

NORTH SLAVE MÉTIS ALLIANCE



PO Box 2301 Yellowknife, NT X1A 2P7

October 28, 2020

Mr. Joseph Judas, Chair
Wek'èezhii Renewable Resources Board
102A, 4504-49th Avenue
Yellowknife, NT, X1A 1A7

Re: Dìga Management Proceeding – Final Comments from North Slave Métis Alliance

The Métis people of the Great Slave Lake region – including members of the North Slave Métis Alliance – have an ancient and complex relationship with barren-ground caribou (*Rangifer tarandus groenlandicus*). They have relied on caribou for more than two hundred years and continue to do so today and have been greatly impacted by the decline of all eight distinct migratory barren-ground caribou herds in the Northwest Territories. While large natural changes in the abundance of migratory barren-ground caribou populations have been documented, the current declining trend is seen as an unusual prolonged low in caribou abundance. The low number of Bathurst caribou on the calving grounds in recent years is a suspected result of low adult survival rates, reduced recruitment, and to a lesser extent, harvest. However, there is still no consensus about the main cause of decline, with several factors such as habitat degradation and fragmentation, predation, climate change, parasitism, and disease being blamed.

Despite limited knowledge regarding wolf predation rates on barren-ground caribou, wolf control programs have been established in other areas to assist the recovery of caribou populations. While wolf control programs in other northern jurisdictions such as Alaska and Nunavut have shown that predator control can have short-term benefits in the recovery of caribou populations, their long-term effects on both caribou populations and the overall ecosystem is unclear.

North Slave Métis Alliance (NSMA) is pleased to be involved in the proceedings surrounding wolf control in the Bathurst and Bluenose-East caribou ranges within the NWT, and to provide the following comments on the wolf control proposal, technical report, and document summarizing caribou population modelling.

Current wolf population estimates in the Bathurst and Bluenose-East region are not available

Wolf populations in the Bathurst and Bluenose-East region were not, until very recently, studied or quantified. We have heard from many NSMA harvesters that wolf populations have been declining in the past decades, but this has not been captured in wolf population estimates due to the lack of population surveys completed. This decline has also been noted by other groups who have harvesters participating in the wolf removal incentive; many harvesters looking to trap or shoot wolves on the ground have shared

reports of wolf scarcity at recent wildlife management meetings. We appreciate the amendment to the wolf management proposal¹ that ensures wolves in the Bathurst and Bluenose-East region will be collared and maintained and look forward to seeing the number of collars deployed on wolves increase in future years.

Due to the lack of wolf population studied in the Bathurst and Bluenose-East region, NSMA is concerned that the wolf removal targets may be overestimated. We understand that the current wolf management proposal expects to use an adaptive management strategy¹ to set wolf removal targets each year, but we have concerns that the relatively short project timeline does not allow for proper adaptive management. We request more information on how wolf populations are being estimated and how wolf removal targets are being set each year.

Wolf recruitment rates in the Bathurst and Bluenose-East region seem to be on the decline

Wolf denning success and pup survival rates in the barrenlands have been noticeably declining since the mid-1990's – this has been reported by NSMA members and was echoed in the wolf management proposal¹. If wolf recruitment is consistently declining, extra consideration must be taken when setting wolf removal targets to ensure the future recovery and genetic stability of the wolf population. Denning studies should be conducted in the region to estimate recruitment and inform this management project going forward.

Furthermore, the annual aerial removal of wolves is planned for late spring, when wolves will be approaching their denning period. This timing presents an additional concern for the successful recruitment of wolves; this concern was validated as 60% of female wolves removed via aerial shooting were pregnant and at least one female was carrying near-term pups. While we respect the goal of removing as many wolves as possible, we recommend completing aerial removal earlier in the spring – i.e. before wolves are likely to begin their denning period in May – to reduce the risk of orphaning litters of pups.

Assumed wolf predation rates on Bathurst and Bluenose-East caribou are likely overestimated

There are several assumptions made in the proposal, technical report, and summary of population modelling documents regarding wolf predation rates on barren-ground caribou. The first assumption is that wolves within the Bathurst and Bluenose-East caribou ranges are primarily predating caribou; while this is not an unreasonable assumption, there are other prey sources available within these areas (with abundant rodents, lagomorphs, and birds, as well as other ungulates) which may be more abundant and/or more accessible. The results from the necropsies and stomach content analyses mentioned in the technical report² should shed light on the accuracy of this assumption once they become available.

¹Government of the Northwest Territories and Tłıchǵ Government Joint Proposal on Management Actions for Wolves (Diga) on the Bathurst and Bluenose-East Barren-ground Caribou (Ekwǝ) Herd Winter Ranges: 2021 – 2024 dated August 25, 2020

²EcoBorealis Consulting Ltd., Environment and Natural Resources (GNWT), and Tłıchǵ Government's DRAFT Wolf (Diga) Management Pilot Program Technical Report dated August 21, 2020

³Document titled *Summary Caribou Population Modeling of Varying Levels of Wolf Removal BATH BNE*

⁴Hayes R.D., and D.E. Russell. 2000. Predation rate by wolves on the Porcupine caribou herd. *Rangifer Special Issue* 12: 51-58

A second assumption is made that average predation rate of wolves on barren-ground caribou in the Bathurst and Bluenose-East caribou ranges can be appropriated from the Hayes and Russell predation study⁴ on the Porcupine caribou – the average predation rate was 29/caribou/wolf/year, which was used in modelling wolf management options³ in the Bathurst and Bluenose-East region. At the time the data was collected for the Hayes and Russell study (in 1989), the Porcupine herd was estimated at 178,000 caribou – in contrast, the 2018 population estimates for the Bathurst and Bluenose-East caribou herds were approximately 8,200 and 19,300 animals respectively. It stands to reason that the estimated predation rate for wolves currently in the Bathurst and Bluenose-East region would be significantly less than predation rates for wolves in the Porcupine range in 1989. Furthermore, the range of predation rate estimates in the Hayes and Russell study⁴ was incredibly large – with less than 4 caribou/wolf/year at the lowest end of the estimate, and nearly 77 caribou/wolf/year at the highest. The average estimated predation rate of 29 caribou/wolf/year found in the Hayes and Russell study⁴ is unsuitable to extrapolate to other regions when the range is so large.

Regional studies of wolf predation rates on barren-ground caribou in the Bathurst and Bluenose-East region are necessary to provide reasonable estimates to continue wolf management. The current models using predation rate estimates extrapolated from the Hayes and Russell (2000) study⁴ are likely overestimating wolf predation rates on Bathurst and Bluenose-East caribou and will lead to the over-removal of wolves in the region.

Wolf removal must be done as fairly and humanely as possible

We recognize and appreciate the emphasis on fair and humane wolf removal throughout the proposal¹ and technical report². We suggest that ground harvesters and aerial removal crews work more closely with knowledge-holders to determine the locations where they are most likely to encounter wolves, to reduce the need for bait stations at all points in the wolf removal process. Knowledge-holders could also suggest areas where wolves are likely to be found that are inaccessible to ground harvesters, to possibly increase the success of aerial removal trips and reduce the number of grid surveys needed. This knowledge-sharing could be done as part of the wolf harvest workshops, which were received enthusiastically and should be repeated annually for interested NWT communities as part of the wolf management proposal.

We understand that this project proposal informs wolf removal within the Bathurst and Bluenose-East regions, though a portion of the wolves removed during the 2019-2020 year were taken from outside the Bathurst and Bluenose-East regions. We request that a map is created showing acceptable wolf removal areas (e.g. within 25km of Bathurst and Bluenose-East incentive zone) and shared with all proponents, specifically those conducting the aerial culls. Wolves should not be shot if they are outside the acceptable wolf removal areas.

NSMA also supports the practice of necropsying every wolf removed via aerial shooting. We would like this practice to be continued throughout the entire wolf management project, and request

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access to the full necropsy results as they become available. Again, we appreciate the emphasis on fair and humane removal throughout this project.

Effective communication must be maintained with collaborators to ensure wolves are not over-harvested

The ground harvest incentive program takes place in both the Northwest Territories and Nunavut to ensure full coverage of the Bathurst and Bluenose-East caribou ranges. We request more information on how harvest results are being shared between the Government of Nunavut and the Government of the Northwest Territories (e.g. on a monthly basis, at the end of the season, at the end of the fiscal year). NSMA emphasizes the need for consistent communication between collaborators to ensure that wolves are not over-harvested during aerial removal. Reporting on ground harvest should be completed before aerial removal targets are finalized.

NSMA appreciates the efforts of the TG and the GNWT to implement an effective wolf removal program in the NWT in hopes of aiding the recovery Bathurst and Bluenose-East caribou herds. We appreciate the opportunity to participate in the proceedings and comment on the documents provided. We look forward to the next steps in the proceedings of this management project.

Please don't hesitate to contact me if there are any questions or comments.



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