



Mr. Joseph Judas, Chair  
Wek'èezhì Renewable Resources Board  
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YELLOWKNIFE NT X1A 1A7  
[jjudas@wrrb.ca](mailto:jjudas@wrrb.ca)

January 28, 2022

Dear Mr. Judas:

**Joint Management Proposal for Sahtì (Bluenose-East) Ekwò Herd**

The Tłıchǫ Government and the Department of Environment and Natural Resources, Government of the Northwest Territories would like to submit to the Wek'èezhì Renewable Resources Board (WRRB) for review and recommendation, a joint management proposal for the Sahtì (Bluenose-East) Ekwò herd. This management proposal is for the period of July 2022 to July 2024.

We look forward to hearing from the WRRB on our proposal and are happy to contribute to Board proceedings on these caribou management and monitoring actions.

Sincerely,

Tammy Steinwand-Deschambeault  
Director, Department of Culture and  
Lands Protection,  
Tłıchǫ Government Behchokò, NT  
[TammySteinwand@tlicho.com](mailto:TammySteinwand@tlicho.com)

Mr. Bruno Croft, Superintendent,  
North Slave Region  
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Yellowknife, NT  
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Attachment

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Department of Environment, Government of Nunavut

Mr. Drikus Gissing  
Wildlife Director  
Department of Environment, Government of Nunavut

# Wek'èezhì Renewable Resource Board Management Proposal

<b>1. Applicant Information</b>	
<p><b>Project Title:</b>  Government of the Northwest Territories and Tłıchǫ Government  Joint Proposal on Management Actions for the  Bluenose-East ʔekwǫ (Barren-ground caribou) Herd 2022 – 2024</p>	
<p><b>Contact Persons:</b>  <b>Organization Names:</b>  <b>Addresses:</b>  <b>Phone/Fax Numbers:</b>  <b>Email addresses:</b></p> <p>Tammy Steinwand-Deschambeault  Director, Department of Culture and Lands Protection  Tłıchǫ Government  127 Donda Tili PO Box 412  Behchokǫ, NT. X0E 0Y0  Phone: 867-392-6381 Ext: 1352  Fax: 867-392-6406  Tammy.Steinwand@tlicho.ca</p> <p>Bruno Croft  Regional Superintendent, North Slave Region  Department of Environment &amp; Natural Resources  Government of the Northwest Territories  2<sup>nd</sup> Floor, ENR Main Building  P.O. Box 2668  3803 Bretzlaff Drive  Yellowknife, NT. X1A 2P9  Phone: 867-767-9238 Ext: 53234  Fax: 867-873-6260  <a href="mailto: Bruno_Croft@gov.nt.ca">Bruno_Croft@gov.nt.ca</a></p>	
<b>2. Management Proposal Summary: provide a summary description of your management proposal (350 words or less).</b>	
<b>Start Date:</b> July 1, 2022	<b>Projected End Date:</b> July 1, 2024
<b>Length:</b> 2 years	<b>Project Year:</b> 1 of 2
<p>A June 2021 calving ground photographic survey of the Bluenose-East caribou herd resulted in estimates of 12,863 (95%CI 10,816-15,298) breeding cows, 13,991 (95%CI 11,805-16,582) adult females and 23,202 (95%CI 19,247-27,971) adults in the herd. This indicates that the herd stabilized between 2018 and 2021 based on estimates of female caribou. Demographic indicators like collar-based adult cow survival rates, fall and late winter calf-cow ratios, bull-cow ratios and pregnancy rates have shown positive trends since 2018, consistent with a stabilizing trend. Previously, the herd had shown a steep declining trend from 2010, when the herd was estimated at about 120,000, to 2018 when the herd estimate was about 19,300.</p>	



The Bluenose-East herd has been assessed as being in the red phase of low numbers as defined by the Taking Care of Caribou Management Plan developed by the Advisory Committee for Cooperation on Wildlife Management (ACCWM) in 2014. This plan continues to provide primary guidance on management of Bluenose-East caribou. An updated herd status assessment by the ACCWM in winter 2022 is pending.

The Tłıchq Government and Government of the Northwest Territories (GNWT) Department of Environment and Natural Resources (ENR) propose continuation of key management actions for a period of two years to promote recovery of the Bluenose-East herd beginning in July 2022. Actions are grouped under the 5 categories defined in the Taking Care of Caribou Management Plan: harvest, predators, land use and habitat, education, and monitoring and research. Management actions should be reviewed regularly as information becomes available consistent with the ACCWM Annual Status Meeting process and the Barren-ground Caribou Technical Working Group (BGCTWG) Adaptive Management Framework.

- (1) Harvest: The Tłıchq Government and GNWT propose that resident, non-resident and commercial harvest from this herd remain at 0 and that the Total Allowable Harvest (TAH) of 193 bulls/year in Wek'èezhii (as per the Wek'èezhii Renewable Resource Board (WRRB) determination #1-2019) be continued. Reported harvest of Bluenose-East caribou in the North Slave region has been well below the TAH in 2018-2019 (74), 2019-2020 (76) and 2020-2021 (63). We propose the allocation be consistent with WRRB determination #2-2019 and as applied since 2015 (Tłıchq 39.3% (76), other Indigenous harvesters (including Nunavut) 60.7% (117)).

The Tłıchq Government has been working on developing programs that promote alternative harvest such as the Tłıchq Dq̄taàts'eedı program where fish is provided to the community members in addition to fuel subsidies to assist people to go out moose hunting. These programs have provided Tłıchq citizens other resources to provide for their families in hopes of reducing caribou harvest. Tłıchq Government also plans to continue and expand its delivery of programs focused on cultural practices on-the-land. These programs emphasize continued use and maintenance of traditional sites and trails. The long-term aim is continuation of projects that teach Traditional Knowledge (TK) of the land and caribou by bringing elders, youth and community members together on the land.

- (2) Predators: A comprehensive Tłıchq Government-GNWT joint wolf management proposal to reduce predation on the Bluenose-East and Bathurst caribou winter ranges underwent public review in fall 2020 and was approved by the WRRB in January 2021. Details of the program from 2020 and 2021 are provided in annual reports (Nishi et al. 2020, Clark et al. 2021) to the WRRB and posted to the WRRB website. The wolf management program was approved for a 5-year period.

- (3) Land Use and Habitat: Currently, there is limited industrial development on the Bluenose-East range. The Tłıchq Government and GNWT continue to participate in environmental assessments and land use planning processes in NWT and Nunavut that may affect this herd and its range.

In addition, a collaborative project is underway to assess cumulative effects of development and climate factors on the Bluenose-East herd and to provide a decision-support tool for managers. The Tłıchq Government has worked with elders and hunters to identify key unburned areas of winter habitat and provided the

locations to ENR to be considered as values-at-risk in fire management decisions. The Tłıchq Government and GNWT will continue to support TK and scientific research (including the Ekwò Nàxoèhdee K'è caribou monitoring program) focused on climate change and other factors affecting caribou health, abundance and the condition of the range.

**(4) Education:** The GNWT and Tłıchq Government recognize the importance of ongoing communication and engagement with communities and harvesters about the status of barren-ground caribou herds and the management actions underway for the Bluenose-East herd and other herds in the NWT.

The following are some examples of education/public awareness initiatives to promote traditional ways of harvesting, improve hunter practices and reduce wounding and wastage:

- The GNWT's Hunter Education program for new/young hunters has been developed and will be adapted for Tłıchq communities to be taught in 2 schools in the Tłıchq region starting in February 2022 as a pilot program.
- The Tłıchq Government and ENR have collaborated in training Tłıchq monitors so that they can teach the Hunter Education program.
- The Tłıchq Government developed and implemented the Ekwò Harvest Monitoring Program in the winter of 2021 and will continue to run it in the winter of 2022.
- A social media campaign will continue to be enhanced to share information on caribou conservation.

The GNWT hosted a Respected Harvesters Gathering in December 2021 that brought together representatives from Indigenous governments and Indigenous organizations that proposed a number of approaches to improving communication and education of people that hunt caribou on the Tibbett to Contwoyto winter road. The Tłıchq Government and GNWT will attempt to address to the extent possible key recommendations from that gathering.

Visits to the four Tłıchq communities to present updated information on caribou herds and review management priorities planned for January 2022 have been postponed due to the current COVID travel and gathering restrictions.

**(5) Monitoring & Research:** The Tłıchq Government and the GNWT support continuing scientific and TK research into factors contributing to caribou abundance and health. In 2020, the Tłıchq Government expanded the Ekwò Nàxoèhdee K'è caribou monitoring program in summer to the Bluenose-East caribou range at Point Lake (TRTI 2021). This on-the-land monitoring program will continue to contribute information on caribou and habitat condition, relative occurrence of calves and predators, and the influence of environmental conditions and cumulative effects.

The biological monitoring activities for the Bluenose-East herd will continue as recommended by WRRB in 2019 including population surveys every two years, annual composition surveys in June, October, and March/April and maintaining radio-

collars on 70 caribou (50 cows and 20 bulls). Accurate monitoring of harvest and use of authorization cards by a Community Monitor in Wekweèti will continue to be important.

Please list all permits required to conduct proposal.

NWT and Nunavut Wildlife Research Permits will be required annually to conduct monitoring recommended in this proposal.

### 3. Background (Provide information on the affected wildlife species and management issue)

#### A. Bluenose-East Caribou Status in 2021 (biological monitoring)

In June 2010 the Bluenose-East herd was estimated at about 120,000 caribou (Adamczewski et al. 2017) and in 2018 it was approximately 19,300; the 2018 estimate represented an 84% decline in 8 years. The herd's annual rate of decline continued at 20-21% per year since 2010 (Boulanger et al. 2019) and the population declined by about half from 2015 to 2018 (Figure 1).

The June 2021 calving ground photographic survey of the Bluenose-East caribou herd resulted in estimates of 12,863 (95%CI 10,816-15,298) breeding cows, 13,991 (95%CI 11,805-16,582) adult females and 23,202 (95%CI 19,247-27,971) adults in the herd (Figure 1). As none of these estimates are statistically different from those of 2018, they suggest a stable population trend.

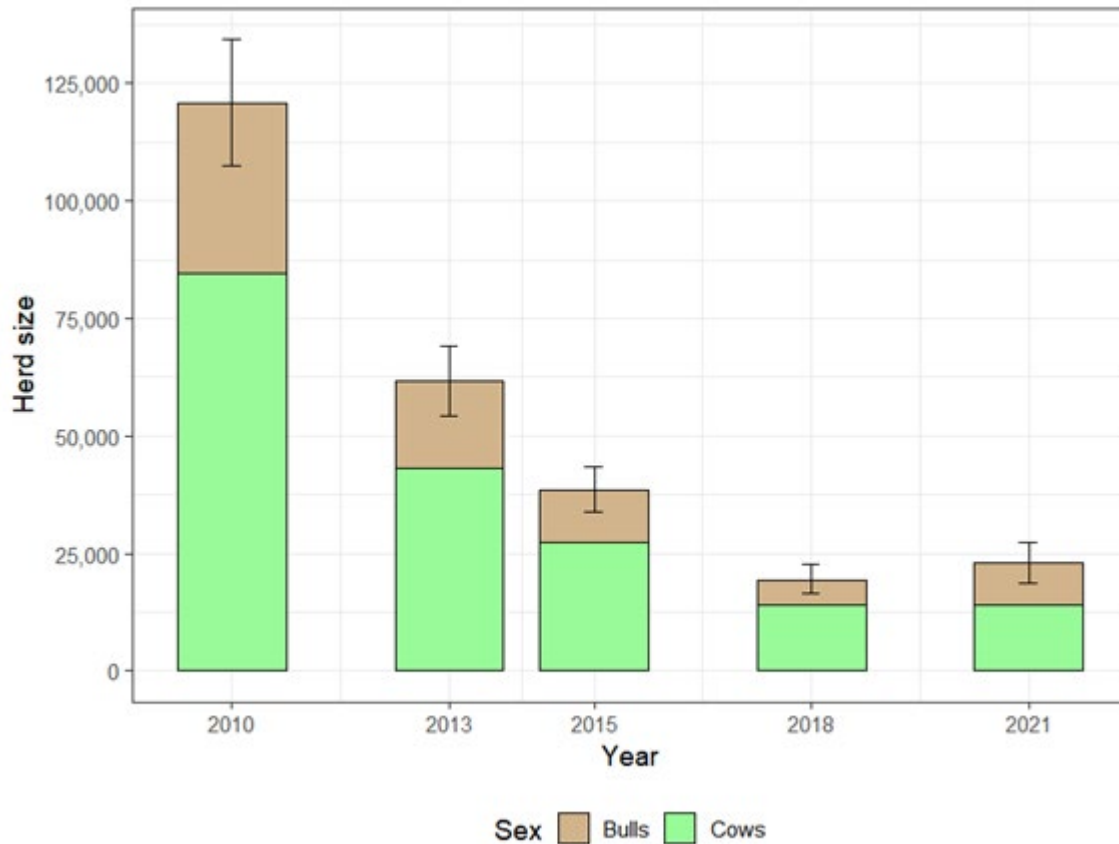


Fig. 1. Trend of Bluenose-East herd estimates 2010-2021 based on photographic calving ground surveys (Means  $\pm$  95% Confidence Intervals). Herd estimates are based on the number of adult females with adult males added in (extrapolated) based on fall bull:cow ratios.

The stable population trend in the Bluenose-East herd between 2018 and 2021 is consistent with recent demographic indicators in the herd. These are summarized briefly below.

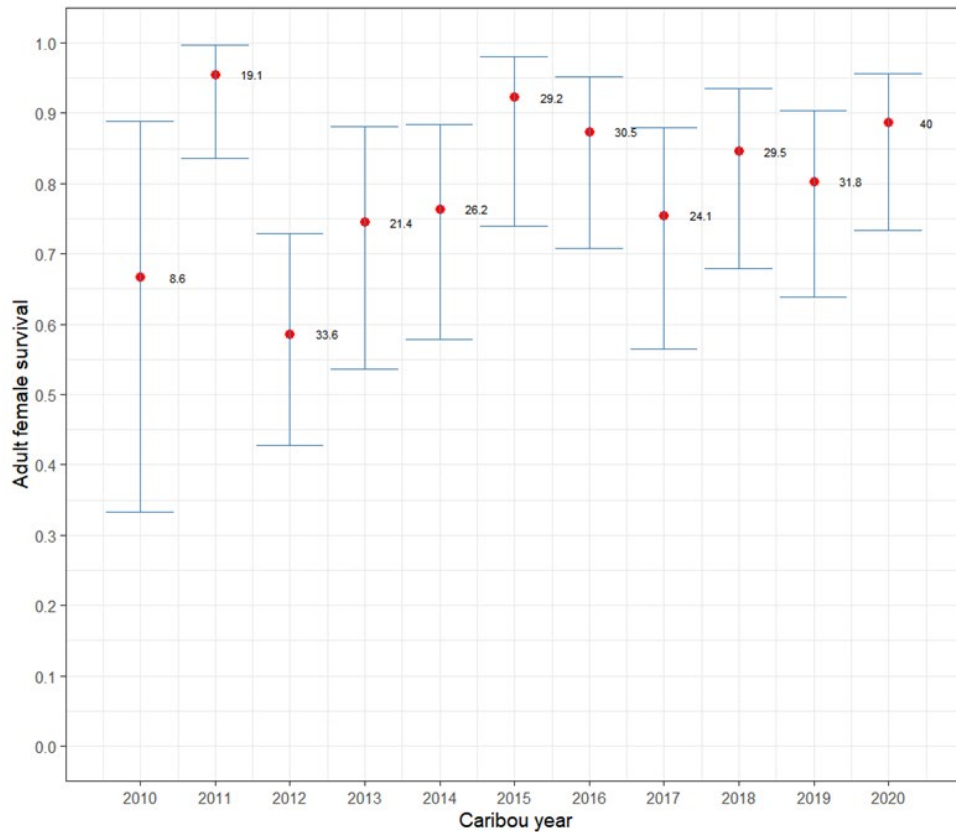


Figure 2. Annual collar-based cow survival estimates for the Bluenose-East herd 2010-2020. The year begins in early June and ends at the end of May, i.e. year 2020 is from June 2020 to May 2021. Red dots are the estimates and the error bars are 95% confidence intervals; the average number of collared female caribou is shown for each year.

Population trends in caribou herds are sensitive to the cow survival rate. Annual estimates of cow survival are shown in Figure 2. The average cow survival between 2015 and 2019 was 85%, consistent with a stable herd, and the estimate for 2020 was 89%.

The proportion of breeding females on the calving grounds at the peak of calving reflects the pregnancy rate from the previous fall rut. Estimates from 2010 to 2021 are shown in Figure 3. The proportion of breeding females was 83% in 2018, 87.5% in 2019 and 91.9% in 2021. These last three estimates show an increasing trend and an exceptionally high value in 2021. Anecdotal observations during the June 2021 composition survey, along with observations from A. Niptanatiak in Kugluktuk, suggest that there have been increased numbers of cows with twins, although the exact extent of the twinning is difficult to estimate<sup>1</sup>.

<sup>1</sup> Sub-groups were occasionally seen with 2 cows and 3 calves, or 3 cows and 4 calves, where no other caribou were close by. However, each group was only observed for a few seconds (long enough to classify a high proportion of the caribou) thus quantitative estimates of apparent twins were not feasible.

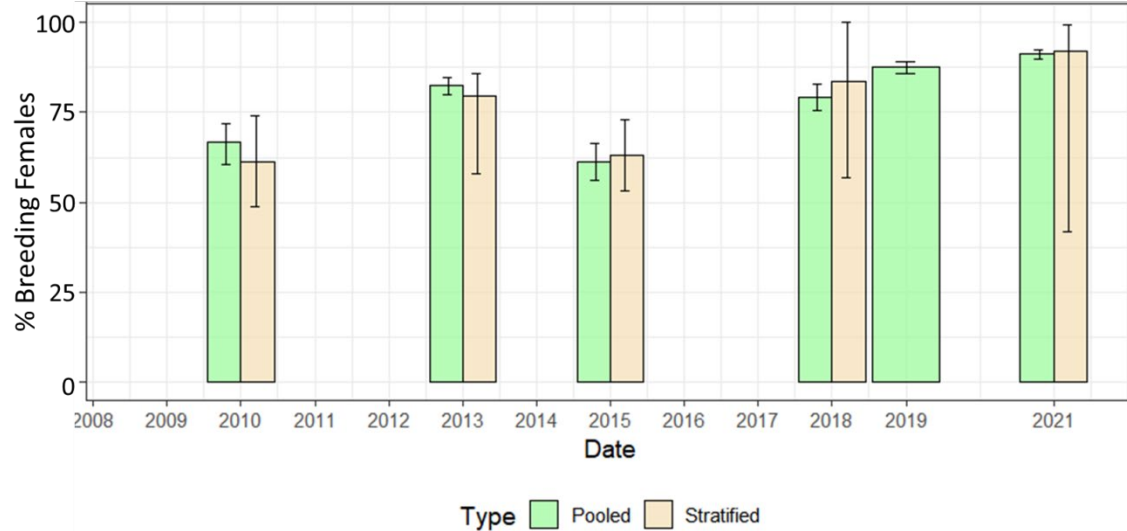


Figure 3. Proportion of breeding females on the Bluenose-East calving ground from composition surveys near the peak of calving, 2010-2021 surveys (Means  $\pm$  95% Confidence Intervals). All surveys except 2019 were part of calving photo surveys. Stratified estimates consider relative numbers of caribou in individual survey blocks, while pooled estimates do not; the 2019 composition survey was a stand-alone survey with no survey blocks defined. Comparison of pooled and stratified estimates suggests there is little difference.

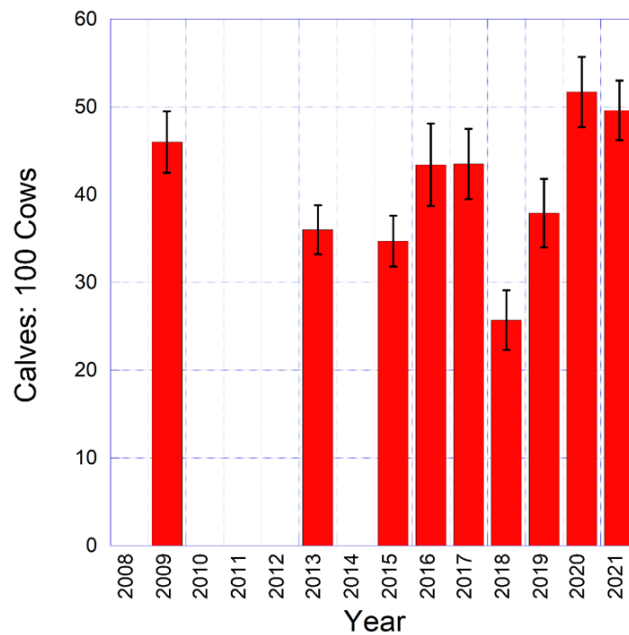


Figure 4. Fall (October) calf:cow ratios in the Bluenose-East herd 2009-2021.

Calf:cow ratios estimated in the fall (usually late October) during the breeding season provide an index of calf survival from calving through the first 4.5 months of life. For the Bluenose-East herd, the ratios in 2020 (51.7 calves:100 cows, 95%CI 47.2-55.7) and 2021 (49.6 calves: 100 cows, 95%CI 45.6-53.0) are the highest recorded since 2009 and the overall trend between 2018 and 2021 has been increasing (Figure 4).

Fall composition surveys near the peak of the rut can also give an estimate of the bull:cow ratio

as all sex and age classes are mixed. Bull:cow ratios estimated for the Bluenose-East herd between 2009 and 2019 (Figure 5) were generally near 40 bulls: 100 cows, however the ratios in 2020 (63.3 bulls: 100 cows, 95%CI 50.0-79.0) and 2021 (68.7 bulls: 100 cows, 95%CI 61.3-77.4) were higher. Results from these last 2 surveys are similar to the average from 6 fall composition surveys during the 1980s when the large herds were last increasing (66 bulls: 100 cows, in Gunn et al. 1997, p. 35).

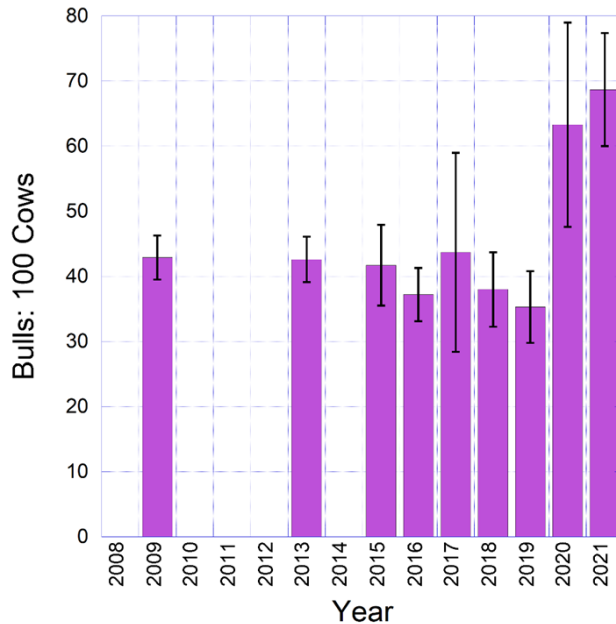


Figure 5. Fall (October) bull:cow ratios estimated in the Bluenose-East herd 2009-2021.

Taken together, these demographic indicators show positive trends in recent years and are consistent with stabilization indicated by the herd estimate from the 2021 calving photo survey. If these trends continue, the herd may be in the early stages of recovery.

Harvest of the Bluenose-East caribou herd in recent years is managed in three settled land claim regions: Sahtú Settlement Area, Wek’èezhii, and Kugluktuk (Nunavut). Reported harvest in the last 3 winters is summarized in Table 1. Total harvest reported was 204 caribou for 2018-2019, 164 caribou for 2019-2020, and 246 caribou for 2020-2021. On average, 205 caribou were taken from a herd estimated in 2018 at 19,300, or a harvest rate of 1.1% with a substantial proportion of these being bulls. This relatively low level of harvest has likely had a limited effect on population trend in recent years. In the NWT, access to the herd has in recent winters been limited, and in the North Slave region, most caribou harvest in the winter has been from the Beverly herd.

Table 1. Reported harvest of Bluenose-East caribou in 2018-2019, 2019-2020, and 2020-2021. Sources: ACCWM Annual Status Reports, and Kugluktuk: GN staff; Déłjne: K. Chan ENR; Wek'èezhì: TG staff; numbers collated by S. Goodman, N Slave ENR.

Harvest by Region	2018-2019	2019-2020	2020-2021
Wek'èezhì	74 bulls	76 bulls	63 bulls
Déłjne	25	0	55 bulls, 35 cows
Kugluktuk	105 (52 bulls & 53 cows)	88 (bulls & cows)	93 (bulls & cows)
Total	204	164	246

## B. Management Context for the Bluenose-East Caribou Herd

Guidance for the management and monitoring of the Bluenose-East herd is provided in the ACCWM's Taking Care of Caribou Management Plan for the Bluenose-East, Bluenose-West and Cape Bathurst herds, finalized in November 2014 (ACCWM 2014). The ACCWM develops annual action plans that outline herd-specific management actions based on herd status and trend following guidance in the Plan. At its November 2020 status meeting the ACCWM assessed the Bluenose-East herd as being in the red zone (low numbers and below 20,000). The ACCWM held its most recent annual status meeting in November 2021 and an updated status for the Bluenose-East herd is expected in the winter of 2022.

The WRRB's Reasons for Decision reports (WRRB 2016a, 2016b and WRRB 2019) provide a comprehensive overview of previous proceedings (2010, 2016, 2019) along with the Board's determinations and recommendations for management of the Bluenose-East herd. As a result of hearings in 2019-2020 of the WRRB and Nunavut Wildlife Management Board (NWMB), harvest limits for the Bluenose-East herd were established as 193 bulls (intended to be herd-wide) under the WRRB, and 170 caribou (1:1 sex ratio) under the NWMB for Kugluktuk. Bluenose-East harvest in the Sahtu Settlement Area is set out in the *Belare Wile Gots'ë ʔekwë – Caribou for All Time – A Déłjne Got'jne Plan of Action 2021-2023*, a community-based plan developed by the Déłjne Renewable Resources Council which includes a harvest limit of 30 caribou.

## 4. Description of Proposed Management Action

### Goal of Management Actions

The short-term goal of the management actions proposed is to promote conditions that will allow for continued recovery of the herd. Over the longer-term, the goal is to enable sustainable caribou harvesting that meets the needs of Indigenous communities across this herd's range. In particular, within Wek'èezhì, the goal is to accommodate Tłıchq rights to harvest caribou throughout Mqwhì Gogha Dè Nıjtłèè.

## 1. Harvest management

The 2021 population estimate for the Bluenose-East herd indicates that the herd has stabilized between 2018 and 2021, and positive trends in demographic indicators are consistent with this stabilizing trend. We note, however, that there is uncertainty in population estimates and other demographic indicators, expressed in confidence intervals. If positive trends in indicators continue, the herd may begin to recover and increase in numbers. We cannot assume, however, that the positive demographic trends in the Bluenose-East herd between 2018 and 2021 will necessarily continue. The Bathurst herd appeared to stabilize from 2009 to 2012 after a very rapid decline 2006-2009, but has since declined further based on surveys in 2015, 2018 and 2021. Continued harvest and predator management actions are important to support and maintain herd recovery.

Reported harvest of the herd in the last 3 years has been about 1.1% of the 2018 herd estimate of 19,300; this low rate of harvest has likely had relatively little effect on the herd. Tłıchq harvest has been all bulls, Sahtú harvest has been mostly bulls and Kugluktuk harvest has been mixed (Table 1). The Tłıchq Government and GNWT propose that Indigenous harvest of the Bluenose-East herd in Wek'èezhìi continue as the Total Allowable Harvest determined by the WRRB in 2019 of 193 bulls/year (Determination #1-2019). This conservative rate of harvest would be consistent with a management emphasis on herd recovery. Resident, non-resident and commercial harvest from this herd should remain at 0. The herd's demographic status will continue to be reviewed annually via the ACCWM fall status meeting, and three times per year by the BGCTWG under the Adaptive Management Framework. Updates to management will be considered as part of those processes.

Table 2. Proposed harvest of Bluenose-East caribou by harvester group, using the allocation that has been used since 2015, with a total harvest limit of 193 bulls. Decisions about harvest in Nunavut and the Sahtu region follow the land claim processes in those regions.

Harvester Group	% of Harvest	Harvest 193 Bulls
Tłıchq	39.3	76
Sahtú	17.2	33
Dehcho	1.6	3
Inuvialuit	0.8	2
NWTMN	1.5	3
Akaiicho	2.1	4
NSMA	1.8	3
Kugluktuk (NU)	35.8	69*
Total	100	193

\*We acknowledge the discrepancy in what is proposed here and the decision made by the Nunavut Wildlife Management Board (NWMB) for a TAH of 170.

The 76 authorization cards (bulls) for Tłıchq communities are for Tłıchq harvesters to continue cultural practice on the land and the harvest will be allocated among the communities. The



Tłıchq Government and the GNWT will continue to work with management authorities in the NWT (Sahtú and Wek'èezhii regions) and Nunavut (Kugluktuk, NWMB and Government of Nunavut) toward a consistent approach to harvest management for this herd.

ENR will create and print new authorization cards to harvest Bluenose-East caribou bulls in July of each year and make them available to all Indigenous groups as per their allocations in August prior to the beginning of the fall hunt. The Tłıchq Government will continue to report on Bluenose-East caribou harvest by Tłıchq harvesters, based on authorization cards.

#### Support for harvest of other wildlife and on-the-land activities:

The Tłıchq Government and the GNWT recognize that reduced caribou harvesting opportunities have serious implications for Tłıchq and other Indigenous communities, and that limitations on hunting has negative impacts on the continuity of Tłıchq culture, language and way of life. The Tłıchq Government will continue to expand programs focused on cultural practices on the land (in fulfillment of WRRB Recommendation #8-2019). These programs include: sustaining cabins; traditional canoe trails from the communities; and winter skidoo trails to harvesting areas, along with other programs currently operated by the Tłıchq Government. The Tłıchq Government has been working on developing programs that promote alternative harvest such as the Tłıchq Dqtaàts'eedı program where fish is provided to the community members in addition to fuel subsidies to assist people to go out moose hunting. These programs have provided Tłıchq citizens with other resources to provide for their families in hopes of reducing caribou harvest. The long-term aim is continuation of projects that teach TK of the land and caribou by bringing elders, youth and community members together on the land. By maintaining traditional trails and cabins, community members share knowledge of these important cultural and environmental locations, thus re-visiting and maintaining these sites are important to maintain the Tłıchq knowledge base. Such activities are important for the practice of the hunting culture, and maintaining cultural identity and continuity as a hunting people, ultimately, to condition people with skills and knowledge of the land, for when caribou return.

In recent years, the Tłıchq Government has expanded the Ekwò Nàxoèhdee K'è caribou monitoring program in summer from the Bathurst to the Bluenose-East caribou at Point Lake (as per WRRB recommendation #15-2019), as a way of maintaining on-the-land activities and cultural practices, as well as providing information on caribou condition, predators, habitat, cumulative effects, and environmental conditions (TRTI 2021).

ENR's On-The-Land unit, in collaboration with the Wildlife & Fish Division and North Slave Region, play an active role working with Tłıchq Government and Tłıchq communities to identify appropriate cultural activities and harvest of other wildlife and fish, and sources of support. The Community Harvester Assistance Program (CHAP) is currently being reviewed and updated to ensure it meets the needs of Indigenous communities.

## **2. Predators**

The rapid decline in the Bluenose-East herd between 2015 and 2018 occurred despite a very limited harvest between the NWT and Nunavut. Low adult and calf survival rates in the Bluenose-East herd at that time suggested that predation may be a key limiting factor. A number of actions were put in place for the reduction of wolves and wolf predation (as the main predator of barren-ground caribou) to assist with recovery of the Bluenose-East herd through a coordinated wolf management program. The program consists of three main

components: 1) support for wolf harvesters and the traditional economy, including training and incentives; 2) the use of aerial removals if harvest targets are not met through ground harvest (not supported by WRRB recommendation in its 2021 Reasons for Decision on the Wolf Management Program); and 3) extensive research and monitoring.

The initial two winters of wolf management actions resulted in removal of 84 wolves in 2020 and 135 wolves in 2021 from areas where the bulk of the Bathurst and Bluenose-East herds were wintering (Nishi et al. 2020, Clark et al. 2021). In 2021, Tłıchq harvesters removed 32 wolves from a base at Roundrock Lake, a ten-fold increase in wolves taken in 2020 by Tłıchq harvesters (Clark et al. 2021).

Annual review, assessment and adjustment of the wolf management program takes place under the approval, recommendations and commitments made in accordance with the WRRB's 2020 Wolf Management Proceeding and the associated WRRB Reasons for Decision report, January 2021.

### **3. Habitat and Land Use**

Recovery of the Bluenose-East herd will require healthy habitat on the herd's range in the NWT and Nunavut. Currently, there is very limited development on the Bluenose-East range. Of a total range size of 294,975 km<sup>2</sup>, approximately 35.2 km<sup>2</sup> (0.0152%) has been disturbed through human and industrial land use. An important part of managing impacts to caribou range use and habitat is through the environmental assessment and land use planning processes. The GNWT and Tłıchq Government continue to participate in processes in the NWT and Nunavut that may affect the Bluenose-East herd and its range (e.g. review of the 2021 Draft Nunavut Land Use Plan).

Fire in the forested, winter range of the Bluenose-East herd can impact herd movements and access to key wintering areas. The Tłıchq Government has worked with elders and harvesters to identify key unburned areas of winter habitat and has provided these locations to the Forest Management Division of ENR to be considered as values-at-risk in fire management decisions. As operations allow, these areas may be prioritized for actioning fires to help maintain winter habitat for the Bluenose-East herd.

The Tłıchq Government and GNWT will continue to support TK and scientific research (including the Ekwò Nàxoèhdee K'è caribou monitoring program) focused on factors affecting caribou health, abundance and condition of the range, including climate change. The GNWT, in collaboration with the WRRB, Sahtu Renewable Resources Board, Gwich'in Renewable Resources Board and Wildlife Management Advisory Council (NWT) has initiated a Cumulative Effects Assessment project which aims to develop a decision-support tool for assessing the relative contribution of various factors influencing caribou populations including changes in land use, climate, human development and management approaches. The Bluenose-East herd is one of four caribou herds the project is considering. This assessment will simulate human-caused and natural disturbances on barren-ground caribou range including the cumulative effects of environmental changes (e.g., climate, fire), project developments (e.g., roads), and management practices (e.g., harvest levels) on caribou population demography. This project may result in an improved understanding of the key vulnerabilities of the Bluenose-East herd with respect to habitat change in the coming years and decades. We are in year two of the three-year project.

Consistent with WRRB Recommendation #6-2019, the Tłıchq Government continues to work

with elders and harvesters to document areas of key caribou habitat and prioritize them for conservation such as Ekwò no'oke (water crossings) and tataa (land crossings). The GNWT and Tłıchq Government have also conducted a preliminary technical analysis of 25 years of caribou collar data from the Bluenose-East, Bathurst and Beverly caribou herds to identify, categorize and map water crossings as key habitat features. The GNWT hosted a series of workshops in 2021 to support this collaborative work and while the workshops focus on the Bathurst herd range, there is extensive overlap of the Bluenose-East range with the Bathurst fall and winter ranges. As the workshop series continues into 2022, the GNWT in partnership with Indigenous Governments and Indigenous Organizations continue to look at options for identifying, prioritizing and legally protecting key caribou habitat as per WRRB Recommendation #7-2019.

In addition to identifying fixed conservation areas, the GNWT has developed a Framework document, Operational Guidance and conducted a desktop pilot exercise for the implementation of Mobile Caribou Conservation Measures (ENR 2021a and ENR 2021b). Mobile Measures are a flexible tool for reducing disturbance of caribou and allowing them to move, with minimal disturbance, through an area adjacent to small and medium sized exploration camps. The GNWT is working with an industry partner to identify opportunities to test the on-site field implementation of Mobile Measures at an exploration camp in 2022.

#### **4. Education**

The Tłıchq Government and GNWT recognize that continued effort is needed to increase awareness among harvesters, communities and the public about the status of NWT caribou herds, the need for conservation actions to promote recovery, and how people can contribute to conservation. Tłıchq elders have emphasized the need for promoting respect for ekwò, and adopting traditional practices which includes using all parts of harvested ekwò and minimizing wastage. The Tłıchq Government and the GNWT are working on a coordinated suite of education/public awareness initiatives to improve general public knowledge of ekwò, and to promote respectful hunting practices that would reduce wounding and wastage.

Awareness of unsafe, illegal and disrespectful hunting practices and wastage on the mine winter roads was raised after the 2020-2021 winter harvest season. The GNWT has continued to work with Indigenous governments and Indigenous organizations, most recently at two Respected Harvester meetings with harvesters and leaders, to increase awareness and take collaborative actions to improve respect for traditional harvesting methods and reduce wastage. Recommendations included a commitment to work together and improve communication, better coordination among GNWT officers, monitors and Guardians, promoting community hunts, hunter accountability and alternative harvesting opportunities and collaborative public messaging. Outcomes from these meetings, while focused on winter road harvesting, will likely have positive impacts across all harvesters, including those of the Bluenose-East caribou.

The GNWT's Hunter Education course is being introduced to selected schools in the NWT as a pilot program in February 2022, with plans for a full course that will be available to all schools in the 2022-23 school year. To really make an impact on community-wide harvesting techniques, the younger audience needs to be targeted with those teachings so that they grow up to be respectful harvesters. The Tłıchq Government has collaborated with ENR to have Tłıchq monitors trained to be able to teach the Hunter Education course.

The Tłıchq Government recognizes the need to educate and promote respectful harvesting

and has been doing so with their Ekwò Harvest Monitoring Program. Not only are the Tłıchq monitors monitoring the number of caribou harvested but they are also educating Tłıchq hunters on ENR regulations, acting as a safety net for Tłıchq hunters, assisting Tłıchq hunters in butchering their harvest and also promoting and encouraging respectful harvesting. The Ekwò Harvest Monitoring Program has mostly been focused where the majority of harvest is occurring along the Tibbitt to Contwoyto winter road.

The following are education/public awareness initiatives to promote traditional harvesting methods, improve hunter practices and reduce wounding and wastage:

- ENR’s Hunter Education program for new/young hunters has been developed and will be taught in 2 schools in the Tłıchq region starting in February 2022 as a pilot program.
- The Tłıchq Government and ENR has collaborated in training Tłıchq monitors so that they can teach the Hunter Education program.
- The Tłıchq Government has developed and implemented in the winter of 2021 the Ekwò Harvest Monitoring Program and will continue to run it in the winter of 2022.
- An enhanced social media campaign to share information on caribou conservation is under development.

Table 3 below summarizes the Tłıchq Government and GNWT objectives for increased public engagement and hunter education.

Table 3. Summary of approaches and objectives for increased public engagement and hunter education for caribou in Wek’èezhii.

<b>General Approach</b>	<b>Description &amp; Objective</b>	<b>Lead (Support)</b>
Hunter education	ENR program for young/new hunters, adapted to Tłıchq needs	Tłıchq Government and GNWT
Community meetings	Periodic meetings in each Tłıchq community to discuss and update wildlife management issues and actions	Tłıchq Government and GNWT
Radio programs	When needed, radio announcements, interviews and/or updates on wildlife management in Tłıchq language during winter hunting season (annual)	Tłıchq Government and GNWT
Sight-in-your-rifle programs	Conduct community-based conservation education programs with an objective of 1 workshop / Tłıchq community / year	Tłıchq Government and GNWT (need to coordinate with community directors)
Ekwò Nàxoèhdee K’è and other Traditional Knowledge programs	Highlight the programs and their results with Tłıchq communities and the public (annual)	Tłıchq Government and GNWT
Outreach through websites, social media and traditional	Regular updates on government websites and	Tłıchq Government and GNWT

media.	social media during fall and winter hunting seasons (Facebook & Tłıchq website)	
Poster campaign	Produce posters for distribution in each Tłıchq community: posters to be developed annually as needed	Tłıchq Government and GNWT

## 5. Monitoring and Research

Three aspects of monitoring and research are described in this section: (a) biological monitoring led by ENR in collaboration with co-management partners, (b) an expansion of the Tłıchq Ekwò Nàxoèhdee K'è caribou monitoring from the Bathurst range to the Bluenose-East range, and (c) support for biological or TK research that helps explain changes in caribou abundance.

### (a) Biological monitoring:

In 2019, the WRRB recommended increased monitoring of the Bluenose-East herd, owing to its low numbers and declining trends. The GNWT and the Tłıchq Government propose to continue this more intensive monitoring for the Bluenose-East herd. Although there are positive demographic indicators and the herd appears to have stabilized, the herd remains at relatively low numbers compared to its previous size, and experience with the Bathurst herd from 2012 to 2021 shows that demographic indicators can change quickly. Table 4 lists updated biological monitoring of the Bluenose-East herd, mostly led by the GNWT, proposed for 2022 to 2024. These activities are meant to address most of the key scientific monitoring indicators identified in the BGCTWG Adaptive Management Framework. A key focus of the monitoring is to provide annual information on productivity and survival of caribou calves and adult cows, as well as more frequent surveys to estimate herd size. The monitoring will also assist in assessing effectiveness of wolf management in improving caribou survival rates. In addition to being presented in Table 4, monitoring actions are described below with a brief rationale.

- I. *Population surveys every 2 years:* In 2019, calving photo surveys for the Bluenose-East herd were proposed at a 2-year interval due to continuing decline (WRRB Recommendation #10-2019), with the next survey planned for June 2020. This was not possible given COVID related restrictions and the survey was flown in June 2021, 3 years after the previous one in 2018. Although the herd has stabilized since 2018 and other indicators show positive trends the herd remains at low numbers. We propose taking a cautious approach and continue with a 2-year survey interval.
- II. *Maintain annual collar numbers at 70:* As per WRRB recommendation #13-2019, collar number will be maintained at 70 (50 cows and 20 bulls) through to 2024. This increase provides more reliable annual estimates of cow survival rates, as well as increasing confidence in defining distribution of caribou throughout the year, assigning harvest to herd reliably, and monitoring of herd fidelity to calving grounds. Range use by bulls shows patterns that vary from those of cows, thus maintaining the 20 bull collars used in recent years will also be important. The collars may also assist in determining where and when wolves should be removed as well as in assessing whether wolf management actions are having an effect on the herd.

- III. *Annual composition surveys in June, October and March/April:* These surveys provide annual information on initial productivity of young (June) and the survival rates of calves to the fall (October) and late-winter (March) periods. The fall surveys also provide an estimated bull:cow sex ratio, which is needed for generation of the herd estimate in years of the calving photo survey, and gives an index of bull survival rates. Continued high survival of cows and calves is needed for the herd to recover.

One additional composition survey is proposed on a one-time basis: a composition survey in early/mid-July, to follow a June calving ground composition survey. This would allow for an assessment of calf mortality in the first 4-5 weeks of life, when calving ground predation may be significant. Previously, one composition survey was flown in July 2020 on the Bluenose-East range; the results suggested relatively high calf mortality that year from calving to July, although a June survey that year was not possible due to COVID related travel restrictions.

- IV. *Harvest monitoring:* Accurate reporting of caribou harvest remains a priority for the Bluenose-East caribou herd. The Tłıchq Government will continue to monitor and report on Bluenose-East harvest by Tłıchq harvesters, based on authorization cards and community monitors. ENR hires a community monitor based out of Wekweèti annually who ensures that hunters are abiding by the allocated authorization cards and are not illegally harvesting. In the last two to three years, the majority of Tlıcho harvest of Bluenose-East caribou has occurred in the Wekweèti area. Tłıchq Government developed and implemented their Ekwò Harvest Monitoring Program in the winter of 2021 to monitor the harvest of ekwò by Tłıchq hunters and to help Tłıchq hunters understand the GNWT regulations and discourage disrespectful harvesting. The Tłıchq Government's Ekwò Harvest Monitoring Program has had a focus on the Tibbett to Contwoyto winter road due to the high harvesting efforts made in that area rather than in the historic Bluenose-East range.
- V. *Condition Assessment and Visual Monitoring:* Limited sample numbers have somewhat constrained the reliability of past assessments of trends in condition of harvested Bluenose-East caribou (see Garner 2014). Reliable reporting of caribou condition with adequate sample numbers could improve understanding of the herd's nutritional status and the influence of environmental conditions that are tracked through the drought index, oestrid (warble and bot fly) index and indices of snow conditions on herd condition. Through the Ekwò Harvest Monitoring Program, the Tłıchq Government will develop body condition monitoring methods with experienced harvesters.

(b) Traditional knowledge monitoring on Bluenose-East caribou range:

The Tłıchq Government plans to continue the TK caribou monitoring program Ekwò Nàxoèhdee K'è on the Bluenose-East range. Expansion of the program to the Bluenose-East range started in the summer of 2020. The Tłıchq Government established a basecamp on Deèzàatì (Point Lake), consisting of a cabin and two boats. However, due to few caribou in the area during 2020 and covid travel restrictions in 2021, caribou monitoring has yet to begin. For the fall of 2022, the Tłıchq Government plans to monitor around Deèzàatì using Tłıchq TK methods and assess caribou health and behavior, cow-calf ratio, predator abundance and habitat conditions. The Tłıchq Government plans to continue monitoring the Bluenose-East

caribou during late August and September when herds are more likely to migrate to Deèzàati.

(c) Research on drivers of change in caribou abundance:

Changes in abundance of migratory barren-ground caribou herds like the Bluenose-East herd likely reflect a combination of factors, potentially including underlying natural cycles, weather in all seasons and a changing climate, predation, harvest, and the cumulative effects of development, including exploration camps, roads and other infrastructure. There is a need to better understand predation rates and their significance to caribou, environmental factors affecting caribou condition and population trend, and the effects of climate change on these relationships. A further area of importance is monitoring and research focused on caribou health, parasites and other diseases, and diseases and parasites from the south that may be expanding into the NWT.

The Tłıchǫ Government and the GNWT will continue to support research into underlying drivers of change in herd abundance, predation, parasites and disease by partnering with academic researchers, using scientific and TK approaches. In addition, both governments support Indigenous guardianship and monitoring programs that increase community involvement, first-hand monitoring of caribou, other wildlife and environmental conditions, and co-generation of knowledge.

**Table 4: Biological monitoring of Bluenose-East herd (ENR primary lead).**

Indicator(s)	Rationale	Desired Trend	Adaptive Management Options	How Often	Notes
1. Estimate of breeding cows and extrapolated herd size from calving ground photo survey	Most reliable estimate for abundance of breeding cows and total number of cows & can be extrapolated to herd size based on sex ratio.	Stable or increasing trend in numbers of breeding cows and herd size in 2023	If trend in breeding cows is increasing, consider increasing survey interval to every 3; if trend stable-negative, continue with 2-year interval	Every 2 years	Last survey 2021, next survey in 2023
2. Cow productivity; composition survey on calving ground in spring (June)	Proportion of breeding females in June at peak of calving establishes initial productivity or approximate pregnancy rate.	Proportion of breeding cows at least 80%.	Low ratio indicates poor fecundity and suggests poor nutrition in previous summer; recent high values for Bluenose-East herd suggest increased pregnancy rates.	Annual	Part of calving ground photographic survey. Annual survey to monitor initial productivity, to compare to later calf:cow ratios.
2b. Early summer composition survey (early/mid July)	Assess calf mortality in their first month (4-5 weeks) of life	Calf:cow ratio above 50:100	Data on calf ratios from early summer compared to June calf ratios would indicate the level of mortality that occurs in the calves' first month of life. Assessing the amount and timing of calf mortality would help determine when and whether follow-up monitoring on predation may be useful	July 2022	This survey is planned for July 2022; follow-up monitoring is subject to assessment of results
3. Fall sex ratio and calf:cow ratio; composition survey (October)	Tracks bull:cow ratio and fall calf:cow ratio. Fall calf:cow ratio provides an index of calf survival from birth through initial 4.5 months.	Bull:cow ratio above 30:100; calf:cow ratio consistently more than 40:100.	If bull:cow ratio below target, consider reducing bull harvest. Low fall calf:cow ratios suggest poor calf survival.	Annual	Sex ratio needed for June calving ground extrapolation to herd size. Higher bull:cow ratios 2020 & 2021 suggest higher bull survival.
4. Calf:cow ratio in late winter (March-April); composition survey	Herd can only grow if enough calves are born and survive to one year, i.e., calf recruitment is greater than mortality.	At least 35-40 calves:100 cows on average.	Sustained ratios $\leq$ 30:100, herd likely declining; may re-assess management.	Annual	Calf productivity & survival vary widely year-to-year, affected by several variables, including weather.
5. Caribou condition assessment from harvested animals	Condition assessment provides overall index of nutrition/environmental conditions over time.	High hunter condition scores (average 2.5-3.5 out of 4); target 70 animals/year.	Sustained poor condition suggests unfavourable environmental conditions and possibly decline.	Annual	Sample numbers to date limited (2010-2021). Tłı̨chǫ Government to develop caribou body condition monitoring methods with experienced hunters .
6. Cow survival rate estimated from OLS model and annual	Need survival of 83-86% for stable herd. Increased collar number to 50 cows should	Continuation of at least 85% averaged over 3	If cow survival continues 85%, or better, herd likely stable; if it declines and stays below 80%,	Annual	Population trend highly sensitive to cow survival rate; recovery will depend



survival estimates from collared cows	improve annual estimation.	years to 2025.	decline likely.		on sustained cow survival of at least 85%.
7. Total harvest from this herd by all users groups (numbers & sex ratio)	Accurate tracking of all harvest is essential to management and to knowing whether management actions are effective.	All harvest reported accurately and within agreed-on limits.	Re-assess recommended harvest annually; if herd appears to decline, re-assess harvest limit.	Annual	Multiple factors other than harvest may contribute to decline but harvest is one factors that humans can control.
8. Maintain up to 70 satellite/GPS collars on herd (50 on cows, 20 on bulls)	Collar information is key to reliable surveys, tracking seasonal movements and ranges, monitoring survival and herd fidelity.	Additional collars added every March/April to maintain up to 70 collars on herd.		Annual additions to keep total of 70.	Information from collared caribou is essential to monitoring and management of all North American caribou herds.
9. Wolf Harvest on Bluenose-East herd range	On-going wolf removal program (2 of 5 years complete) on Bluenose-East and Bathurst winter ranges to increase adult and calf caribou survival..	Increased harvest of wolves, evidence of depletion of wolf abundance.	Re-evaluation of wolf removal targets as more information is gained on wolf numbers, ecology and evidence of management effectiveness.	Annual	Herd overlap in winter likely means mixing of wolves associated with those herds and may influence effectiveness of wolf removals.

**Table 5. Monitoring Programs led by Tłı̨chǫ Government for Sahtı Ekwò**

<b>Programs</b>	<b>Indicators</b>	<b>Rationale/Methods</b>	<b>Desired Outcome</b>	<b>Timeframe</b>
<b>Ekwò Nàxoèhdee K'è</b>	Health (body condition and injuries)	Knowing the condition of caribou can give an indication of how well the overall herd is doing and how well they are feeding. When caribou are observed their body condition is rated based on if they are skinny, average or fat.	More fat and average ratings	Annually (July to September)
	Calf Abundance (Calf to Cow Ratio)	An ekwò herd with an average adult female survival rate of 85% would need to have approximately 35 calves per 100 cows in late winter to have a stable population growth rate. Calf abundance in summer would need to be comparatively higher	High confidence and representative sampling of caribou herds based on ground observations. Summer ratios of at least 35-40 calves per 100 cows	Annually (July to September)
	Predator Abundance	Diga, sahcho and nõgha are the main predators of ekwò, if there are high numbers of predators when herds are declining, we know that they are feeding on ekwò and their numbers will not increase.	Low observations/ balanced number of predators	Annually (July to September)
	Habitat (Weather and Vegetation)	Summer weather conditions, including trends in temperature, wind speed and precipitation, have direct and indirect influences on ekwò health and fitness for the coming months of the rut and the long winter migrations. Summer weather influences plant growth and forage quality, which, in turn, influences ekwò nutrition, and body condition and fitness. It is important when we are on the land to observe and assess the vegetation and caribou forage.	Rich, moist soil producing succulent, good quality lichens, grasses, shrubs and dwarf birch	Annually (July to September)
	Insect Activity	Biting and parasitic insects may influence ekwò foraging behavior and activity levels, which in turn may affect body condition and pregnancy rates of ekwò.	Low insect activity is desirable so that ekwò can feed well through the growing season	Annually (July to September)
	Industrial Infrastructure and Activity	Industrial activity can be a sensory disturbance for caribou that can negatively impact animals' ability to rest and feed properly. Industrial infrastructure may negatively impact the herds ability to migrate to seasonal feeding ground and can fragment their seasonal ranges.	No industrial obstacles that fragment habitat, and less industrial activity causing sensory disturbance	Annually (July to September)
<b>Ekwò Harvest Monitoring Program</b>	Harvest Management	Overharvesting may contribute to the decline of many caribou herds; we want to prevent that for caribou and see them become plentiful again. It is important that harvesting is consistent with the WRRB determination for a bull-only TAH and proportional allocation to Tłı̨chǫ communities.	Compliance with WRRB determination for a TAH and proportional allocation of 76 bulls for Tłı̨chǫ	Annually (December to May)
	Health (body condition	Hunters tend to target healthy, fat animals to feed their	Hunter's observations of	Annually (December

	and injuries)	families, it is important to note if ekwò are unhealthy because it could indicate the health of the larger herd.	ekwò with rounded rumps, lots of fat, and good carcass conditions and meat quality.	to May)
	Predator Abundance	We will work with Tłıchǫ hunters and monitors to help track predator observations. Monitoring the relative occurrence of predators seen by hunters and monitors while harvesting caribou helps to understand the ongoing level of predation.	Low sightings of wolves (including wolf-killed caribou) and wolverines	Annually (December to May)
<b>Diga Harvesting Program</b>	Number of diga killed	Increased harvesting of diga decreases their abundance on the landscape and predation on ekwò which gives a better chance for ekwò numbers to recover.	Sustainable amount that allows for the recovery of ekwò	Annually (January to April)
	Ekwò Abundance and Composition	Participants of the Diga Harvesting Program complete questionnaires by ENR and are asked how many ekwò are observed; watching the amount of ekwò can give insight on the interaction and relationship between diga and ekwò.		Annually (January to April)
	Catch-Per-Unit-Effort (CPUE)	Trends in CPUE metrics such as the number of km traveled or hours driven on snow mobile by hunters will be used to assess relative occurrence of diga numbers.	A decrease in CPUE of wolves would be predicted if wolf occurrence (density) has declined because of wolf management actions.	Annually (January to April)

## 5. Consultation

### **Describe any consultation undertaken in preparation of the management proposal and the results of such consultation.**

This section lists a number of key meetings where the GNWT presented results of Bluenose-East calving ground surveys and other monitoring. Discussion and participant comments at these meetings have shaped the proposal. On several occasions, participating organizations were offered individual follow-up meetings.

- On November 9, 2021, GNWT, ENR staff presented results of the June calving ground survey of the Bluenose-East herd at the annual Section 15 meeting (required under the *Wildlife Act*) of NWT organizations responsible for wildlife management (in person/virtual). Meeting notes are available upon request.
- ENR staff presented June 2021 survey and other monitoring results for the Bluenose-East herd from Nov 23-25, 2021 at the (virtual) annual ACCWM caribou herd status meeting. This meeting was attended by representatives from Nunavut, including Kugluktuk, and all the boards making up the ACCWM. A 2022 Action Plan with management recommendations is pending.
- ENR sent a letter via email to all Indigenous Governments on barren-ground caribou survey results on November 29, 2021. The letter offered follow up presentations upon request.
- ENR presented results of the Bluenose-East calving ground surveys to the WRRB on Dec. 7, 2021 (WRRB request).
- The GNWT issued a press release on results of all barren-ground caribou population estimates, including the Bluenose-East and Bathurst calving ground surveys on December 20, 2021. The GNWT website was also updated with the new estimates.
- The ENR Minister met with leadership of the North Slave Métis Alliance on December 15, 2021 where information on Bathurst and Bluenose-East population surveys and management actions were discussed.
- The ENR Minister met with leadership of the Tłı̄chǫ Government on December 17, 2021 where information on Bathurst and Bluenose-East population surveys and management actions were discussed.
- The ENR Minister met separately with leadership of NWT Métis Nation, Łutsel K'e Dene First Nation and Yellowknives Dene First Nation on January 12, 2022 where information on Bathurst and Bluenose-East population surveys and management actions were discussed.
- Meetings in the four Tłı̄chǫ communities are planned for winter 2022 subject to COVID gathering restrictions. These would include the Tłı̄chǫ leaders and senior officials from ENR to talk about the caribou herds and proposed management.
- An in-person meeting and presentation on Bluenose-East and Bathurst caribou surveys and management was requested by the Kugluktuk Hunters and Trappers Organization in December 2021; this meeting was planned for January 2022 and has

been postponed due to COVID travel restrictions.

In addition:

- The Tłı̨chǫ Government, ENR and WRRB staff met periodically in the fall and winter 2021-2022 to discuss status and management of the Bluenose-East, Bathurst and Beverly caribou herds. These 3 groups comprise the Barren-Ground Caribou Technical Working Group, which has been meeting since 2010.
- The Tłı̨chǫ Government and ENR staff began to meet in late November 2021 and continued into December 2021 and January 2022 to develop joint management proposals for the Bluenose-East and Bathurst caribou herds.

## 6. Communications Plan

**Describe the management proposal's communications activities and how the Tłı̨chǫ communities will be informed of the proposal and its results.**

The Tłı̨chǫ Government and GNWT leadership will hold a joint information session in each of the 4 Tłı̨chǫ communities pending COVID travel and gathering restrictions. Emphasis will be placed on visual aids that are easily understood and on hearing from community members.

Table 3 (listed earlier in this proposal) describes approaches and objectives for increased public engagement and hunter education for caribou in Wek'èezhii.

## 7. Relevant Background Supporting Documentation

List or attached separately to the submission all background supporting documentation, including key references, inspection/incident reports and annual project summary reports.

Adamczewski, J., J. Boulanger, B. Croft, T. Davison, Heather Sayine-Crawford, and B. Tracz. 2017. A comparison of calving and post-calving photo-surveys of the Bluenose-East herd of barren-ground caribou in northern Canada in 2010. *Canadian Wildlife Biology and Management* 6(1): 4-30.

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Boulanger, J., J. Adamczewski, J. Nishi, D. Cluff, J. Williams, H. Sayine-Crawford, and L. M. LeClerc. 2019. Estimates of breeding females & adult herd size and analyses of demographics for the Bluenose-East herd of barren-ground caribou: 2018 calving ground photographic survey. Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, Northwest Territories, Canada. Manuscript Report 278.

Clark, K., J. S. Nishi, H. D. Cluff, S. Shiga, S. Behrens, N. Jutha, R. Abernathy, and R. Mulders. 2021. Technical Report Wolf (diga) Management Program January - March 2021. DRAFT Manuscript Report. Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT. 109 pp. + 5 Appendices

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Garner, K. 2014. Tłı̨chǫ Caribou Health and Condition Monitoring Program. Final Report, Department of Culture and

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#### 8. Time Period Requested

**Identify the time period requested for the Board to review and make a determination or provide recommendations on your management proposal.**

Management actions proposed here would apply from July 1, 2022 (start of the harvest season) until July 1, 2024 with the results of the next calving ground photo survey of the Bluenose-East herd expected in 2023. The Tłıchq Government and GNWT suggest that management actions, including harvest management and other actions, be reviewed annually or whenever key additional information is available according to the BGCTWG Adaptive Management Framework (e.g. additional survey information or recommendations from ACCWM or boards).

#### 9. Other Relevant Information

**If required, this space is provided for inclusion of any other relevant project information that was not captured in other sections.**

The Tłıchq Government and GNWT support efforts by the WRRB and other boards, through recommendations and public hearings, to collaborate on management of the Bluenose-East herd and the implementation of the ACCWM Taking Care of Caribou Management Plan and the Délıne Renewable Resources Council community conservation plan, *Belare Wile Gots'è ʔekwé – Caribou for All Time*.

#### 10. Contact Information

**Contact the WRRB office today to discuss your management proposal, to answer your questions, to receive general guidance or to submit your completed management proposal.**

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Wek'èezhii Renewable Resources Board  
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