NUNAVUT PLANNING COMMISSION – PUBLIC HEARING ON THE 2016 DRAFT NUNAVUT LAND USE PLAN

Kitikmeot Regional Wildlife Board

PRE-HEARING WRITTEN SUBMISSIONS

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Kitikmeot Regional Wildlife Board Submission for the Public Hearing on the 2016 Draft Nunavut Land Use Plan

February 28, 2017

1. Background

Under the Nunavut Land Claims Agreement, the Kitikmeot Regional Wildlife Board (KRWB) is responsible for the overall management of harvesting with members of regional Hunters and Trappers Organizations (HTO), regulating harvesting practices and techniques within the Kitikmeot region, as well as the allocation and enforcement of regional basic needs levels and adjusted basic needs levels among these HTOs. As such, the KRWB represents HTOs and their members from the communities of Bathurst Inlet, Ekaluktutiak, Gjoa Haven, Kugluktuk, Kugaaruk, Umingmaktok, and Taloyoak.

With the goal of bringing the voices of Elders, harvesters and other community members to the forefront, the KRWB has carried out a review of documented Inuit Qaujimajatuqangit (IQ) and traditional knowledge (TK) of caribou behaviour and preferences related to calving and post-calving areas, as well as of pertinent observations, concerns and recommendations shared by knowledge holders as recorded in the published and gray literature.

The people of the Kitikmeot region have relied upon caribou for much more than food since time immemorial; the human-caribou relationship is at the heart of Inuit culture. IQ teaches that the health of the people depends upon the health of the caribou, which depends in turn upon the health of the range. Knowledge holders and harvesters understand that calving and post-calving areas are among the most important within the range because caribou are at their most sensitive during calving and immediately post-calving. For this reason, Inuit have long understood that calving and post-calving areas are sacred and not to be disturbed. Although calving only occurs for a short time, caribou's needs are so specific during this period that the critical areas able to meet them are essential to the species survival and must be protected permanently in order to ensure they are able to do so continuously. The KRWB views assigning a Protected Area Land Use Designation that prohibits incompatible uses to all core caribou calving areas, key access corridors, and post-calving areas in the Draft Nunavut Land Use Plan (DNLUP) as a positive step in this direction.

Although large-scale observations indicate that caribou return to the same calving and post-calving areas each year, small-scale observations shared by our Elders and hunters indicate that the location of these areas can shift. It is speculated that these shifts are cyclical and, as if to illustrate caribou's highly specific needs and heightened sensitivity during calving and post-calving, driven by corresponding shifts in habitat and weather conditions. Knowledge holders report that changes in habitat and weather conditions are being caused and/or exacerbated by both climate change and cumulative effects associated with human disturbance throughout the range. KRWB believes that from year to year these forces could have impacts upon the location of calving and post-calving areas, and/or the ability of cows to reach the calving areas in good

health. While KRWB generally approves of the draft plans to assign a Protected Area Land Use Designation that prohibits incompatible uses to core caribou calving areas, key access corridors, and post-calving areas, we further recommend that the development of mobile protection measures for caribou be investigated to provide additional safeguards should shifts in calving and/or post-calving areas cause either or both to be temporarily located outside of established protected areas.

2. General Comments and Recommendations

The KRWB views assigning a Protected Area Land Use Designation that prohibits incompatible uses to all core caribou calving areas, key access corridors, and post-calving areas as a positive step towards safeguarding caribou and critical habitat.

The physical, cultural and spiritual health of Inuit people in the Kitikmeot region is tied to the health of the barren-ground caribou they have relied upon, respected and managed for millennia. IQ holders and harvesters share an intricate and extensive understanding of caribou, and their habits, preferences and patterns.

> According to the living memory of Elders, and stories told by those who have passed on, caribou have always followed a yearly cycle. This cycle includes mating and calving periods that occur during migrations from southern wintering grounds to northern calving grounds and back again. The rut begins in mid-October when the caribou are the healthiest, specifically, after a summer of grazing and hopefully storing backfat. The cows are pregnant during their fall migration to the southern wintering grounds, into the winter months, and throughout their return migration to the north in mid-April. (Thorpe et al 2001:121)

Another way to put this is to say simply that "caribou are always moving; they will travel many hundreds of kilometers in both the spring and fall seasons" (Parlee et al. 2013:12). Knowledge holders and harvesters report that caribou generally follow the same migration routes to return in the large-scale to the same calving and post-calving areas each year.

> They return to their calving grounds like they always have. It is the same as birds, they return to their nesting grounds. The same holds true with all animals… Yeah, they return to the grounds they were born on. They go to the same area to calve, like they always have. (Frank Analok 1999 in Thorpe et al 2001:131)
>
> The statement that I can make, which is true, this whole area is a calving ground, the whole of Bathurst Inlet corridor. It doesn't matter what years they are, they are going to be calving somewhere in here. (C110 in KIA 2014:41)

Parlee et al 2013, notes that although in the small-scale the location of calving areas and the fidelity of caribou to them can vary over time, "for most herds, the spring calving range (i.e., calving grounds) tends to be located with the same area from year to year" (12). For example:

> The caribou always return to the same calving grounds to calve year after year. (C13 in KIA 2014: 41)
>
> Generally, there is a common understanding that the Bathurst herd presently calves west of Qinguak (Bathurst Inlet), the Bluenose East to the west of Qurluqtuq (Kugluktuk), and the Dolphin-Union herd calves on Kiilliniq (Victoria Island). In the recent past, other irniurnviit (calving) locations for the Bathurst herd has included Tahiryuaq (Contwoyto Lake) and Ellice Lake near the Queen Maud Sanctuary. (TCS 2012:27)

The shifts in calving and post-calving areas apparent at the local level are understood by some knowledge holders to be cyclical, describing a general movement back and forth over time.

> From what I hear about calving grounds, they use that area for a few years and then there will be no food so they change until the food grows there again. There are so many of them and there's no food. If they go back next year and there is no food for them, they change until the place grows again. They don't calve in one spot for life. They switch… to where there's food for them. (C111 in KIA 2014:42)

These shifts in location are understood to be driven primarily by the availability of food (TCS 2012:29), and can be seen to be the caribou's response to degradations in calving areas, highlighting the value of protecting core calving and post-calving areas permanently in order to ensure natural impacts to this critical habitat as a result of its use by caribou are not potentially compounded by the effects of human disturbance.

> Part of the decline has to do with industrialization. There is always a [migration] route before they started mining. After the mines came, they had to find a wider range, had to walk around mine sites. Contaminated areas have to do with their decline. Over time, they had to adjust to these industrializations. They were having a harder time getting to the calving and feeding grounds. Another part would be the roads. A caribou has a main route and all the sudden they have a road in middle of their pass. They will stop and look around and look for hours looking for their trail. Where is my trail now? Some may look over and not be able to find their trail. I would think this has to do with the decline of the caribou and reindeer here and globally. Mining is happening all around the world. (Joseph Niptanatiak in Golder 2011:51)

The following statement from an interview participant sharing knowledge of calving area locations in 1998, beautifully illustrates the way in which these small-scale shifts in calving areas do not represent a locational change to calving areas in the large-scale.

> They used to calve around here [east of Bathurst Inlet], but now they calve over here [west of Bathurst Inlet]. They used to calve on this side of Tahikaffaaluk Lake by Ellice River… Right now they calve somewhere else. That is where they have always calved, since the past… Just a few years ago, a couple of years, I heard of caribou calving here… Yes, always the same place they go to calve. (John Akana 1998 in Thorpe et al 2001:154)

Similarly, the following knowledge holders remarks suggest that although the exact location of

calving grounds may shift from year to year, it does so within an established area.

> They always changed their routes. Inuit are waiting in their old campsites, but sometimes the caribou go to another part of the area. (Colin Adjun in Golder 2011:50)

TCS 2012, suggests that uncertainties amongst knowledge holders and harvesters concerning calving and post-calving ground locations may be related to traditional practices requiring that Inuit demonstrate their respect for caribou by avoiding "sacred" calving grounds (27). As the knowledge holder below explains, these practices are surely based on the understanding that "the stability and growth of barren-ground caribou populations are highly dependent on successful spring calving and the survival of calves during the first few months of life" (Parlee et al 2013:30-31).

> We always ask people to stop for a couple weeks to make sure you do not disturb mothers and their young. Once they are separated and they do not get together again, and then the calf can die. The first crucial hour of calf being born requires no disturbances, so they must be protected. This is usually two weeks, so it is pretty short. (Allen Niptanatiak in TCS 2012:27)

As interviewees and workshop participants emphasized in TCS 2014:

> Tuktuit (caribou) are particularly sensitive during irniurniit (calving) and so should be respected and avoided at such times. As such, it is important to identify irniurviit (calving ground) locations as a means of protecting them from industrial activity and development. (55)

Traditional injunctions against disturbing calving and post calving areas are not limited to the periods during which caribou are actively calving and/or nursing because, in addition to respecting the sensitivity of the caribou at this time, they are intended to preserve this critical habitat so that the caribou can return to it. Knowledge holders report Elders compelling them to minimize even the slightest potential disturbances within these areas throughout the year.

> My late uncle used to tell me that his dad used to tell him not to make tea around the flat lands as he did not want the ground to be full of soot from the firewood; these areas are the calving grounds for the caribou… That was the rule long ago. (Trailmark 2015:31)

> The Elders say you should never impact [calving grounds] in one form or another because they are really sacred. They care for these calving grounds, particular spots on the land where it's just like a large swamp, or swampy areas where the ground becomes yellow from the calves. After they calve. And they don't want to dirty that part of the land from all the ashes or any other thing. You can't camp there, or make fires (Bobby Algona in Trailmark 2015:31)

For these reasons it is understood that:

> Pregnant cows should be protected [and, although] usually calving grounds are naturally protected from hunting because of difficulties for access, the hunting season for non-Inuit

> is closed, skins are of poor quality and not desired, and travel to these areas is difficult, calving areas should be protected from other activities as well. (Golder 2011:27)

Calving may only occur for a short time, but caribou's needs are so specific during this period that the critical areas able to meet them are essential to the species survival and must be protected permanently in order to ensure they are able to do so continuously.

Inuit from Kugluktuk participated in multiple community meetings as part of the Advisory Committee for Cooperation on Wildlife Management as part of the Cape Bathurst, Bluenose-West and Bluenose-East Barren Ground Caribou Herds Management Plan between 2007 and 2013. Below are the recommendations around calving grounds that came from community members in Kugluktuk as detailed in ACCWM 2012 (52, 165):

> There should be a moratorium on industrial activity on or near calving grounds at any herd status. (Kugluktuk)
>
> When we give away lands to development, the animals move away and maybe that's why the animals are scattered. (Kugluktuk)
>
> We need the HTO and the community to tell the Government of Nunavut: we need the calving ground protected because that's where our food comes from. We don't want developments in this area. (Kugluktuk)
>
> It is important to identify critical habitat like calving grounds and protect it. (Kugluktuk)

There are several key references that speak to exact locations of the calving grounds. For example, KIA 2012 and 2014 which draw upon the Naonayaotit Study as well as Thorpe et al. 2001 which is based on the Tuktu and Nogak Project. KRWB would like to review the specific locations of protection proposed in the DNLUP to confirm that these align with what community members in the Kitikmeot have identified.

3. Specific Comments and Recommendations

3.1. Issue

Mobile Protection Measures for Caribou

3.1.1. Reference in DNLUP

Page number 27, section number 2.2.

3.1.2. Comment

Knowledge holders report that changes in habitat and weather conditions are being caused and/or exacerbated by both climate change and cumulative effects associated with human disturbance throughout the range. KRWB believes that from year to year these forces could have impacts upon the location of calving areas, and/or the ability of cows to reach core calving and post-calving areas in good health. In either case the assignment of Protected Area Land Use Designation to static areas represented by core caribou calving areas, key access corridors, and

post-calving areas may be periodically insufficient to protect this keystone species and essential resource providing food, supporting cultural heritage, and driving local economies.

3.1.3. Recommendation(s)

The KRWB recommends the development of mobile protection measures for caribou be investigated in addition to assigning a Protected Area Land Use Designation that prohibits incompatible uses to core caribou calving areas, key access corridors, and post-calving areas.

3.1.4. Rationale

Although large-scale observations indicate that caribou return to the same calving and post-calving areas each year, small-scale observations indicate that the location of these areas can shift over time. It is hypothesized that these shifts are cyclical, generally describing a movement back and forth between areas (TCS 2012:29).

> There is much controversy surrounding the precise location of calving grounds. Locals report that they are often shifting as a function of climate, fidelity, human activity, escape from predators, open spaces, timing and other environmental factors... While the Bathurst herd has been calving on the west side of Bathurst Inlet for the last few years, this is not unusual and it is expected that they will return to the east side of the Inlet in short time. Locals say that it is difficult to predict the periodicity of calving ground location and fidelity. (Golder Associates 2003:16)

> From the 1970s to the mid-1990s, the Ahiak caribou calved on the east side of Bathurst Inlet, but they shifted to the west side for the latter half of the 1990s. Locations of the calving grounds have generally shifted back and forth from the east to west side of Bathurst Inlet depending on human activity, the timing of the season, and the effects of hila on nuna. (Thorpe et al 2001:13)

As suggested above, and as if to illustrate caribou's highly specific needs and heightened sensitivity during calving and post-calving, these shifts in location are likely driven by corresponding fluctuations in habitat and weather conditions (Thorpe et al 2001:139). The following description of factors affecting migration routes may apply equally to calving and post-calving grounds.

> There is a certain pattern of change to their migration routes. One reason for these changes is that caribou shift their migration routes once they "eat up" most of the tundra along their traditional routes. Another reason is that caribou trample and eat tundra in one area so that soon they have to look to other regions for migration and calving. Bugs, wind, heat, and the weather also play a role in where caribou migrate. (Thorpe et al. 2001:89)

Thorpe et al 2001, summarizes the responses of knowledge holders on the question of what may determine the specific location of calving areas from year to year.

> People suggested that the tundra was all the same and it depended on when they started

> moving northwards and how far the cows were physically able to travel before giving birth. This large-scale view differed from the smaller scale view of several people who explained that calving ground selection had to do with such basics as the nuna, hila, safety, human activity, and snow conditions of each year. (128)

Knowledge holders also suggest that changes to calving areas are linked to the timeless and the delicate balance between respect and generosity that defines the human-caribou relationship.

> The reciprocal relationship between people and caribou often factors into explanation about why the caribou migrate to certain places year after year and why suddenly they might avoid some areas. (Parlee et al 2013:42-43)

As noted in section 2, although the exact location of calving grounds may shift from year to year, it does so within a definable area that must be protected permanently in order to ensure that the calving and post-calving areas it contains remain undisturbed and capable of supporting caribou during the most critical period both for successful calving and the ongoing health of the herd and species. The DNLUP intends to provide for this by assigning a Protected Area Land Use Designation that prohibits incompatible uses to core caribou calving areas, key access corridors, and post-calving areas.

In addition, KRWB recommends the development of mobile protection measures for caribou during calving and post-calving periods be investigated in order to ensure caribou remain protected at this time should shifts in their calving and/or post-calving areas cause either or both to be temporarily located outside of established protected areas, as well as to address the more alarming observation that "migration routes and locations of calving grounds have shifted on a local scale partially because of the impacts of a warming climate" (Thorpe et al 2001:139).

Knowledge holders and harvesters are already reporting changes in caribou patterns and behaviour as they are forced to adjust to the effects of climate change.

> Patches of water opened earlier in ice on the sea, rivers, and lakes and forced caribou to change their normal migration routes on a small-scale. Another observed impact is that plants became taller, bushier, and more plentiful and, as a result, caribou shifted their migration routes towards these areas of rich vegetation. (Thorpe et al 2001:139)

> The weather has been changing. In the past four years, we have had freezing rain during winter. This has happened before but has increased in recent years. Caribou have a hard time finding food, especially if females are not in good health or condition. They will have a hard time having calves and this can influence the dynamics of the herd. This was the case on Victoria Island after a few years of freezing rain. Many factors can affect the herd and if they all come together at the same time, it can cause a decline in numbers. (Stevens & Thorpe 2011:28)

It is easy to see that such changes in climate, weather and habitat have the potential to affect corresponding changes in both the location of calving areas, and the ability of cows to reach calving and post-calving areas in good health. For these reasons, and given that "one thing that

everybody agreed upon was that when a cow is ready, she will give birth then and there, regardless of the conditions" (Thorpe et al 2001:128) investigating the development of mobile protection measures is recommended to ensure that caribou remain undisturbed by cumulative impacts during their calving and post-calving periods.

> There are so many mining camps and exploration camps being built around the calving grounds lately. Maybe it is time to limit the exploration camps. We can go to KIA (Kitikmeot Inuit Association) or the organizations who permit these activities. This may be one solution. (Anonymous, Kugluktuk, in ACCWM 2014:52)

> The [mining companies] should shut down when the caribou are coming through, about 16 kilometres [from the caribou]. They have got pretty good ears and eyes. You know it really bothers the caribou… They get more sensitive when they are calving. (George Kapolak Haniliak 1998 in Thorpe et al 2001:99)

A participant in the March 2006, Caribou and Roads Project carried out at Lac de Gras reported that:

> We can educate hunters and newcomers to correctly select caribou and harvest meat. The community should send good hunters, to reduce waste and make sure good meat is harvested. Having caribou to hunt depends on the numbers of caribou that are produced each year. Pregnant cows should be protected. Usually calving grounds are naturally protected from hunting because of difficulties for access, the hunting season for non-Inuit is closed, skins are of poor quality and not desired, and travel to these areas is difficult. Calving areas should be protected from other activities as well. Activities such as mining and exploration should be better monitored and managed, especially from aircraft traffic. (Rescan 2007: 5-5)

In multiple workshops, meetings and during several research projects, Elders and community members across the Kitikmeot have called for the protection of caribou as well as the protection of their calving grounds.

> I know that caribou will usually travel through the area but I have seen some injured caribou stay around the campsite for months till they are healed or become healthy to move on. This is why we have many of the calving grounds protected, for this very purpose to ensure that they are disturbed too much when they are having their young. Too much disturbance will make them move away, and I do believe this is some of the past causes that have made the caribou move away. They will move to protect their young calves and move to a safer place or a less disturbed place. Our elders had always told us to be careful around the areas that the animals use as too much noise will make them move away. I believe they knew what they were talking about as they live with the animals or should I say alongside of the animals and treated them with great respect. (Allen Niptanatiak in Golder 2011: 71)

> Long ago there wasn't much of a mine. Now the caribou are having a hard time going to

> the west. They are having a hard time with the snow. They smell the snow. They stay away from there… When they want to go calving, they go the west… Two different herds. Sometimes they get mixed up with the others. They have got a problem. They are from a different area. Because Bluenose herd they are different from the other ones east… One hundred here, one hundred here, when they meet them on the land they can smell them by what they eat close to the mines. They can tell right away. When they eat the snow they move to the west or the east. The east caribou don't like the west and the west caribou don't like the east anymore. The same thing with the wolves; they don't kill any caribou on this side anymore. They can smell it from the water and what they are eating. That is how it works in the whole area. Especially the water and the ground… But with the wind coming from the east they can smell the mining camp and they go back… and they bother the other caribou going to Bluenose Lake. When that kind of a problem happens they went down don't make any young ones. Because of this they are dying down. (Charlie Bolt in Golder 2011: 47)

Investigating the development of mobile protection measures in the DNLUP in addition to assigning a Protected Area Land Use Designation that prohibits incompatible uses to core caribou calving areas, key access corridors, and post-calving areas, will ensure the Final Nunavut Land Use Plan includes provisions that protect caribou when they are at their most vulnerable, as well as protecting the critical habitat they rely upon at these times.

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