ʔehdzo Got’ı̨nę Gots’ę́ Nákedı

Sahtú Renewable Resource Council

Response to IR #89, Part A

Prepared on behalf of the SRRB by Carrie Breneman and Shannon Bower, PlanIt North

89	Culture, Traditional Land Use, and Harvesting: Caribou and moose, harvest pressure, management actions (DAR Chapter 5, WMMP, 10.7.2)	Section 10.7.2 notes that there are gaps in current harvest knowledge and in potential increases in harvest, and that Indigenous harvest information for caribou and moose was not available and not considered in the DAR. It will be important to develop and implement adaptive co-management regimes for boreal caribou and moose with Indigenous Governments and organizations in the Dehcho and Sahtú regions. Future wildlife management decisions will need to include regular population monitoring to ensure sustainable use (harvest) of caribou and moose. Please coordinate with Norman Wells, Tulita, and any other relevant Renewable Resource Councils in responding to this question.	A. In the SRRBs opinion, do you believe there are current stressors, including harvest, to caribou numbers? Will this project add to those stressors? B. Please provide examples of harvest monitoring (such as guardian programs and Traditional Knowledge-based monitoring) that have been tried on other highways (such as the Inuvik-Tuktoyaktuk Highway, Tłı̨chǫ Highway) or other regions. C. Please describe any engagement with Indigenous Governments or co-management Boards on potential monitoring programs.	

A. In the SRRBs opinion, do you believe there are current stressors, including harvest, to caribou numbers? Will this project add to those stressors?

It is the ʔehdzo Got’ı̨nę Gots’ę́ Nákedı (Sahtú Renewable resources Board; SRRB)’s opinion that there are several stressors currently influencing caribou population numbers in the Sahtú and that the project in question will inevitably add to those stressors. However, the scale of the potential impact on caribou population numbers posed by highway development and subsequent use, and the scale of measures required to mitigate those stressors have yet to be determined. In the response below, we present the rationale guiding

our opinion and the resulting recommendation for a risk-averse approach to mitigating potential impacts on caribou in this process as a result of these unknowns. We look forward to the upcoming technical hearings as we anticipate they will provide further detail on this issue.

Caribou in the Sahtú

Caribou and Sahtú Dene have shared a close and precious relationship since time immemorial. Caribou have always been a staple of Dene subsistence, and seasonal migrations of caribou herds have determined and guided the movement of Dene on the land. There are three types of caribou in the Sahtú: tǫdzı (boreal woodland caribou; *Rangifer tarandus caribou*), ɔekwę́ (Délı̨ne Got'ı̨ne) or ʔedə (K'áhsho Got'ı̨ne and Dela Got'ı̨nę; barren-ground caribou; *Rangifer tarandus groenlandicus*) and shúhta ɔepę́ (mountain caribou; boreal caribou that live in the mountains). In recognition of this close relationship, we use 'caribou' in this response when referring to more than one type but use Dene dialects when referring to specific subtypes of caribou rather than English herd names.

Caribou Species' Status

Both tǫdzı and ɔekwę́/ ʔedə are federally and territorially listed Species at Risk. This alone suggests that a risk averse approach should be taken to both safeguard the future of these species and ensure compliance with federal and territorial guidelines governing at-risk species.

ʔekwę́/ ʔedə were assessed as Threatened by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in 2016 based on an estimated population decline of over 56% over three generations for a large proportion of the species.[1] The rationale for the national listing acknowledges that Indigenous Knowledge and western science indicate population fluctuations for the species are natural; however, evaluators suggest that unlike natural fluctuation periods, there is no evidence of population recovery, and the cumulative threats faced by the species are unprecedented. The status of 'Threatened' was chosen for the species as there was no evidence of imminent extinction. ɔekwę́/ ʔedə are due to be reassessed in the coming years and are under consideration for addition to Schedule 1 (the formal list of Canadian Species at Risk) under the Species at Risk Act (SARA; 2002).

Tǫdzı were listed as Threatened under SARA in 2003, and re-assessed as Threatened in 2022, based on the extirpation of small subpopulations in Quebec and Western Canada, as

[1] https://species-registry.canada.ca/index-en.html#/fn1

well as range contractions of more than 50% of their historical range.[2] Additional threats to tǫdzı described in the listing include predation and linear disturbance, including seismic lines and road development. At the most recent listing, evaluators predicted a further 30% decline in population size based on the cumulative nature of these and other threats.[3]

In the NWT, ɔekwę́/ ʔedə were listed as Threatened by the Conference of Management Authorities[4] under the NWT Species at Risk Act (2009) in 2018 based on the risk of extirpation or extinction in the NWT over the course of a lifetime.[5] Tǫdzı were assessed as Threatened in 2012, listed under the NWT Species at Risk Act (2009) in 2014, and re-assessed as Threatened in 2024.[6] The most recent assessment result was based on two factors. One, concern was expressed by knowledge holders that tǫdzı and their habitat will continue to decline within the lifetimes of their grandchildren. Two, there is a persistent actual or inferred decline in mature individuals combined with an absence of immature individuals in at least one subgroup.[7]

Lastly, both tǫdzı and ɔekwę́/ ʔedə and are considered priority species under the Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada.[8] Their inclusion on the list reflects both their cultural importance to Indigenous Peoples and the need for collaboration and partnership in supporting their recovery.

These listings indicate that populations of both subtypes have declined to a state of risk that requires action as legislated by territorial and federal governments. It is therefore crucial that when discussing the nature of cumulative threats impacting caribou, that this risk state be considered the baseline for evaluating the impact of those threats. Specifically, the stressors discussed below are not impacting healthy-sized populations and discussions on what constitutes significant and adverse impacts arising from the proposed project must take this reality into account.

<u>Stressors Currently Impacting Caribou</u>

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[2] https://species-registry.canada.ca/index-en.html#/species/636-252
[3] https://species-registry.canada.ca/index-en.html#/species/636-252
[4] https://www.nwtspeciesatrisk.ca/en/conference-management-authorities
[5] Species at Risk Committee. 2017.
[6] Government of the Northwest Territories, 2024; Species at Risk Committee. 2022
[7] The Species at Risk Committee (2022) describes the criteria as 'an observed, projected, or inferred continuing decline in the number of mature individuals AND % of mature individuals in one subpopulation = 100%'.
[8] https://www.canada.ca/en/services/environment/wildlife-plants-species/species-risk/pan-canadian-approach/species-at-risk-conservation.html

There have been many documented stressors to caribou populations shared from Indigenous knowledge and scientific research studies. In general terms, Indigenous perspectives on caribou and caribou habitat suggest both are declining in abundance and resilience and that the bulk of these declines are driven by climate change, human activities, and wildfire.[9] In particular, industrial development and wildfires can result in changes to the landscape that can make caribou avoid an area for many decades. Climate change also interacts cumulatively with other stressors.

Climate change has been implicated in changes to caribou habitat, harvest, breeding cycles, and food supply. The SRRB recently reported on the wildfire and climate change impacts on caribou based largely on community focus groups.[10] Communities in the Sahtú have been reporting more wildfires and more intense fires than in the past. The fires leave fewer trees stands and less shade for caribou, and the lichen being burned takes decades to grow back.[11] It was also reported that caribou do not return to burned areas for many years.

During the community engagements with the SRRB and GNWT, people expressed concern about changes in weather patterns and the resulting impacts on caribou habitat and behaviour that they are witnessing. [12] Overall, people said that weather has become unpredictable, and this has impacted the ability of caribou to access their usual habitat and follow their usual seasonal cycles. For example, communities reported thinner ice or snowpacks than in the past and reported the occurrence of 'icing' events –generally caused when a period of warmer, rainy weather follows a period of snow. Once temperatures drop again, and a crust forms on the snow, it becomes much more difficult for caribou to get to their feed. Harvesters have seen caribou die of starvation when the weather has followed this pattern.

Harvest as a Stressor and Impacts to Harvest Rights from Stressors

Broadly speaking, harvest can be considered a stressor for an at-risk species, but it is also critical to consider harvest as a vital connection between culture and land for Indigenous communities in the Sahtú. Further, this connection is so important that harvesting is recognized as a right in the Sahtú Dene and Metis Comprehensive Land Claim Agreement (1993).[13]

[9] Janet Winbourne, 2024a.
[10] Janet Winbourne, 2024b.
[11] Janet Winbourne, 2024b.
[12] SRRB and GNWT, 2015.
[13] I.e., Sahtu Dene have right to harvest wildlife throughout the Sahtu Settlement Area.

In the Sahtú, Indigenous communities manage risk of harvest as a stressor for caribou using traditional and colonial approaches. There are Dene laws surrounding proper hunting protocols that provide guidance on how to respond to and respect the needs of declining populations. Several communities have developed caribou management plans to assist in sharing these protocols with harvesters and encouraging respectful practices. There are also colonial practices that harvesters in the Sahtú are required to follow, including harvest limits (total allowable harvest). These processes collectively suggest that the risk harvest poses as a stressor to caribou is currently being managed. Sahtú communities are also engaging in the Tǫdzı Nę́nę́ / Boreal Caribou Range Planning Process that is required given the listing of tǫdzı as threatened under Species at Risk Act. Work towards the MVH and range planning have not yet been collaborative but both need to consider the impact of the highway.

In the context of the proposed work, it is any potential risk to harvest rights that is a concern. For example, community members have expressed concern that the highway may result in increasing harvest by non-rights holders.[14] In a 2024 review of Indigenous Knowledge of ɔekwę́/ ʔedə, Winbourne cited several focus groups exploring harvester and community member views on land use and development impacts to ɔekwę́/ ʔedə and caribou more broadly.[15] When discussing impacts of development to harvest, focus group participants from Tulit'a expressed a concern that the highway will impact harvesting areas.

In the conclusion to her review, Winbourne (2024) wrote: "None of the sources reviewed for this project indicated that subsistence harvesting is playing a major role in recent caribou declines, yet each region recognizes a need to strengthen, re-assert, and educate harvesters about Traditional Knowledge, practices, and protocols in order to re-build the human / caribou relationship in a more respectful manner that would ultimately be beneficial for caribou."

These perspectives suggest that potential direct and indirect impacts to rights holders' harvest will be of keen interest to Sahtú community members through the course of this environmental assessment.

Anticipated Stressors Arising from the Project

Governmental, scientific, and Indigenous knowledge studies have documented and reported on the direct and indirect impacts of industrial development, including roads,

[14] Bower, personal communications.
[15] E.g., Headwater Group, 2022.

mining, exploration and oil and gas activities, on caribou.[16] These activities impact caribou through a combination of direct and functional habitat loss, decreased habitat quality (i.e., habitat degradation), avoidance of noise and light, and development of linear features such as roads and seismic lines (i.e., habitat fragmentation). Habitat fragmentation is often linked to increases in predator populations and changes in the distribution of other species, which can increase predation on caribou and decrease caribou populations through competition. Road development can also result in increased vehicle collisions and harvest of caribou.

Conclusion

As the Mackenzie Valley Highway is an all-season road project and will result in increased traffic and a change from seasonal traffic to year-round traffic, there could be an increase in caribou collisions along the highway, an increase in an avoidance of the highway, impacts to harvest rates and locations, and a decrease in available caribou habitat.

Based on the importance of caribou to Indigenous culture in the Sahtú, the species' risk status, the cumulative nature of stressors impacting caribou, and the potential impacts from the proposed project, the SRRB suggests that a risk averse approach will be necessary for mitigating potential impacts to caribou.

The SRRB and ʔehdzo Got'ı̨nę (Renewable Resource Councils) are evaluating, through their review of the project, the potential impacts of the Mackenzie Valley Highway on fish, wildlife, traditional land use, and harvest in the Sahtú Region and working to identify mitigation and monitoring measures. We look forward to continued engagement on these issues.

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