor, which is defined in the DNLUP 2016? It is also not clear what setbacks for ecological and cultural heritage sites are being referred to. The reference provided for the setbacks include reference to Table 2 and Table 4. Table 2 outlines Migratory Bird Setbacks while Table 4 outlines Community Priorities and Values for Marine Areas, yet neither of these specify setbacks. In addition, more of an explanation is needed regarding the statement, “Vessels must obey these setbacks, subject to safe navigation, as per NUPPAA”. What NUPPAA provisions support this statement?

Another marine shipping provision that is unclear is the following:

³³ DNLUP, Section 5.5.2, p. 46.

No project/project proposal is permitted in Nunavut that would include or involve any shipping during any time of the year in Moffatt Inlet or Foxe Basin, which are assigned Protected Area Land Use Designation. [See Schedule A and Table 1 – Site # 73, 74]³⁴

The wording of the provision suggests that there can be no marine shipping at any time within Moffatt Inlet or Foxe Basin. However, the references to Site #73 and #74 are to Community Areas of Interest that prohibit shipping in a portion of Moffatt Inlet and Foxe Basin. This section should reference the Community Areas of Interest and indicate the geographic boundaries of the proposed Protected Areas.

3.6 Implementation Issues

3.6.1 Conformity with NUPPAA

3.6.1.1 Responsibility to implement Conditions in Table 1

The DNLUP 2016 should have more explicit language that is consistent with NUPPAA regarding the parties that are responsible for implementing conditions presented in Table 1. In some cases, it is not clear which parties are responsible for implementing conditions. For example, proposed designation #41 has a condition that states:

No vessel may approach within five (5) km seaward of a walrus haul-out, at any time during the year. Any project in Nunavut that involves shipping that would violate these conditions is prohibited.

The condition appears to be directed at proponents under subsection 74 (f) of NUPPAA. It is not explicit in the wording of the condition that Regulatory Authorities must implement the condition by virtue of subsection 69(1) of NUPPAA. There should be a notation within Table 1 when conditions are directed to proponents that the condition is also applicable to Regulatory Authorities. We recognize that there is a reference at section 1.7.5.4 at p. 23 of the DNLUP 2016 that states that Regulatory Authorities implement “relevant Conditions through the issuance of permits, licences, and authorizations...”. However, this general reference is not repeated in Table 1, which refers to the implementation responsibility of Regulatory Authorities in connection with many, but not all conditions. This creates uncertainty regarding implementation of conditions in Table 1. **NTI and the RIAs recommend that wording be added to Table 1 stating that Regulatory Authorities are required to implement general conditions such as the one proposed for designation #41.**

³⁴ DNLUP, Section 5.5.2.2, p.47.

Most designations in Table 1 have conditions stating that Regulatory Authorities “must incorporate” a specific requirement “during the issuance of permits, licences, and authorizations”. It is not explicit in the wording of the conditions that proponents also are required to abide by these conditions independently of the action of Regulatory Authorities. Sections 1.7.5.1 and 1.7.5.2 at p. 22 of the DNLUP 2016 state clearly that subsection 74(f) of NUPPAA, requiring proponents to comply directly with identified plan requirements, is intended to apply to all applicable plan restrictions: “It is prohibited to contravene any applicable restrictions in...under 74(f) of the NUPPAA”. Accordingly, the wording in Table 1 should make clear that proponents must also comply with the conditions directed at Regulatory Authorities. **NTI and the RIAs recommend that wording be added to Table 1 that makes it explicit that proponents must abide by conditions directed to Regulatory Authorities.**

3.6.1.2 Indefinite Wording of Set-back Conditions in Table 1

In a number of instances within the wording of conditions, it is stated that “Regulatory Authorities, where appropriate, must incorporate the setbacks...”. The wording “where appropriate” introduces ambiguity and raises doubt whether the setbacks are land use plan requirements within the meaning of NUPPAA. **NTI and the RIAs recommend that the conditions that contain the wording “where appropriate” be redrafted to provide more certainty regarding the requirement.**

3.6.1.3 Implementation of Prohibited Uses

It is not explicit in the DNLUP 2016 that Regulatory Authorities have the obligation to implement prohibited uses, as well as conditions. **NTI and the RIAs recommend that section 1.7.5.1 include the statement that Regulatory Authorities are required to not issue permits, licences, and other authorizations that contravene prohibited uses, and to incorporate the requirement not to engage in a prohibited use in their authorizations where the prohibited use otherwise would be authorized.**

3.6.1.4 Wording Inconsistencies with NUPPAA

There are a few wording inconsistencies in the DNLUP 2016 with NUPPAA. These include:

- Minor Variance, which is defined at p.10 of DNLUP 2016 as meaning:

relief or reasonable deviation from certain Conditions of a Land Use Designation while not permitting additional uses or changing a Land Use Designation. [emphasis added]

This definition is roughly consistent with NUPPAA, which treats a minor variance as permission to deviate in a small way from the obligation to comply with a land use plan requirement. However, at p. 50 of the DNLUP 2016, a different definition is provided, suggesting that a Minor Variance “is a small change to a Term”. **For consistency, NTI**

and RIAs recommend that this wording at p. 50 be amended to “is a small deviation from the obligation to abide by a certain Condition”.

- Throughout the DNLUP 2016, there is reference to “permits, licences, and authorizations”, which assumes that authorizations do not include permits and licences. However, the recurring phrasing in NUPPAA is “permits, licenses, and other authorizations”, which implies that permit and licences are authorizations. **NTI and the RIAs recommend that the DNLUP 2016 be revised to use the NUPPAA phrasing.**
- NUPPAA requires at subsections 54 (1) and 54 (3) that signatories to the land use plan “accept it jointly or reject it with written reasons”. In contrast, the DNLUP 2016 refers to the “approval” of the land use plan by all three signatories (see p. 16). Under NUPPAA, approval is a subsequent step to acceptance and is given by the two governments (see subsection 54(4) and section 55). **NTI and the RIAs recommend that references to NLUP being approved by the Designated Inuit Organization (DIO) be amended to the NLUP being “accepted”.**

3.6.1.5 Proposals – Conformity Determinations

The DNLUP 2016 in section 6.3.1 at pg. 50 states that:

The NUPPAA and NLCA exempt some works and activities from review by the NPC based on their definitions of “project” and “project proposal” respectively. Due to inconsistent wording between the two definitions, the NLCA requires the NPC to continue reviewing any works and activities that satisfy the definition of “project proposal” in section 1.1.1 of the NLCA, even if it is exempt from the meaning of “project” in the NUPPAA.

NTI and the Department of Justice Canada have submitted expert reports regarding the terms “Project” in NUPPAA and “Project Proposal” in the *Nunavut Agreement*. Both reports indicate that there is no conflict between the meaning of the two terms. For the purposes of the DNLUP 2016, references should be to the term “Project”. Moreover, it is unnecessary to refer to “inconsistent wording between the two definitions” in the DNLUP 2016. Of course, NTI would be willing to consider a reasonable amendment to the *Nunavut Agreement* concerning this issue if compelling analysis were to demonstrate that such an amendment is needed and could be made consistently with the rights and interests of Inuit under the *1993 Agreement*.

3.6.1.6 Existing Rights

At section 6.5 of the DNLUP 2016, NPC provides an explanation regarding what projects may be “grandfathered” based on “Existing Rights” that does not use wording and phrasing from

NUPPAA. As much as possible, NTI and the RIAs recommend that Section 6.5 mirror the NUPPAA, Part 5 provisions addressing “rights preserved”.

In light of the previous exchanges of views on the record regarding "grandfathering" of existing mineral rights, if the Commission receives further submissions regarding that issue, NTI and the RIAs will require more time to assess the legal and policy basis of any related proposals and provide recommendations.

Appendix A:

Comments and Recommendations for Mainland Migratory Caribou Post- Calving Areas in the Draft Nunavut Land Use Plan 2016

Nunavut Tunngavik Inc.,
Department of Wildlife and Environment

January 13, 2017

1. Context

The drafting of a territory-wide land use plan by the Nunavut Planning Commission (NPC) has demonstrated the importance of caribou and caribou habitat throughout Nunavut. It has also highlighted that caribou ranges extend over vast tracts of land bearing both biological and economic significance. Discussions on caribou have largely revolved around the weighing of two differing needs: the need to ensure the persistence of caribou herds and populations capable of sustaining Inuit harvesting, and the need to promote economic development. These discussions are essential, given that the balance of evidence suggests that anthropogenic disturbances have a negative impact of varying magnitude on caribou; at very best, they are extremely unlikely to have a positive effect (Trailmark Systems Inc., 2015). The challenges regarding caribou habitat are articulated in the Government of Nunavut (GN) *Draft Nunavut caribou strategy framework*:

“Consequently, there is a need for careful management of human activities affecting caribou to avoid unacceptable and irreversible impacts on the health of herds; impacts which not only jeopardize the integral role of caribou in the Arctic ecosystem but also the use of this resource by future generations of Inuit. At same time, we also face the challenge of avoiding limitations on the use of caribou or caribou habitat which are contrary to the long-term economic, social and cultural interests of Inuit.” (GN, 2010, p. 4)

Although conserving a highly migratory species is difficult (Runge *et al.*, 2014), there exists little disagreement in Nunavut that the protection of caribou and caribou habitat warrants major attention. As a Beverly and Qamanirjuaq Caribou Management Board (BQCMB) representative underlined during the 4th technical meeting on the Draft Nunavut Land Use Plan 2016 (DNLUP 2016), the broader goal of caribou and caribou habitat protection “is to support continued sustainable caribou harvesting by Inuit and by other indigenous groups outside Nunavut who also depend on these species” (NPC, 2016a, p. 71). Or, in the words of a Hunters and Trappers Organization (HTO) board member from Baker Lake, “quotas or bans on hunting caribou would be a disaster for the people in Baker Lake. I don’t know if we will be able to feed ourselves properly. So we have to make sure caribou are properly protected so we don’t end up in that situation” (NPC, 2016a, p. 23).

Wildlife management under the *Nunavut Agreement* must, in addition to being guided by the principles of conservation, likewise serve the long-term economic and sociocultural interests of Inuit. NTI has already stated its respect for the perspectives of the Regional Inuit Associations (RIAs), namely the Kitikmeot Inuit Association (KitIA), the Kivalliq Inuit Association (KivIA) and the Qikiqtani Inuit Association (QIA), relating to the protection of caribou and caribou habitat (NTI *et al.*, 2016). This document provides further clarification on the subject of caribou post-calving areas in Nunavut.

2. Caribou Populations

In terms of wildlife management, there are approximately twenty subpopulations of either barren-ground caribou (*Rangifer tarandus groenlandicus*), Peary caribou (*R. t. pearyi*), Dolphin and Union caribou (*R. t. groenlandicus x pearyi*) or reindeer (*R. t. tarandus*) that calve either wholly or at least partially within the Nunavut Settlement Area (GN, 2010; Nagy *et al.*, 2011; NPC, 2016a). Additionally, barren-ground caribou can be described by migratory behaviour or ecotype basis, that is as migratory taiga-wintering mainland caribou or caribou wintering in either mainland or island tundra (Festa-Bianchet *et al.*, 2011; Nagy *et al.*, 2012). Caribou ecotypes differ most significantly in their calving strategies, as well as in the extent of their seasonal movements and sexual segregation (Bergerud, 1996; NPC, 2016a).

These distinctions imply that the effective protection of caribou and caribou habitat throughout Nunavut must be informed by scientific knowledge and Inuit Qaujimajatuqangit, and accommodate regional and population-specific particularities (Weihs & Usher, 2001; Poole & Gunn, 2016a). In that sense, the planning and management of land use activities can play an important role in maintaining the functional integrity of migratory barren-ground caribou calving grounds and post-calving areas (Griffith *et al.*, 2002; Adamczewski *et al.*, 2011; Festa-Bianchet *et al.*, 2011; Gunn *et al.*, 2011). Currently, a variety of management tools are used across North America to protect caribou and their habitat (Trailmark Systems Inc., 2015).

The DNLUP 2016 proposes several land use designations for mainland caribou populations (NPC, 2016b). This document discusses caribou post-calving areas of mainland migratory barren-ground caribou that pertains to populations such as the Qamanirjuaq.

3. Definitions

Calving Grounds & Calving Season

The calving grounds of mainland barren-ground caribou can be defined as the spatial area occupied by parturient cows from calf birth to the initiation of foraging by calves, approximately three weeks afterwards (Russell *et al.*, 2002). Long ago recognized as “the most invariable point in the migratory pattern of caribou populations” (Lent, 1966, p. 752), the calving grounds of migratory barren-ground caribou have since become the widely accepted basis for herd definition and short-term management (Thomas, 1969; Parker, 1972; Gunn & Miller, 1986; Hinkes *et al.*, 2005; Fisher *et al.*, 2009; Gunn *et al.*, 2013). The calving season is a period of time when caribou cows consistently display the most pronounced gregariousness and spatial fidelity (Gunn *et al.*, 2007; Adamczewski *et*

al., 2009; Nagy *et al.*, 2011; Gunn *et al.*, 2012), as well as exhibit the lowest daily movement rates (Russell *et al.*, 1993; Griffith *et al.*, 2002; Gunn *et al.*, 2013; NPC, 2016a). In addition, during the time cows and calves spend in calving grounds, they are especially sensitive to growth-influencing factors, highly wary of disturbances and vulnerable to predation (Lent, 1966; Nellemann & Cameron, 1998; Wolfe *et al.*, 2000; Griffith *et al.*, 2002; Russell *et al.*, 2002; Cameron *et al.*, 2005; Stankowich, 2008; NPC, 2016a). Caribou are considered to be most sensitive during this period due to the high concentration of caribou cows within a confined area. For a sense of the scope of the geographic scales involved, the multi-jurisdictional annual home range of the migratory Qamanirjuaq barren-ground caribou herd stretches over 310,000 km², whereas the extent of concentrated calving of that mainland herd spans less than 20,000 km² (Campbell *et al.*, 2010).

Post-Calving Areas

Barren-ground caribou post-calving areas are zones of high quality forage adjoining calving grounds; their location, and the timing of their use by caribou, are therefore relatively predictable (Wilson *et al.*, 2012; Gunn *et al.*, 2013; NPC, 2016a). Post-calving areas are however not as readily defined or delineated as calving grounds, because the progressively increasing dispersal of caribou during the post-calving period creates a more heterogeneous distribution of caribou aggregations (Russell *et al.*, 1996; Patterson *et al.*, 2004; NPC, 2016a). Further, although caribou cows demonstrate a certain fidelity to post-calving areas (Gunn *et al.*, 2013), they do not always use the areas consistently from year to year—especially when major fluctuations in herd size occur (Hinkes *et al.*, 2005; Poole & Gunn, 2016b). Post-calving areas are also where caribou cows tend to exhibit greater selectivity of vegetation type than during either the calving period or late summer, due to an emphasis on forage intake for lactation and nursing (Wilson *et al.*, 2012; GN, 2014). Thus, although calf abandonment is still possible during the post-calving period, it becomes less likely over time as increasing energetic investment strengthens the cow-calf bond (NPC, 2016a). The post-calving period is a time when caribou cows and calves are building resilience, or the ability to “cope with natural and anthropogenic environmental variations and stressors” (Gunn *et al.*, 2011, p. 120). It is, ironically, a natural stressor—the emergence of, and subsequent harassment by, biting and parasitic insects—that is thought to cause the avoidance behaviour triggering caribou post-calving migrations (Folstad *et al.*, 1991; Russell *et al.*, 1993; Kutz *et al.*, 2014; NPC, 2016a).

Caribou Protection

Caribou protection hinges on the reduction of caribou exposure to disturbances, especially at times and places when/where the vulnerability of caribou is most pronounced; the emphasis of caribou protection is thus lessening direct impacts on caribou. The protection of caribou derives much of its legitimacy from consensus to the effect that caribou should not exclusively benefit from some form of protection while—and

only while—in protected components of their ranges (Weihs & Usher, 2001; BQCMB, 2004; Ferguson & Viventsova, 2007; Runge *et al.*, 2014). Owing to its versatility, caribou protection is apt to accommodate both spatial and temporal shifts in habitat use by caribou, and alleviate misgivings about overly restrictive means of protection (Weihs & Usher, 2001; CircumArctic Rangifer Monitoring and Assessment Network (CARMA), 2013). Caribou protection can also be implemented in conjunction with area protection. It is, however, not free of shortcomings. The most tangible challenge linked to caribou protection is the need to locate caribou in order to provide them effective protection when and where required (Gunn & Poole, 2009; Poole & Gunn, 2016b).

Over the years, a number of different iterations of caribou protection measures (CPM) have surfaced in Nunavut: the ‘original’ CPM (Mychasiw, 1984) resulting from the 1978 interim injunction filed by the Hamlet of Baker Lake against the Minister of Indian and Northern Development, the CPM annexed to the Keewatin Regional Land Use Plan (NPC, 2000a) and to the North Baffin Regional Land Use Plan (NPC, 2000b), as well as the more recent project-specific Mary River CPM (QIA & Baffinland Iron Mines Corporation, 2014); the mobile CPM put forward in the Draft West Kitikmeot Regional Land Use Plan (NPC, 2004); and lastly, the mobile caribou conservation measures just proposed by the KivIA in a submission on the 2014 draft of the NLUP (KivIA, 2016). The seasonal restrictions on land use activities in post-calving areas submitted by the GN (GN, 2014) can likewise be regarded as caribou protection.

Area Protection

The protection of crucial habitat is a widely accepted concept in wildlife management and conservation (Klein *et al.*, 2005). Essentially, area protection is the prohibition of certain activities from specific areas selected on account of their particular sensitivity or importance, or both. Area protection relies upon the elimination of adverse effects potentially associated with land use activities in protected areas—and on wildlife while they make use of these areas—to preserve the availability, accessibility and functional integrity of the crucial wildlife habitat.

As it relates to the DNLUP 2016 and mainland migratory barren-ground caribou, area protection is the year-round prohibition of industrial activities that are deemed incompatible with the needs of caribou. Protecting expansive habitats that can shift geographically through time is challenging, however, considering that inappropriately located protection rarely achieves the desired conservation objectives (Berkes *et al.*, 2009; Taillon *et al.*, 2012; CARMA, 2013). In parallel, the fixed boundaries inherent to area protection can result in the unnecessary restriction of land use activities—in the event that caribou do not make use of substantial portions of the protected areas (Weihs & Usher, 2001). In short, accurate definitions and delineations of the areas to be protected are prerequisites for sound land use decision-making, especially during the periods touched by the protection (Mychasiw, 1984). Nevertheless, one of the draft points of agreement that emerged from a recent Nunavut Wildlife Management Board (NWMB) workshop on caribou and caribou habitat protection was that “establishing Protected

Areas is generally a more effective conservation action for the protection of core caribou habitat and vulnerable caribou populations than simply establishing protection measures” (NWMB, 2015, p. 1).

Mitigation

Mitigation relates to measures deemed necessary to minimize the predicted impacts of an activity, in instances where avoidance of the effects of the activity is not possible and where these effects are not severe enough to require compensation. Mitigation is often considered in terms of a hierarchy of responses ranging from avoidance to compensation/offset, with minimization and rehabilitation/restoration as intermediary steps (McKenney & Kiesecker, 2010; Business and Biodiversity Offsets Programme (BBOP), 2012). Accordingly, whereas area protection emphasizes the conservation of caribou habitat, and caribou protection instead focuses on separating caribou from land use activities in both time and space, mitigation strives to ensure ecosystem resilience (Fenton, 2016). Mitigation is habitually connected to environmental impact assessment, and is essentially project-specific. The Nunavut Impact Review Board (NIRB) defines mitigation as “the actions taken including design, construction, schedule, and restorative measures, to control, reduce or eliminate a potential adverse environmental effects of a proposed activity or project” (NIRB, 2007, p. 5).

Mitigative measures, by aiming to attenuate the impacts from land use activities to the point where no adverse effects ensue (BBOP, 2012), complement the two more protection-oriented concepts outlined above. Mitigation fundamentally differs from protection, however, given that the need to mitigate only arises in cases where protection was either not fully granted, or ineffective (i.e. if a damaging activity had not taken place, there would be no need to mitigate its negative effects). While mitigation is as useful as it is advisable to land use management, it is not a planning or decision-making tool. As such, mitigation is seldom relied upon as a stand-alone approach; it rather tends to be a component of the guidance provided by the environmental impact assessment of proposed land use activities (McKenney & Kiesecker, 2010). In practical terms, there ought to be some extent of mitigative measures associated with any land use activity that cannot completely avoid adverse effects on either caribou or caribou habitat. Even so, mitigation in itself cannot resolve the issue of when and where land use activities ought to occur.

4. Discussion

The maintenance of healthy wildlife populations capable of sustaining Inuit harvesting needs is one of the principles of conservation guiding the co-management of wildlife in Nunavut, as described in Section 5.1.5 of the *Nunavut Agreement*. This is why although it is important to identify critical habitat that can maintain healthy caribou populations,

critical caribou habitat should be managed within an overall objective of maintaining the integrity of all seasonal components of caribou ranges (KivIA, 2016).

While post-calving areas are important seasonal components of the ranges of mainland migratory caribou herds, the impact of activities on caribou during the post-calving period is likely reduced due to movement and dispersion. That being said, resource-selection models have suggested that anthropogenic disturbance during the post-calving period could significantly both reduce high-quality habitats, and increase low-quality habitats of barren-ground caribou (Johnson *et al.*, 2005). The significance of post-calving areas warrants their management, but they should be managed with tools that are commensurate with the potential impacts of specific land use activities on caribou populations.

NTI's Department of Wildlife and Environment recommends that the post-calving areas of mainland migratory barren-ground caribou be designated as 'Special Management Areas', and that related land use proscriptions focusing on caribou protection and mitigation be regionally developed, in consultation with the relevant RIAs, Regional Wildlife Organizations (RWOs), and HTOs. These land use proscriptions should seek to accommodate population-specific requirements.

This recommendation is consistent with the GN's direction when it provided the spatial data that NPC has largely relied on to develop the boundaries for the land use designations for caribou. In its submission (GN, 2014), the GN provided management recommendations for each of the spatial data layers provided. For caribou calving areas and key access corridors, the GN recommended prohibiting industrial activities. For post-calving areas, the GN recommended:

"Seasonal restrictions (June 15 – July 15) on development activity when and where caribou are present. Restricted activities include, but are not limited to, air and vehicle traffic, loud or repetitive noise or vibration disturbances. All season roads are not permitted in these areas to prevent inappropriate access to these herds during vulnerable periods. Winter access roads would be allowed." (GN, 2014, p. 4)

This recommendation is also consistent with the expert report provided by the Kivalliq Inuit Association on November 15, 2016 (Poole & Gunn, 2016b). The expert report recognizes that migratory barren-ground caribou are most sensitive to disturbance, and at higher risk, during the calving and post-calving periods, and that limitations must consequently be placed on appropriate industrial developments within caribou post-calving areas. The expert report recommends restricting activities within post-calving areas until the high-risk period is over.

In summary, regional assessment and planning exercises, such as the DNLUP 2016, represent useful processes to guide "whether activities in special areas should be limited, require special management or should be prohibited altogether, depending on the nature of the interaction" (Baker & Kirstein, 2011, p. 212). Due to the magnitude of the restrictions associated with designated 'Protected Areas', it is a designation that should only be

contemplated for seasonal range components that have an unquestionable, determining impact on the health and productivity of mainland migratory caribou herds.

References

- Adamczewski, J., Boulanger, J., Croft, B., Cluff, D., Elkin, B., Nishi, J., Kelly, A., D'Hont, A., & Nicolson, C. (2009). *Decline in the Bathurst caribou herd 2006-2009: A technical evaluation of field data and modeling*. Draft technical report. Yellowknife, NT: Government of the Northwest Territories, Department of Environment and Natural Resources.
- Adamczewski, J., Nishi, J., Gunn, A., Antoniuk, T., Johnson, C., Russell, D., Blondin, T., Legat, A., Beaulieu, D., Virgl, J., Pasquayak, M.C., & Wooley, B. (2011). *Modeling cumulative effects in barren-ground caribou range: Proceedings of a workshop in Yellowknife, February 2008*. Manuscript Report 233. Yellowknife, NT: Government of the Northwest Territories, Department of Environment and Natural Resources.
- Baker, J., & Kirstein, F. (2011). Regional Sectoral Assessment and extractive industries. In B. Sadler, R. Aschemann, J. Dusik, T.B. Fischer, M.R. Partidário, & R. Verheem (Eds.), *Handbook of Strategic Environmental Assessment* (pp. 208-219). Washington, D.C.: Earthscan.
- Bergerud, A.T. (1996). Evolving perspectives on caribou population dynamics, have we got it right yet? *Rangifer*, Special Issue 9, 95-116.
- Berkes, F., Kofinas, G.P., & Chapin III, F.S. (2009). Conservation, community, and livelihoods: Sustaining, renewing, and adapting cultural connections to the land. In F.S. Chapin III, G.P. Kofinas, & C. Folke (Eds.), *Principles of ecosystem stewardship: Resilience-based natural resource management in a changing world* (pp. 129-147). New York, NY: Springer.
- Beverly and Qamanirjuaq Caribou Management Board. (2004). *Protecting calving grounds, post-calving areas and other important habitats for Beverly and Qamanirjuaq caribou: A position paper by the Beverly and Qamanirjuaq Caribou Management Board*. Stonewall, MB: BQCMB Secretariat.
- Business and Biodiversity Offsets Programme. (2012). *Glossary*. 2nd updated edition. Washington, D.C.: BBOP.
- Cameron, R.D., Smith, W.T., White, R.G., & Griffith, B. (2005). Central Arctic caribou and petroleum development: Distributional, nutritional, and reproductive implications. *Arctic*, 58(1), 1-9.
- Campbell, M., Nishi, J., & Boulanger, J. (2010). *A calving ground photo survey of the Qamanirjuaq migratory barren-ground caribou (Rangifer tarandus groenlandicus) population – June 2008*. Technical Report Series 2010 – No. 1-10. Arviat, NU: Government of Nunavut, Nunavut Wildlife Service.

CircumArctic Rangifer Monitoring and Assessment Network. (2013). *Moving forward: Knowledge to action*. Proceedings of the CARMA 8 Conference, December 4-6, 2012, Vancouver, BC. Akureyri, Iceland: Conservation of Arctic Flora and Fauna.

Fenton, N.J. (2016). Applied ecology in Canada's boreal: a holistic view of the mitigation hierarchy and resilience theory. *Botany*, 94, 1009-1014.

Ferguson, M.A.D., & Viventsova, K. (2007). *Community conserved areas in the Circumpolar Arctic: Preliminary description and assessment of their legal status, threats and needs*. Prepared for the IUCN Strategic Direction on Governance, Communities, Equity, and Livelihood Rights in Relation to Protected Areas. Marathon, ON: NordEco.

Festa-Bianchet, M., Ray, J.C., Boutin, S., Côté, S.D., & Gunn, A. (2011). Conservation of caribou (*Rangifer tarandus*) in Canada: An uncertain future. *Canadian Journal of Zoology*, 89, 419-434.

Fisher, J.T., Roy, L.D., & Hiltz, M. (2009). *Barren-ground caribou management in the Northwest Territories: An independent peer review*. Vegreville, AB: Alberta Research Council.

Folstad, I., Nilssen, A.C., Halvorsen, O., & Andersen, J. (1991). Parasite avoidance: The cause of post-calving migrations in Rangifer? *Canadian Journal of Zoology*, 69, 2423-2429.

Government of Nunavut. (2010). *Working together for caribou: Draft Nunavut caribou strategy framework*. Iqaluit, NU: Department of Environment.

Government of Nunavut. (2014). *Submission to the Nunavut Planning Commission for the draft Nunavut Land Use Plan on the Options & Recommendations document and draft Nunavut Land Use Plan*. Submitted to the NPC on May 28, 2014. Iqaluit, NU: Department of Environment.

Griffith, B., Douglas, D.C., Walsh, N.E., Young, D.D., McCabe, T.R., Russell, D.E., White, R.G., Cameron, R.D., & Whitten, K.R. (2002). The Porcupine caribou herd. In D.C. Douglas, P.E. Reynolds, & E.B. Rhodes (Eds.), *Arctic Refuge coastal plain terrestrial wildlife research summaries* (pp. 8-37). Biological Science Report USGS/BRD/BSR-2002-0001. Reston, VA: U.S. Geological Survey, Biological Resources Division.

Gunn, A., & Miller, F.L. (1986). Traditional behaviour and fidelity to caribou calving grounds by barren-ground caribou. *Rangifer*, Special Issue 1, 151-158.

Gunn, A., & Poole, K.G. (2009). *A pilot project to test the use of aerial monitoring to supplement satellite collared caribou for mobile caribou protection measures*. Déline: NT: Déline Renewable Resources Council.

Gunn, A., Poole, K.G., Wierzchowski, J., & Campbell, M. (2007). *Assessment of Caribou Protection Measures*. Submitted in fulfillment of NCR # 830359. Gatineau, QC: Indian and Northern Affairs Canada.

Gunn, A., Johnson, C.J., Nishi, J.S., Daniel, C.J., Russell, D.E., Carlson, M., & Adamczewski, J.Z. (2011). Understanding the cumulative effects of human activities on barren-ground caribou. In P.R. Krausman, & L.K. Harris (Eds), *Cumulative effects in wildlife management: Impact mitigation* (pp. 113-133). New York, NY: CRC Press.

Gunn, A., Poole, K.G., & Nishi, J.S. (2012). A conceptual model for migratory tundra caribou to explain and predict why shifts in spatial fidelity of breeding cows to their calving grounds are infrequent. *Rangifer*, Special Issue 20, 259-267.

Gunn, A., D'Hont, A., Williams, J., & Boulanger, J. (2013). *Satellite collaring in the Bathurst herd of barren-ground caribou: 1996-2005*. Manuscript Report 225. Yellowknife, NT: Government of the Northwest Territories, Department of Environment and Natural Resources.

Hinkes, M.T., Collins, G.H., Van Daele, L.J., Kovach, S.D., Aderman, A.R., Woolington, J.D., & Seavoy, R.J. (2005). Influence of population growth on caribou herd identity, calving ground fidelity, and behaviour. *Journal of Wildlife Management*, 69(3), 1147-1162.

Johnson, C.J., Boyce, M.S., Case, R.L., Cluff, H.D., Gau, R.J., Gunn, A., & Mulders, R. (2005). Cumulative effects of human developments on Arctic wildlife. *Wildlife Monographs*, 160, 1-36.

Kivalliq Inuit Association. (2016). *Technical review of 2014 Draft Nunavut Land Use Plan — Schedule B: Proposed Kivalliq mobile conservation measures*. Submission to the Nunavut Planning Commission, dated May 4, 2016. Rankin Inlet, NU: KivA.

Klein, D.R., Baskin, L.M., Bogoslovskaya, L.S., Danell, K., Gunn, A., Irons, D.B., Kofinas, G.P., Kovacs, K.M., Magomedova, M., Meehan, R.H., Russell, D.E., & Valkenburg, P. (2005). Management and conservation of wildlife in a changing Arctic environment. In C. Symon, L. Arris, & B. Heal (Eds.), *Arctic Climate Impact Assessment* (pp. 597-648). New York, NY: Cambridge University Press.

Kutz, S.J., Hoberg, E.P., Molnár, P.K., Dobson, A., & Verocai, G.G. (2014). A walk on the tundra: Host–parasite interactions in an extreme environment. *International Journal for Parasitology: Parasites and Wildlife*, 3, 198-208.

Lent, P.C. (1966). Calving and related social behavior in the barren-ground caribou. *Zeitschrift für Tierpsychologie*, 23(6), 701-756.

McKenney, B.A., & Kiesecker, J.M. (2010). Policy development for biodiversity offsets: A review of offset frameworks. *Environmental Management*, 45, 165-176.

Mychasiw, L. (1984). *Five-year review of the Beverly and Kaminuriak caribou protection measures*. File Report 42. Yellowknife, NT: Government of the Northwest Territories, Department of Renewable Resources.

Nagy, J.A., Johnson, D.L., Larter, N.C., Campbell, M.W., Dérocher, A.E., Kelly, A., Dumond, M., Allaire, D., & Croft, B. (2011). Subpopulation structure of caribou (*Rangifer tarandus* L.) in arctic and subarctic Canada. *Ecological Applications*, 21(6), 2334-2348.

Nagy, J.A., Campbell, M.W., & Kelly, A. (2012). *Herd structure, movements, calving grounds, activity periods, home range similarity, and behaviours of migratory and tundra-wintering barren-ground caribou on mainland Nunavut and eastern mainland Northwest Territories, Canada*. Technical Report Series 2012 – No. 01-12. Iqaluit, NU: Government of Nunavut, Department of Environment.

Nellemann, C., & Cameron, R.D. (1998). Cumulative impacts of an evolving oil-field complex on the distribution of calving caribou. *Canadian Journal of Zoology*, 76(8), 1425-1430.

Nunavut Impact Review Board. (2007). *Guide 2 – Guide to terminology and definitions*. Cambridge Bay, NU: NIRB.

Nunavut Planning Commission. (2000a). *Keewatin Regional Land Use Plan*. Cambridge Bay, NU: NPC.

Nunavut Planning Commission. (2000b). *North Baffin Regional Land Use Plan*. Cambridge Bay, NU: NPC.

Nunavut Planning Commission. (2004). *Draft West Kitikmeot Regional Land Use Plan*. Dated March 10, 2004. Cambridge Bay, NU: NPC.

Nunavut Planning Commission. (2016a). *Transcript: Draft Nunavut Land Use Plan 4th technical meeting, March 7-10, 2016*. Cambridge Bay, NU: NPC.

Nunavut Planning Commission. (2016b). *Nunavut Land Use Plan - 2016 Draft*. Released June 23, 2016. Cambridge Bay, NU: NPC.

Nunavut Tunngavik Incorporated, Kitikmeot Inuit Association, Kivalliq Inuit Association, & Qikiqtani Inuit Association. (2016). *Joint NTI-RIA submission regarding revisions to the DNLUP 2014*. Submission to the Nunavut Planning Commission, dated May 16, 2016. Iqaluit, NU: NTI.

Nunavut Wildlife Management Board. (2015). *(Draft) Points of agreement among participants at the November 4th and 5th 2015 “Protecting caribou and their habitat” workshop*. Iqaluit, NU: NWMB.

Parker, G.R. (1972). *Biology of the Kaminuriak population of barren-ground caribou, Part 1: Total numbers, mortality, recruitment, and seasonal distribution*. Canadian Wildlife Service Report Series — Number 20. Ottawa, ON: Environment Canada.

Patterson, B.R., Olsen, B.T., & Joly, D.O. (2004). Population estimate for the Bluenose-East caribou herd using post-calving photography. *Arctic*, 57(1), 47-58.

Poole, K., & Gunn, A. (2016a). *Caribou technical session: Recommendations on caribou protection to the NPC*. Report prepared for the Kivalliq Inuit Association, dated February 15, 2016. Rankin Inlet, NU: KivIA.

Poole, K., & Gunn, A. (2016b). *Management of caribou post-calving areas in the Kivalliq Region, Nunavut: Report for the Kivalliq Inuit Association*. Dated November 15, 2016. Rankin Inlet, NU: KivIA.

Qikiqtani Inuit Association, & Baffinland Iron Mines Corporation. (2014). *Joint statement of QIA and Baffinland to the Nunavut Planning Commission and the Nunavut Impact Review Board regarding Appendix I of the North Baffin Regional Land Use Plan*. Iqaluit, NU: QIA and BIMC.

Runge, C.A, Martin, T.G., Possingham, H.P., Willis, S.G., & Fuller, R.A. (2014). Conserving mobile species. *Frontiers in Ecology and the Environment*, 12(7), 395-402.

Russell, D.E., Martell, A.M., & Nixon, W.A.C. (1993). Range ecology of the Porcupine caribou herd in Canada. *Rangifer*, Special Issue 8, 2-167.

Russell, D.E., Kofinas, G., & Griffith, B. (2002). *Barren-ground caribou calving ground workshop: Report of proceedings*. Technical Report Series Number 390. Ottawa, ON: Canadian Wildlife Service.

Russell, J., Couturier, S., Sopuck, L.G., & Ovaska, K. (1996). Post-calving photo-census of the Rivière George caribou herd in July 1993. *Rangifer*, Special Issue 9, 319-330.

Stankowich, T. (2008). Ungulate flight responses to human disturbance: A review and meta-analysis. *Biological Conservation*, 141, 2159-2173.

Taillon, J., Festa-Bianchet, M., & Côté, S.D. (2012). Shifting targets in the tundra: Protection of migratory caribou calving grounds must account for spatial changes over time. *Biological Conservation*, 147, 163-173.

Thomas, D.C. (1969). *Population estimates of barren-ground caribou in Mackenzie District, N.W.T., Saskatchewan, and Alberta—March to May, 1967*. Canadian Wildlife Service Report Series — Number 9. Ottawa: ON, Department of Indian and Northern Affairs.

Trailmark Systems Inc. (2015). *Review of post-2010 literature on human effects on barren-ground caribou: Focus on traditional knowledge, western science and caribou protection measures*. Prepared for the Nunavut Wildlife Management Board. Victoria, BC: Trailmark Systems Inc.

Weihs, F.H., & Usher, P.J. (2001). *Development of a departmental policy statement for federal lands regarding the management of human activities in caribou calving and post-calving grounds: Consultation report*. Submitted by Consilium and P.J. Usher Consulting Services in fulfillment of contract # 00-0210. Ottawa, ON: Department of Indian Affairs and Northern Development.

Wilson, R.R., Prichard, A.K., Parrett, L.S., Person, B.T., Carroll, G.M., Smith, M.A., Rea, C.L., & Yokel, D.A. (2012). Summer resource selection and identification of important habitat prior to industrial development for the Teshekpuk caribou herd in Northern Alaska. *PLoS ONE*, 7(11), 1-14 (e48697).

Wolfe, S.A., Griffith, B., & Wolfe, C.A.G. (2000). Response of reindeer and caribou to human activities. *Polar Research*, 19(1), 63-73.