

Management Proposal

1. Applicant Information	
<p>Project Title: Government of the Northwest Territories Proposal for Harvest Season Extension for Mackenzie Wood Bison</p>	
<p>Contact Person:</p> <p>Karin Clark Manager, Research and Management, Wildlife Management Division Department of Environment & Climate Change (ECC) Government of the Northwest Territories PO Box 1320 Yellowknife, NT. X1A 2R3 Phone: 867-767-9237 ext. 53225 Karin_Clark@gov.nt.ca</p>	
2. Management Proposal Summary	
<p>Start Date: Summer 2023</p>	<p>Projected End Date: Indeterminate</p>
<p>Length:</p>	<p>Project Year ____ of ____</p>
<p>Provide a summary description of your management proposal (350 words or less).</p> <p>Based on a recommendation from the Mackenzie Bison Working Group (MBWG), the Department of Environment and Climate Change (ECC) proposes to extend the current harvest season of the Mackenzie wood bison population to year-round harvest. Current harvest of wood bison in the Mackenzie population is under a bull-only TAH of 40 with a season of September 1st – March 15th. Since the harvest opened in 2021, the TAH has not been filled by harvesters partly due to cold weather and difficult winter travel conditions. The MBWG wished to consider options for increasing the season to support harvesters in filling their tags and addressing food security issues especially in the face of restricted barren-ground caribou harvest.</p> <p>To aid its consideration of the impacts of a season extension on the Mackenzie Wood Bison population, a qualitative biological risk assessment (attached for your reference) was developed by the Tłı̄ch̄q Government and accepted by the MBWG. The MBWG discussed this issue more fully at its August and November 2022 meetings. The MBWG came to consensus in November 2022 to open the bull harvest to year-round and agreed that if a cow harvest is opened that harvest of</p>	

females be open from September 1 – March 31, to protect cows during the calving season and to allow time for calves to become self-sufficient. The MBWG recommendation is consistent with the harvesting plan within the *Mackenzie Bison Management Plan* (the MBMP; attached) and the *Recovery Strategy for Wood Bison* (*Bison bison athabasca*) in the Northwest Territories (the Strategy).

Please list all permits required to conduct proposal.

None

3. Background

Provide information on the affected wildlife species and management issue.

Wood bison existed in what is now the Northwest Territories for millennia (Stephenson et al. 2001) and were in the Great Slave Plain High Boreal and Great Slave Lowland Mid-Boreal ecoregions including present day Wek'èezhìi at least as far north as "Great Marten Lake", in latitude 63° or 64° (presumably now known as Lac la Marte) (Richardson 1829). Bison disappeared from the Mackenzie population's current range sometime in the last 200 years. The population was re-established with the release of 18 bison in 1963. The population increased rapidly for the next 25 years, but its abundance has fluctuated since (Fig. 3, p. 9 of the MBMP).

The MBMP was developed by a working group, which included representatives from the WRRB, Tłı̄chǫ Government, Community Government of Behchokǫ, Deh Gah Got'ie First Nation, Fort Providence Métis Council, Fort Providence Resource Management Board, Hamlet of Fort Providence, North Slave Métis Alliance, Northwest Territories Wildlife Federation, Northwest Territory Métis Nation, Yellowknives Dene First Nation and ECC. The planning process took a collaborative approach and reached decisions about the plan by consensus. The value of the MBWG and the ability of its members to work together became evident early in the planning process when the 2012 anthrax outbreak killed 450 bison and the group recommended to close the harvest using its draft harvest management plan. That harvest management plan became part of the completed MBMP.

Primarily due to the anthrax outbreak, the population declined from 1550 individuals estimated in 2012 to 740 in 2013. In 2016 it was estimated at 851 (95% confidence interval 528-1371, coefficient of variation = 25%). In 2019 the population was estimated at 1468 (95% CI 914-2359, CV = 24%), indicating an average annual population growth rate of 13% since 2013. The MBWG recommended opening harvest with a Total Allowable Harvest (TAH) of 40, bulls only, which was approved by WRRB and implemented by GNWT. This TAH is consistent with the MBMP which recommends an annual total allowable harvest of 1-3% of total estimated population

size, for males only, when the Mackenzie population is estimated between 1000-1500 animals. When harvest re-opened in 2021, the harvest season for Mackenzie wood bison was kept consistent with what had been in place prior to the 2012 closure (September 1st – March 15th).

4. Description of Proposed Management Action

Regulation amendments to the *Big Game Hunting Regulations* are the only change that will be needed. This amendment has been drafted and is also attached for your review.

What are the desired outcomes of the proposed management action?

The desired outcomes of the proposed management action are ease of access for Indigenous and resident harvesters to lawfully harvest Mackenzie bison.

What, if any, outcomes may be incidental to the management action?

The risk assessment in Table 1 lists the possible consequences of opening the harvest season year-round primarily related to increased disturbance. The assessment concluded that any potential increase in disturbance risk to bison cows is offset by limited access (primarily by ATV) throughout the year.

There will be a need for education to ensure all harvesters are aware of the increased opportunities to lawfully harvest wood bison in the area.

What monitoring, if any, will be conducted to assess the effectiveness of the management action?

ECC conducts surveys to detect anthrax outbreaks, to estimate age- and sex- ratios and to estimate population density and abundance. Density and abundance are estimated from aerial surveys using distance sampling (e.g., Buckland et al. 2001. Introduction to Distance Sampling: estimating abundance of biological populations. Oxford Univ. Press), normally at 4-year intervals, but more frequently if the previous estimate was <1000 animals or there has been a catastrophic die-off in the population. Age-and sex-ratios are estimated every summer if possible, but in recent years Mackenzie bison have dispersed from formerly traditional summer habitats and classification estimates have been unreliable due to small sample sizes. Anthrax surveillance takes place annually by fixed-wing aircraft bi-weekly from late June to mid-August.

The MBMP recommends all persons or organizations who receive a tag to harvest a

bison be required to report their harvest to ECC. Consequently, ECC requires mandatory reporting of the harvest.

There have been two full seasons since harvesting was re-opened, Indigenous governments and Indigenous organizations reported on the actual harvest by their members to the MBWG in summer 2022, and have not yet reported on their harvest in 2022-23. ECC reported on harvest by Limited Entry Draw tag holders. The actual harvest in the 2021-22 season was:

- Fort Providence (Deh Gáh Got'ie First Nation and Fort Providence Métis Council): 14/20
- NWT Métis Nation: 2/4
- Tłıchq: 2/4
- North Slave Métis Alliance: 1/4
- Yellowknives Dene First Nation: no report
- Limited Entry Draw: 1/4

ECC suggests that effectiveness and potential benefits and impacts of the season change be assessed by the MBWG during their biannual meetings

5. Rationale for Proposed Management Action

Describe the purpose of your proposal and how it will address the management issue.

One of the goals of the Strategy is to maintain healthy wood bison populations that can sustain on-going harvests for the benefit of all people of the NWT. Harvesting wildlife is a traditional activity and one of the most important ways to connect people to wildlife. Harvesting is critical to the culture and way of life of many people, and is a central aspect of both historic and modern treaties for Indigenous Peoples. Sound harvest management can provide harvesting opportunities to help create and sustain social and cultural connections with bison while still enabling populations to recover and function in their ecological roles.

The season for Mackenzie wood bison harvest is currently September 1 – March 15. No other wood bison populations in the NWT have restricted seasons for harvest but rather have year-round access for harvest opportunities.

During the meeting of the MBWG in April 2022, representatives from Indigenous governments and Indigenous organizations reported that their combined harvest was approximately 50% of the current TAH.

A risk assessment was conducted by the Tłıchq Government for the MBWG to use

as it considered alternatives. In summary, the outcomes were:

- An increase in potential disturbance from year-round hunting is offset by the limited overall access to pursue and hunt Mackenzie bison across its range during the snow-free season. Other than the HWY 3 corridor, there are limited opportunities to hunt Mackenzie bison during spring, summer, and fall when travel by snowmachine is not possible (see Table 1 in Risk Assessment).
- Thus, in comparison to the current fall-winter season, year-round hunting of Mackenzie bison likely presents a presumed small, but unknown increase in potential disturbance to the bison population.
- No other NWT bison populations have a seasonal hunting restriction applied to Indigenous harvesters

Describe alternatives to the proposed management action and reasons for why these were rejected.

One alternative the MBWG considered was a season extension to March 31st or April 15th to allow for hunting into the spring. However, the risk assessment concluded that a one month extension is likely not meaningfully different from the current season.

An alternative is to leave the season unchanged, which may result in harvesters continuing to be unable to fulfill the TAH.

6. Consultation

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

Tłı̨chq̓ Government has provided a letter of support which is attached to the proposal.

ECC has determined that Section 35 consultation with Indigenous governments and Indigenous organizations is not required with submission of this proposal.

7. Communications Plan

Describe the management proposal’s communications activities and how the Tłı̨chq̓ communities and all harvesters will be informed of the proposal and its results.

ECC will work with the members of the MBWG on public education to ensure hunters know about the proposal and its planned implementation.

8. Natural 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. MBMP and Biological Risk Assessment attached
9. Time Period Requested
Identify the time period requested for the Board to review and make a determination or provide recommendations on your management proposal. ECC would like to implement the change for the 2023/24 harvest season if possible.
10. Other Relevant Information
If required, this space is provided for inclusion of any other relevant project information that was not captured in other sections.
11. 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. Jody Pellissey Executive Director Wek'èezhì Renewable Resources Board 102A, 4504 – 49 Avenue Yellowknife, NT X1A 1A7 (867) 873-5740 (867) 873-5743 jpellissey@wrrb.ca