

A Framework for Boreal Caribou Range Planning

Plain Language Summary



Boreal Caribou Range Planning Framework – Discussion Document – Understanding Approaches

Boreal Caribou Range Plans

What it is

The Boreal Caribou Range Planning Framework will guide the development of regional range plans for boreal caribou across the NWT and will help ensure these plans are consistent with one another. The Framework outlines what factors range plans will consider, how disturbance will be managed, what kinds of actions are recommended for different levels of disturbance, and how those actions will be implemented.

Why

Range plans are recommended under both the national and NWT recovery strategies for boreal caribou. They will demonstrate how natural and human disturbance will be managed to ensure there is adequate habitat across the NWT range to maintain a healthy and sustainable boreal caribou population. The national recovery strategy sets a target of maintaining at least 65% of the range in an undisturbed state. This amount of undisturbed habitat is considered “critical habitat” under the federal *Species at Risk Act*.

Who

Responsibility for management and stewardship of boreal caribou and their habitat is shared amongst wildlife and land management authorities across the NWT.

The GNWT will engage with Indigenous Governments and Organizations, renewable resource boards, land use planning boards, regulatory boards, relevant federal government departments, Yukon government, industry and environmental non-governmental organizations, and the public to review, refine and finalize the Framework before proceeding with the development of regional range plans.

Goal

To outline an approach to developing range plans to ensure there is adequate habitat across the NWT range to maintain a healthy and sustainable population of boreal caribou.

Objectives

- *Caribou conservation*: ensure there is adequate habitat to support a self-sustaining caribou population throughout the range.
- *Compliance with the Species at Risk Act*: help the GNWT demonstrate compliance with the Federal *Species at Risk Act*.
- *Development*: maximize flexibility and predictability for mining, oil and gas, infrastructure and forestry developments into the future.
- *Equity*: share the responsibility for conserving boreal caribou habitat among regions in the NWT fairly by considering the specific opportunities and constraints of each region.
- *Transparency*: support transparent decision making about development proposals.
- *Efficiency and Compatibility*: add minimal burden on government administrators by being as streamlined as possible.

- *Adaptability and Learning Potential*: facilitate learning and flexibility, given the high potential for new information and new learning about caribou, and for changing conditions.

Approaches

- Regional range plans
- Long-term limits and thresholds for disturbance
- A tiered approach to managing habitat disturbance
- Range management actions appropriate for each management class
- Tools for implementation of proposed management actions
- A plan for monitoring, review and revisions
- A timeline for development of regional range plans, starting with the regions that have the highest levels of habitat disturbance.

Regional Range Plans

Given the sheer size of the range and its overlap with several settled and unsettled land claim regions, GNWT proposes to divide the range plan regionally. Separate plans will be developed for the Yukon, Inuvialuit, Gwich'in, Sahtú, Wek'èezhì portions of the range, and one plan for the Southern NWT.

Purpose

- Ensures consistency in range plans across the NWT while allowing for tailoring to regional conditions.

Benefits

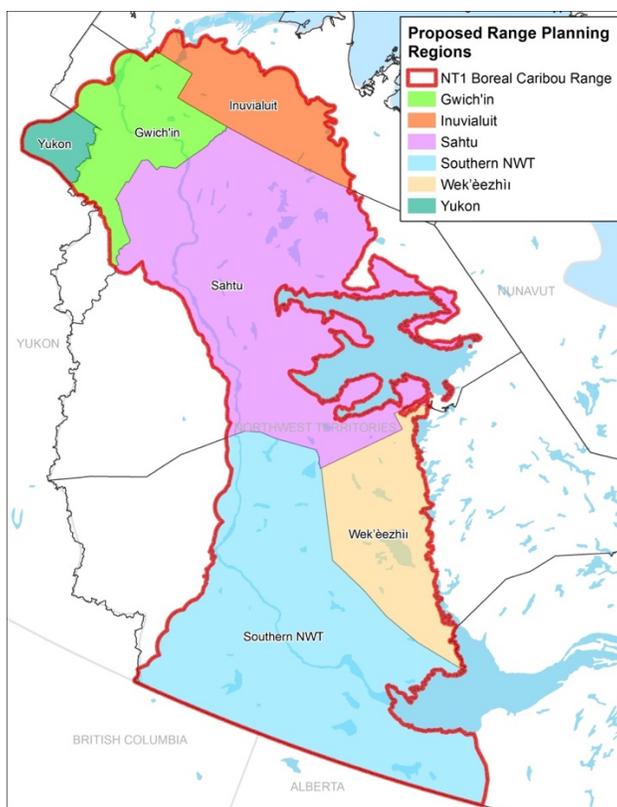
- Acknowledges that there are already established land use plans and regional land and water boards that guide land use decisions in settled land claim regions.
- Allows the range plans to be tailored to the needs and conditions in each region.
- Manages for habitat connectivity across the range to avoid caribou range recession.

Challenges

- Will require time to complete all regional range plans.

Key Questions

- Is the proposed regional division for range plans an appropriate scale for range planning in NWT? Why or why not?
- What additional issues or options could be considered?



Long-term Limits and Thresholds for Disturbance

Each region will have long-term disturbance limits for the combined amount of human development disturbance and natural (fire) disturbance, as well as clear expectations for acceptable amounts of human development disturbance.

Purpose

- To ensure that the 65% undisturbed habitat target (or 35% disturbance limit) defined by the national recovery strategy can be met at the full range scale.
- To ensure that enough undisturbed habitat is kept across the range to support boreal caribou into the future.

Region	Long-term maximum total disturbance limits (%)	Human Disturbance Thresholds (%)		
		Low-Risk	Cautionary	High-Risk
Inuvialuit	12	<9	9-11	>11
Gwich'in	36	<6	6-11	>11
Sahtú	30	<8	8-11	>11
Southern NWT	41	<3	3-11	>11
Wek'èezhì	45	<3	3-11	>12
Yukon	36	<10	10-15	>15
NT1	35	<7	7-11	>11

Long-term total disturbance limits are set for each region to add up to 35% disturbance at the full range scale. Limits are adjusted for each region to accommodate different fire histories and to provide each region with a consistent amount of room for human disturbance (about 10%).

Human disturbance thresholds indicate the likelihood of exceeding the long-term total disturbance limit after accounting for expected variation in fire disturbance.

High-Risk – this level indicates that the amount of human disturbance puts the region at a high risk of exceeding the long-term disturbance limit.
Cautionary – this level indicates that the amount of disturbance in the region will be close to the long-term disturbance limit.
Low-Risk – this level indicates that there is an acceptable amount of human disturbance for that region, with a low risk of exceeding the long-term disturbance limit.

Benefits

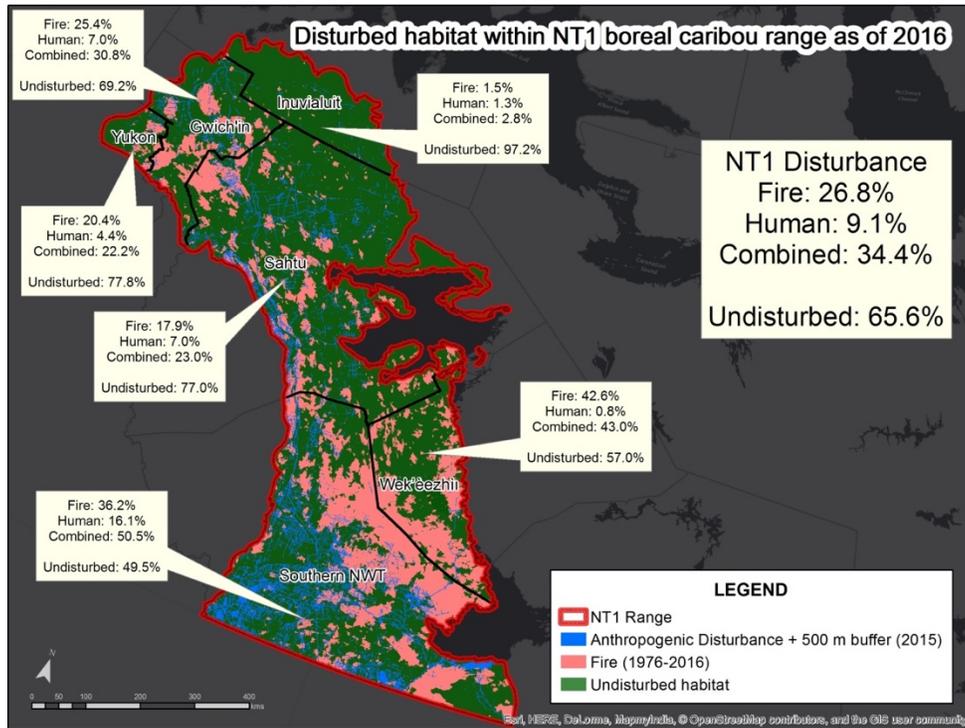
- Is responsive to region-to-region differences in fire history.
- Incorporates a consistent allowance for human disturbance among regions.
- Focuses on managing human-caused disturbance, which we have much greater control over.

Challenges

- The difference in fire histories across the range mean that some regions have disturbance limits that are lower than 35%, and others greater than 35%.
- Uncertainty about the relative impact of the two sources of disturbance on drivers of caribou population trend.
- Some regions are already in the Cautionary threshold for human disturbance, and the Southern NWT is already in the High-Risk threshold.

Key Questions

- Are there other important considerations for promoting an equitable distribution of development opportunity and responsibility for caribou conservation across regions?
- Do you support the proposed concept of defining regional disturbance thresholds for human activities that account for fire? Why or why not? If not, what other issues or options for achieving compliance with the 65% undisturbed habitat management threshold should be considered?
- Do you think the approach should be more or less conservative with respect to managing habitat disturbance? Or is it about right? Why? What other issues or options should be considered?



A tiered approach to managing habitat disturbance

Caribou habitat within the range will be assigned to Basic, Enhanced, and Intensive management class areas. The management classes that are applied in each region, their location, and the proportion of each region assigned to each management class, will depend on the level of human disturbance, maps of relative habitat importance for boreal caribou based traditional, local and scientific knowledge, and existing land protections and development interests. Management actions are proposed for each management class that will address both human and natural (fire) disturbance.

Purpose

- To guide decisions about development and fire management in caribou habitat in times when there is more disturbance and in places that are more important to caribou.
- To guide decisions about how to address human and natural (fire) disturbance in each management class to promote avoidance of undisturbed habitat and ensure that the recovery of disturbed habitat is equal to or greater than the rate of new habitat disturbance in the Enhanced and Intensive classes.

Human disturbance thresholds	Relative importance of an area for Boreal Caribou		
	Low	Medium	High
High-risk	Basic	Enhanced	Intensive
Cautionary	Basic	Enhanced	Enhanced
Low-risk	Basic	Basic	Enhanced

Range management actions that are appropriate for each management class

Management Class	Management Actions	
	Development	Fire
Basic	<ul style="list-style-type: none"> • Encourage use of best practices and guidelines 	<ul style="list-style-type: none"> • Follow existing GNWT Fire Management Policy
Enhanced	Ensure no net loss of undisturbed habitat through: <ul style="list-style-type: none"> • Re-use of disturbed areas • Balancing new habitat disturbance against recovery • Enhanced restoration • Offsets for new permanent disturbance 	<ul style="list-style-type: none"> • Reduce fuel loads in strategic locations • Identify areas of boreal caribou habitat as Values at Risk
Intensive	Same as Enhanced, <u>plus</u> : <ul style="list-style-type: none"> • Higher offsetting ratios • Stricter requirements for re-use of disturbed areas and habitat restoration 	Same as Enhanced, <u>plus</u> : <ul style="list-style-type: none"> • Assess feasibility of re-seeding or re-planting burns

Benefits

- Leaves greater flexibility for development during times when the human disturbance footprint in a region is below the Low-Risk or Cautionary threshold.
- More stringent management actions are used in areas that are of higher importance for boreal caribou, which will protect important habitat.
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Challenges

- May have an impact on the potential opportunity for economic development when regions are above the Cautionary and High-risk thresholds.
- May impose increased costs in terms of the requirements for mitigation.
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Key Questions

- The framework proposes a menu of management actions, with specific actions selected/defined at the regional range planning stage. Does this strike a good balance between protection and flexibility? Should it be more/less prescriptive? Why?
- What other management actions might be appropriate in each class?
- The proposed intent is to improve range condition and achieve no net loss of undisturbed habitat in Enhanced and Intensive management classes. Do you support that as a goal?
- What are the opportunities and challenges for the use of offsets to achieve the goal of no net loss of undisturbed habitat?

Tools for implementation of proposed management actions

Range Plans produced under this Framework need to have policy and regulation that support actually using the Range Plans to guide decisions.

Purpose

- Identify available regulatory and policy tool that provide strong support to implement the Range Plans. The preliminary list includes:
 - a GNWT Range Plan Policy to consider range plans in departmental decision making,
 - habitat protection, conservation areas, and Wildlife Management and Monitoring Plans under the Wildlife Act,
 - habitat designations and habitat conservation under the Species at Risk (NWT) Act,
 - considering range plans at different entry points into the issuance of oil and gas rights,
 - considering protection of important areas under the Forest Fire Management Policy, and under the Forest Management Act,
 - Integrating range plans in the development and amendment of Land Use Plans,
 - Federal direction to Land and Water Boards and the Review Board under the Mackenzie Valley Resource Management Act (MVRMA).

Benefits

- The Framework is designed to be administratively efficient to implement, by fitting cleanly within the existing integrated system of land use planning, environmental impact assessment, regulatory approvals and cumulative impact monitoring.
- The Framework is also designed to reduce administrative burden by relying, where possible, on existing policy and legislation.

Challenges

- While it may ultimately be most efficient to integrate range plans with regional land use plans, this process could take many years to complete.

Key Questions

- Do you have any input on which legislative or policy instruments are most appropriate? Why?
- What considerations will be important for effective implementation?

A plan for monitoring, review, and revisions

Each regional range plan will be revised on a 10-year cycle to incorporate new science about caribou, account for new fire and human disturbance and areas that have recovered, and incorporate lessons learned about how to manage caribou habitat. Every five years, a mid-term review will enable managers to make corrections and adjustments if needed in response to unexpected or rapidly changing conditions.

Purpose

- To evaluate whether management actions are achieving the objectives of maintaining or increasing the amount of undisturbed habitat in each region.
- To strike a balance between providing certainty for developers while leaving the opportunity to adjust management actions in response to unexpected changes and new information from monitoring programs.
- To better understand the main factors driving caribou population trends in the NWT – especially the relationship between habitat disturbance and population trend, and use these lessons to guide management actions.

Benefits

- Responsive to new lessons and changing conditions that could affect caribou.
- Revising plans on a 10-year cycle provides greater certainty for developers than more rapid review cycles because the management actions that are required in different areas will remain constant for that period.

Challenges

- Disturbance limits and thresholds are based on historical variation in fire, but fire regimes are expected to change with climate change.

Key Questions

- How can we ensure that range plans are responsive to changes observed through monitoring? Is the proposed timeframe for range plan review and update appropriate?
- Are there other factors that should trigger an earlier review or amendment of a regional range plan?
- How can we ensure effective use of traditional knowledge in monitoring and adaptive management?
- Are there other key questions that should be included in an adaptive management plan?