# Bathurst Caribou Range Plan Interim Discussion Document

# WHAT WE HEARD: Summary of Meetings and Written Submissions

October 2017



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# 1 Summary of Comments

In February 2017, the Bathurst Caribou Range Plan (BCRP) Working Group (WG) released its Interim Discussion Document. The Discussion Document outlined progress towards development of a range plan for the Bathurst caribou herd planning area (Figure 1), and presented management options, important considerations and questions for guiding community and decision-maker engagement. Between February and April 2017, with support from WG members, Environment and Natural Resources (ENR) held engagement sessions in several communities and met with 21 groups and agencies. A list of meetings is provided as Appendix 1.

This document summarizes comments received during the engagement period and how they have been addressed in the Draft Range Plan. In addition to discussions held during the engagement sessions, written submissions were received from one individual and 16 organizations representing Aboriginal governments and organizations (AGOs), co-management Boards, industry and non-governmental organizations. A list of groups that provided written comments is provided as Appendix 2.

General perspectives, and specific comments organized by the major themes introduced or discussed in the *Interim Discussion Document*, are summarized and described below and presented individually in Appendix 3. These comments have been incorporated into developing the Draft Bathurst Caribou Range Plan to be released for public engagement in the of Fall 2017/Winter 2018.

The BCRP WG wishes to thank all of the communities, agencies, groups and individuals who participated in the engagement sessions. Your input, perspectives, commitment, and expertise to the Bathurst herd range planning process are greatly appreciated.

Comments and responses from ENR are summarized by theme in the following sections of this report. As mentioned, Appendix 3 contains all written feedback received by ENR, grouped in the same themes.

# 1.1 General Perspectives

Of the comments received many were related to points of clarification and a request for more information. There were also differing opinions on the management approaches presented. With respect to the cumulative disturbance framework some felt that some areas of the range should be in the red or critical zone, others felt the disturbance frameworks were too restrictive. There were also many comments on the scientific modeling and technical analyses.

#### 1.2 Scope of the Range Plan

Comments on the scope of the Range Plan emphasized the importance of clarifying the context of the Range Plan in relation to other management processes, either in place or under development, and presenting the relative contribution of all factors influencing the Bathurst caribou herd. Additionally, comments indicated that more information is needed to substantiate the impacts of human disturbance on caribou and the various factors that were assessed in models and predictions.

In response, the Draft Range Plan is designed to be complementary to traditional laws, harvest restrictions, and other processes such as land use planning. These structures and processes are described in section 2 of the Draft Range Plan. The Technical supporting documents outline the various factors affecting caribou populations and the Draft Range Plan has been updated to be clearer on these factors and that human disturbance is an incremental cumulative effect.

# 1.3 Planning Area

Comments were received that recommended expanding the planning area boundary to the east of Bathurst Inlet and provide information about how the plan will address potential changes to the range.

The planning area boundary was selected based on an annual range derived from the analysis of collared caribou (1996 – 2014), acknowledging that the Bathurst herd once used a larger area including a calving area east of Bathurst Inlet. The WG agreed that the "historic" range should be reflected on all maps in the Range Plan and perhaps best referred to as the range identified through Traditional Knowledge (TK).

# 1.4 Goals and Objectives

The Interim Discussion Document presents the overarching goal for the Range Plan as:

Maintain the Bathurst caribou herd annual range in a resilient landscape condition.

Four objectives were identified to assist in achieving the goal of a resilient landscape condition:

Objective 1 – Maintain the amount of human disturbance below threshold levels.

Objective 2 - Maintain connectivity between seasonal ranges.

Objective 3 – Maintain the integrity of sensitive habitats.

Objective 4 – Manage human access.

Comments suggest the goal of maintaining a resilient landscape condition is widely supported. The concept of finding a balance between economic, social and ecological perspectives received mixed comments. Some suggested that seeking a balance should be the task of Land Use Planning (LUP); others that no balance is required as there is evidence that mining and caribou can co-exist. Some comments suggested that the (economic) value of a diversified economy (to communities, outfitters, and ecotourism) should be emphasized.

In response, the draft BCRP has added text to reflect the importance of continuing dialogue in balancing different interests.

# 1.5 Knowledge sources

The Range Plan process has considered and utilized TK and scientific sources in its technical work and development of management approaches. Comments received on these knowledge sources and how they were used are presented below.

# 1.5.1 Traditional knowledge

To document TK, all AGO WG members were supported and three TK workshops were held, two in 2016 and one in 2017, to share this information and discuss its appropriate use.

Comments on the use of TK in the Discussion Document related to a variety of areas. Perhaps overarching is that TK in the Draft BCRP should use and build on existing and emerging sources including Dene Nation Resolutions related to caribou in addition to ongoing processes (NLUP, Tłąchǫ LUP, Akaitcho).

In response, the draft BCRP has been reframed to incorporate TK and ensure that traditional perspectives and values are taken into account at all stages of decision-making and management.

#### 1.5.2 Scientific information and technical analysis

Comments received on the science and technical information/analyses are presented under the following topics: development scenarios and economic analysis, modeling, Zone of Influence and seasonal ranges.

#### 1.5.2.1 Development scenarios and economic analysis

Comments related to development scenarios and economic analysis suggested different approaches to conducting economic analyses and questioned aspects of the predictions of development scenarios in the discussion documents.

In response, the development scenarios presented in the discussion documents are based on the mining lifecycle from early exploration to closure. A Minerals Task Group comprised of NWT/ Nunavut Chamber of Mines, industry, and GNWT representatives worked to develop plausible scenarios of future development based on publicly available information and expert opinion. These scenarios formed the basis of modeling cumulative impacts to caribou of future development and an economic analysis. The Bureau of Statistics provided advice on the economic multipliers.

#### 1.5.2.2 Modeling

Comments were received that asked for clarification on how the model used in the discussion document was developed, what factors were included, requested additional information and suggested the model be peer reviewed.

The CircumArctic Rangifer Monitoring and Assessment (CARMA) Caribou integrated cumulative effects (CE) model was used as a learning tool to examine the relative contributions of mortality (harvest, predation), environment and land use disturbance to caribou abundance. The model also allowed the population level effects of future development scenarios to be explored along with the implications of cumulative disturbance thresholds. The CE modeling and other technical analyses were discussed extensively at the Technical Workshop held in June 2017. Agreement was reached among the participants on how to improve on the documentation on the model assumptions, key uncertainties, sensitivity analyses, how best to present results and the adaptive management cycle. These areas of agreement can be found in the Technical Workshop summary and are reflected in the Technical Supporting Documents.

#### 1.5.2.3 Zone of Influence

Comments on the Zone of Influence (ZOI) related to how they were calculated and the rationale for including only certain disturbances.

In response, the draft BCRP recognizes that ZOI is not easily or directly measurable, but is rather a subjective way to account for the impact on habitat beyond the direct footprint. As such, ZOIs based on the published and publicly available literature were used. Features assigned a ZOI are those included in the Inventory of Landscape Change database which was derived from the Land and Water Board permit registries. Communities, roads and transmission lines are included in this database.

# 1.5.2.4 Seasonal ranges

Comments on seasonal ranges requested clarification on how the Range Plan will account for seasonal range changes.

In response, the dynamic nature of the range has been incorporated into the draft BCRP. Adaptive management is a key component of the draft BCRP, which will ensure the plan is regularly assessed for its effectiveness.

# 1.6 Range-scale Management Tools and Approaches

#### 1.6.1 Cumulative Disturbance Frameworks

Comments were received requesting how the range assessment area boundaries were set. While the concept of setting thresholds was generally supported, more clarification was requested for what the management responses at each threshold level would be.

In response, the range assessment boundaries were derived using traditional territories, human land use patterns, administrative boundaries, herd range use and habitat conditions. Management responses are broad and varied. They include government-led, community-led, and proponent-led initiatives, and are identified and tied to different levels of disturbance (Desirable, Cautionary, and Critical). They include management or policy-based responses, monitoring, various habitat protection options, as well as proponent-led mitigation and offsetting.

#### 1.6.2 Protected / Conservation Areas

Most comments related to this topic sought clarification on how and when protected/conservation areas would be used. There was also disagreement on the applicability of protected areas in comparison to more flexible tools such as activity guidance (mobile caribou conservation measures (MCCM)). This was especially apparent for calving and post-calving ranges.

In response, identification of sensitive areas/times, including calving grounds and post-calving grounds, water crossings, and land bridges are included as a priority in the plan. The possibly of MCCMs to address vulnerability at certain times of the year has also been included.

#### 1.6.3 Land Use Activity Guidance

Comments regarding land use activity guidance varied from support for no-activity zones, to ensuring recommendations are not too prescriptive to limit adaptive management.

In response, recommendations in the draft BCRP are worded to allow for a combination of options.

#### 1.6.4 Access Management and Planning

Concerns about roads and access fall into categories of disturbance to caribou due to traffic, barriers to movement and collision mortalities versus harvester access to the herd on its winter range.

Both the issues of industrial impact and access management have generally been addressed in the revised plan. Habitat fragmentation, disturbance, industrial access, mitigation measures, and guardianship programs have all been included in the plan. The issue of increased public access has also been included in the plan, but as a topic that requires further discussion.

#### **1.6.5** Fire Management

Comments received on fire management focused mainly on impacts to the range, but also encompassed issues of suppression, fuel management, prescribed burns and re-vegetation.

While fire has been removed from the calculation of total disturbance updating the GNWT values at risk database to include habitat and supporting feasibility studies on management and revegetation are part of the basic management responses for all range assessment areas.

#### 1.7 Implementation

Considering issues of implementation will be critical to the success of the Range Plan. Work has already been done on policy, regulatory and legislative implementation options for the management approaches under consideration. These are presented in the Draft Range Plan. Comments received on issues of implementation include, reporting requirements, adaptability of management responses and the need for a phased and coordinated approach.

Assessment of effectiveness is an important pillar of the Range Plan, and includes a framework for adaptive management and the future development of measures of effectiveness. The five-year review period has been retained, but is considered a minimum. More frequent reviews can be triggered based on a number of factors, including changes in population or with community direction. Reviews will also be automatically triggered whenever a range assessment area moves into the 'Critical' category.

# 1.8 Research, Monitoring and Adaptive Management

Comments related to research, monitoring and adaptive management related to the importance of community-based research and monitoring initiatives. The identification of particular research gaps like the relative importance of certain water crossings, the identification of key migratory corridors and the relationships between different barren-ground caribou herds.

Community guardianship has been included as the first of the management tools in the Range Plan, in the 'Basic' management response category, which is to say that it will be a fundamental tool at all levels of disturbance. Priority areas for research include Zone of Influence, the development of an annual/range-wide range assessment area, impacts associated with non-footprint activities, further identification of important habitats (including estimating importance and sensitivity), wildlife management in the winter range, wildlife response to climate change, participatory community-based research, and community-driven research to repair the relationship between people and caribou.

# 2 Key Directions from Working Group

The WG met in May 2017 to discuss the comments received on the Discussion Document and technical supporting information during the public engagement phase. The project team presented summaries based on major themes, as is presented in the above sections.

Upon deliberation and discussion, the WG provided the following key direction on next steps for incorporating comments into the Draft BCRP.

#### <u>Traditional Knowledge and community perspectives</u>

- Improve documentation of how Traditional Knowledge was used to inform:
  - o Setting the Principles, Goals and Objectives for the Range Plan;
  - o Developing disturbance management thresholds;
  - o Identifying important habitats; and
  - o Developing Range Plan recommendations
- Hold a Traditional Knowledge workshop to discuss with TK holders the Discussion Document, TK related comments and issues.

#### Caribou and habitat Assessment

- More sensitivity analyses should be done on some key model assumptions as well as sensitivity rankings, but no additional population modeling to be done.
- Improve documentation of methods and assumptions.
- Identify key uncertainties, and use these to prioritize recommendations for monitoring, research and adaptive management.
- Hold a Technical workshop with caribou science experts to discuss the Discussion Document, technical analyses and CE modeling to solicit input on a path forward.

#### **Tools and Approaches**

#### Cumulative Disturbance Frameworks

• Improve rationale for setting disturbance management thresholds.

- Refine Thresholds based on re-analysis of Seasonal Range sensitivity.
- Full consensus is unlikely, in this case it will be important to document the different perspectives on current range status:
  - o Some say All Red
  - o Some say All Green

#### Protected/Conservation Areas

- Recommend as a tool for protection of priority migration sites (water crossings and land bridges).
- Describe benefit and role of existing Protected Areas (e.g., Tłıcho LUP) and Interim land Withdrawals in the NWT.
- Document the current status of the Draft Nunavut LUP, and BCRP WG member positions.

#### Access Management and Planning

- There are significant challenges in restricting public access. The Draft BCRP will document the issues and what can/cannot be done under current legislation.
- There is consensus support for recommending Guardianship programs, coupled with community-based monitoring.

#### Fire Management

- Continue working with ENR Forest Management Division to document practical approaches to:
  - o Integrating caribou habitat into the values-at-risk system.
  - o Implementing fuels management and restoration.
- Recommend research into:
  - Wildfire effects on caribou.
  - o Importance of fire disturbance relative to other factors.

# 3 Next Steps

At the direction of the WG, two workshops were held to discuss comments received on the Discussion Document and define a path forward, on June 5-6 (Traditional Knowledge) and June 28-29 (science and technical analyses). A Draft BCRP was developed based on the Discussion Document and comments received during meetings, formal submissions and the June workshops. The Draft BCRP will be publicly distributed and a period of public engagement will be held in the Fall of 2017/Winter 2018. It is expected, that a final BCRP will be submitted to GNWT Cabinet by June 2018.

It is the hope of the WG that consensus can be reached on recommendations presented in the BCRP. We will continue to discuss and share knowledge and perspectives on the issues through WG meetings and public engagement periods. If consensus is not reached over the next six months the final BCRP will present the differing perspectives for consideration by decision makers. Overall, the draft BCRP demonstrates it is through implementation of all management approaches that the goal of a resilient range will be achieved.