

Bathurst Caribou Range Plan - Interim Discussion Document

Understanding Approaches



BATHURST CARIBOU RANGE PLAN

WHAT IT IS

The Bathurst Caribou Range Plan is a plan to provide guidance on managing and reducing disturbance to caribou and caribou habitat resulting from human and natural change.



WHY

- In response to concerns regarding the cumulative effects of mineral exploration and development on the Bathurst range

WHO

Indigenous and Northern Affairs Canada - Nunavut
Athabasca Denesuline
Barren-ground Caribou Outfitters Association
Canadian Parks and Wilderness Society
Chamber of Mines - Exploration
Chamber of Mines – Industry
GNWT - Department of Environment and Natural Resources (ENR)
GNWT - Department of Industry, Tourism and Investment (ITI)
GNWT - Department of Lands

Government of Nunavut – Environment
Kitikmeot Inuit Association
Kitikmeot Regional Wildlife Board
Kugluktuk Hunters and Trappers Organization
Łutsel K'e Dene First Nation
North Slave Métis Alliance
Nunavut Tunngavik Incorporated
NWT Métis Nation
NWT Wildlife Federation
Tłı̨chǫ Government
Wek'èezhì Renewable Resources Board
Yellowknives Dene First Nation

GOALS

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

OBJECTIVES

- Maintain the amount of human disturbance below threshold levels.
 - The Bathurst caribou's use of space across its extensive annual range is a key adaptive behaviour.
 - Community members have observed this cyclic use of space since time immemorial.
- Maintain connectivity between seasonal ranges.
 - Conserving caribou migrations requires that connectivity – the ability to move freely between core seasonal ranges – is maintained
- Maintain the integrity of sensitive habitats.
 - Calving and post-calving areas are considered the most sensitive habitats to disturbance followed by summer range areas.
- Manage human access.
 - Construction and use of winter and/or all season roads on the Bathurst caribou range is fundamentally important for economic development of the region because road access facilitates construction and operation of mines. Minimizing disturbance to caribou from roads will be crucial as economic development progresses.

APPROACHES

- Conservation zones
- Cumulative disturbance thresholds
- Access management
- Activity guidelines

CONSERVATION ZONES

Protected or conservation areas can offer legal protection of important migration corridors and sensitive habitats. They can be either permanent—for example, a land use protected area zone—or flexible, such as mobile conservation areas to manage disturbance.

PURPOSE

- Protect important and sensitive habitat from disturbance
- Protect caribou at sensitive times of the year

BENEFITS

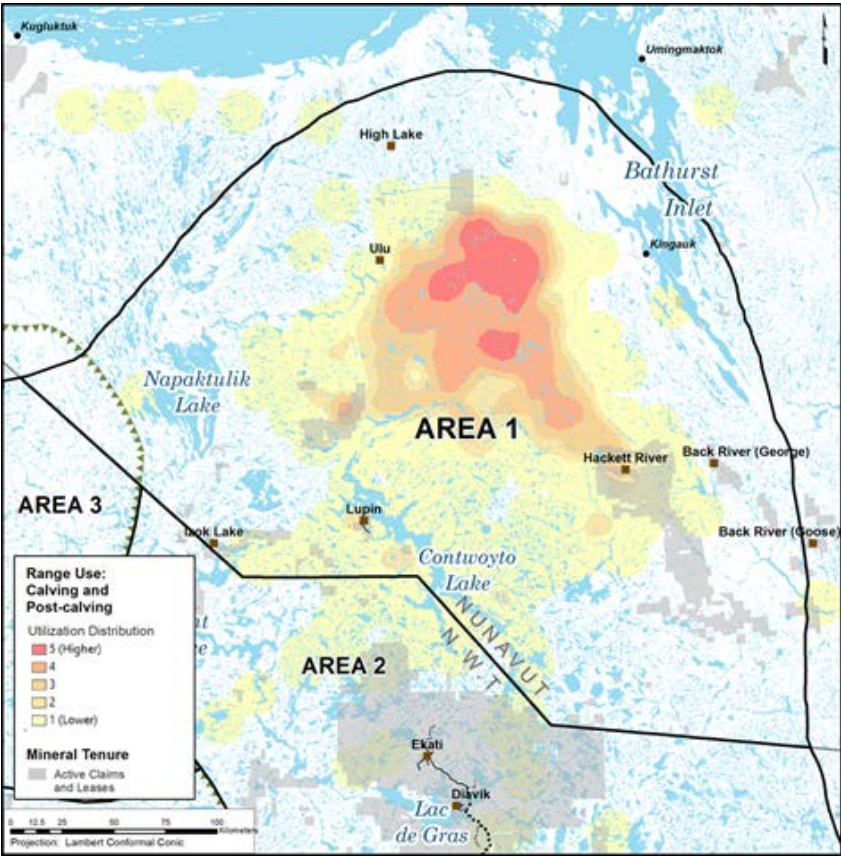
- Prohibit both development and disturbance
- Could protect key cultural sites located at important areas along caribou migration routes

CHALLENGES

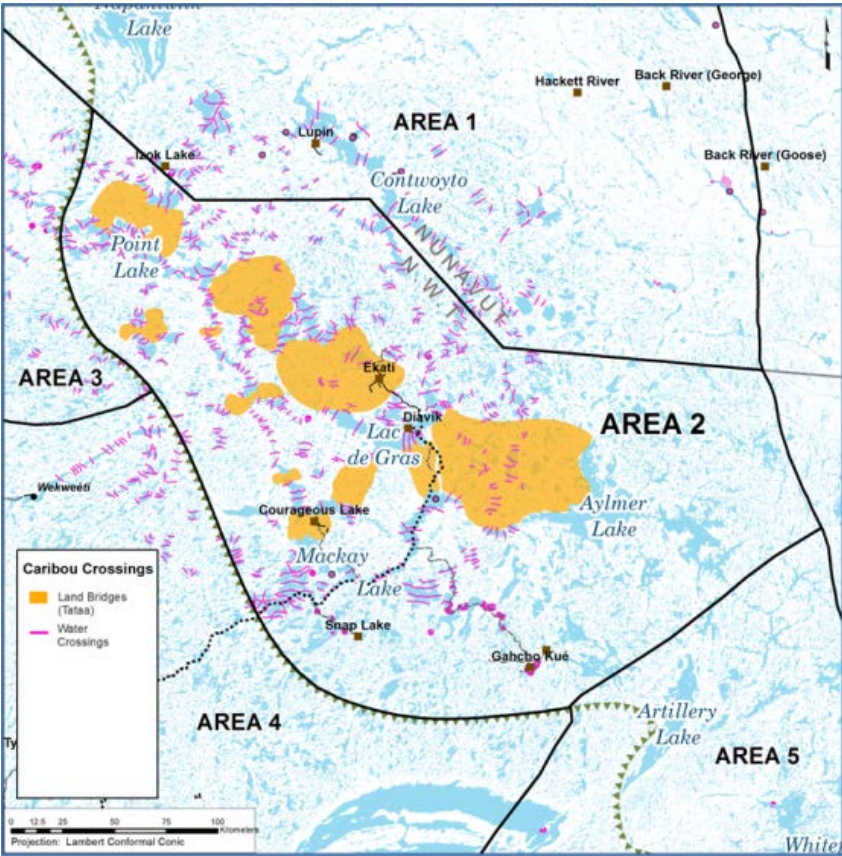
- Caribou may change their use of the area and not use the protected area /conservation zone
- May preclude future economic development or transportation opportunities

WHERE THEY COULD BE USED

- Calving and post-calving areas are considered the most sensitive habitats to disturbance
- Water crossings and land bridges have been identified as important migratory paths.

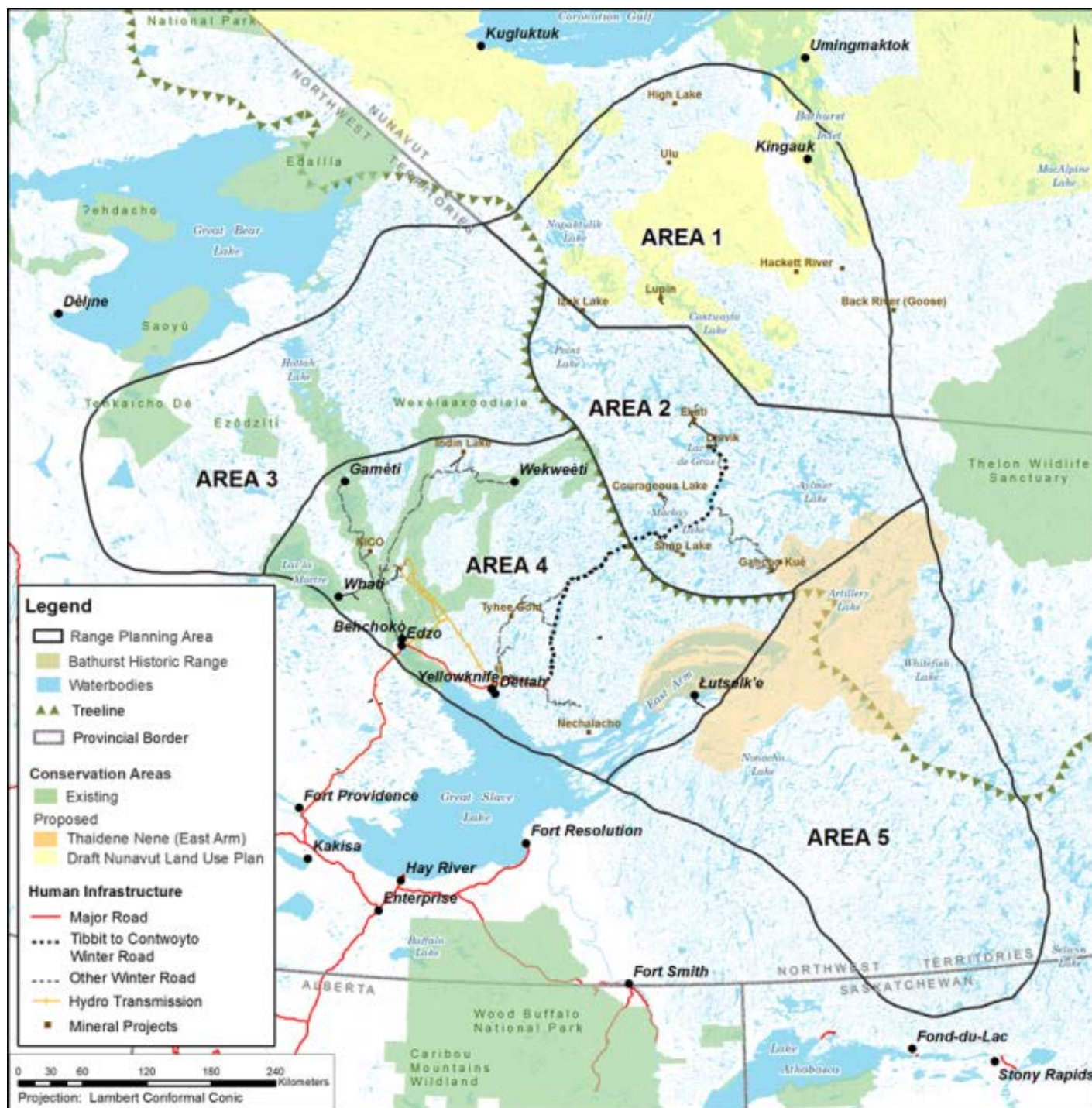


Calving and post-calving grounds



Water crossings and land bridges (from: Tłı̨chǫ Government Traditional Knowledge Study)

WHERE ARE THEY ALREADY BEING USED



Existing and proposed protected areas

KEY QUESTIONS

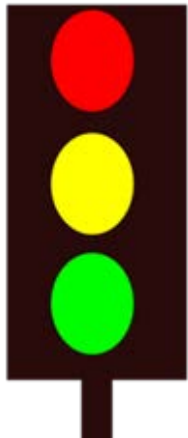
- Should protected areas be established in the calving and post-calving ranges?
- Is it possible to identify locations for protected areas for the summer range, when caribou are mobile?
- Are there areas of winter habitat that should be included in the ENR Fire Values at Risk database?
Where are they?

CUMULATIVE DISTURBANCE THRESHOLDS

One way of helping to maintain sufficient space and habitat for caribou into the future is to manage the total amount of human disturbance across the Bathurst herd’s annual range.

PURPOSE

- Manage the amount of total disturbance
- Adjust management actions to levels of disturbance
- Have more strict management of impacts to caribou, as total amount of disturbance increases (see figure below)



Amount of Disturbance	Action
High	Active disturbances are minimized or removed prior to further development
Moderate	Enhanced mitigation: <ul style="list-style-type: none">• Offset or compensate for all anticipated impacts• Accelerated reclamation• Reduction of zone of influence• Application of new mitigation techniques• Focused research into impact pathways
Low	Best Practices: <ul style="list-style-type: none">• Community based monitoring programs• Maintain key habitats• Minimize disturbance

Green indicates a low level of disturbance; yellow indicates a moderate level of disturbance and red a high level of disturbance. Each colour zone triggers certain mitigation requirements.

BENEFITS

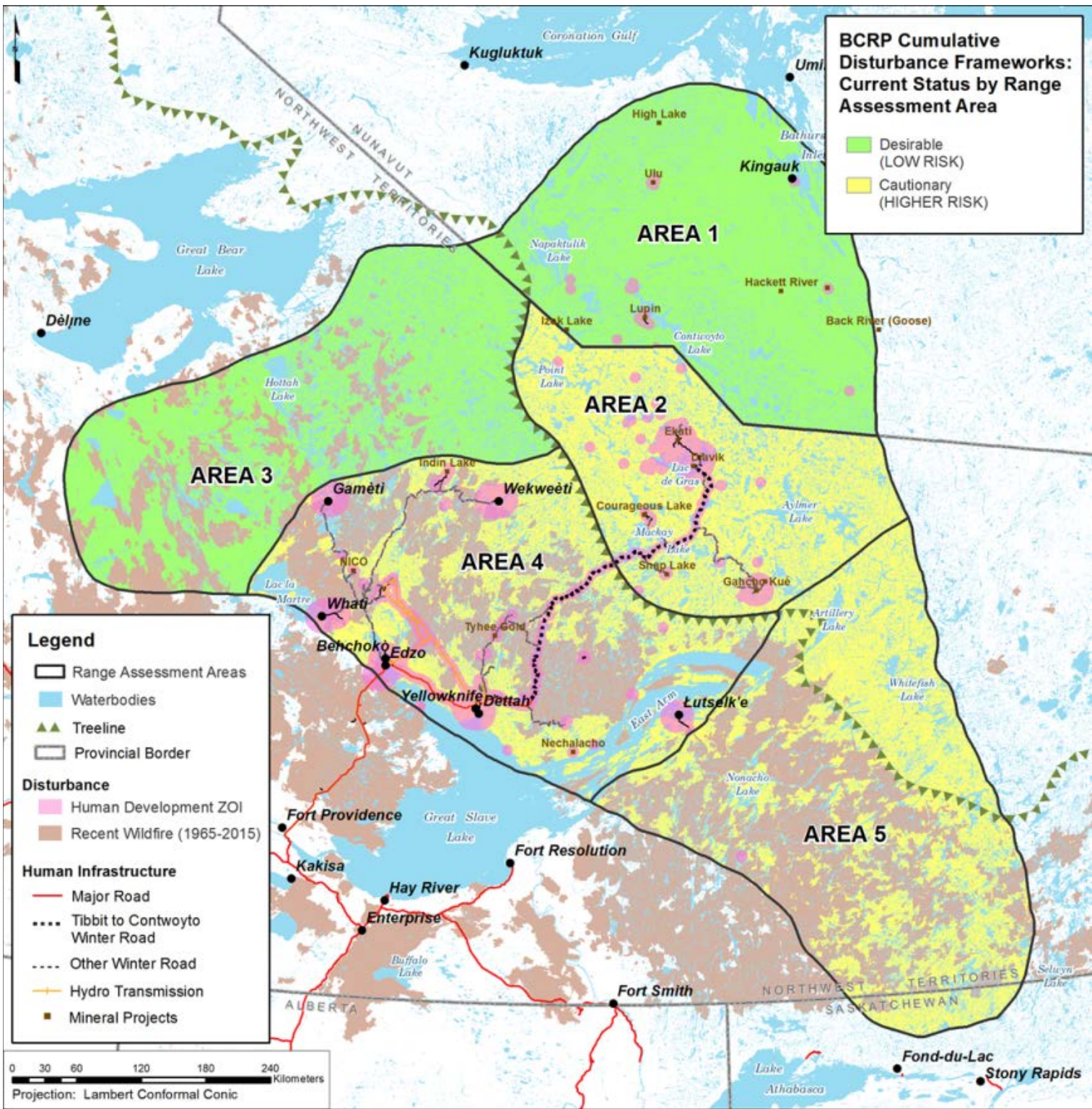
- Improved certainty regarding the types of mitigations that will be required as development increases
- Clarity on the level of development supported at any one time

CHALLENGES

- May have an impact on the potential opportunity for economic development
- May impose increased costs in terms of the requirements for mitigation

WHERE THEY COULD BE USED

- Across the range
- If thresholds are applied as presented in the Discussion Document, the status of the range could look like the figure below:



KEY QUESTIONS

- Can disturbance thresholds provide balance between caribou and economic development?
- Are the management responses in each zone suitable?
- Is wildland fire an important part of disturbance in the forested regions?
- Should wildland fire be incorporated into disturbance thresholds in the forested regions?

ACCESS MANAGEMENT

New road access has many economic benefits, however it often has unintended consequences for caribou. These are:

- Disturbance from road traffic
- Increased harvest opportunities—that is, when harvest is reinstated for the Bathurst herd
- Restricting caribou movement from one area to another—habitat fragmentation

PURPOSE

- Access management and planning approaches could address issues such as:
 - construction methods and route orientation to reduce barriers to movement
 - consolidating routes among multiple users to reduce fragmentation
 - using seasonal roads vs. all-season roads to minimize/control the timeframe over which disturbance might occur

BENEFITS

- Winter roads greatly reduce direct habitat disturbance and are generally preferable to all-season roads
- In the tundra, activity on winter roads avoids the period when Bathurst caribou are on the calving and post-calving, and summer ranges

CHALLENGES

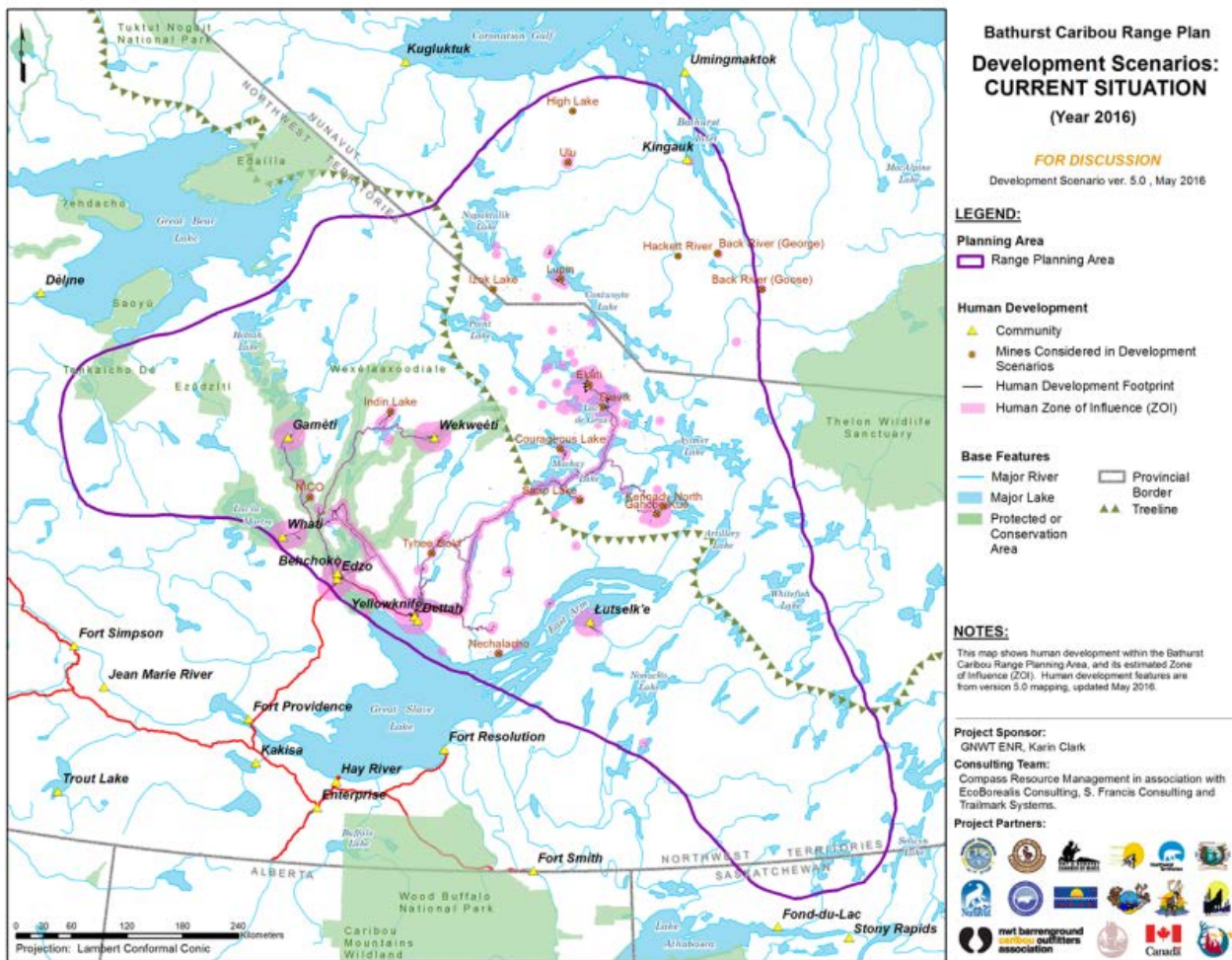
- Once a road is built, it is very difficult to manage people's use of and activities on the road.
- Some types of development may require all-season roads to be economically viable
- winter roads may have a similar impact on caribou on their winter range as all-season roads

WHERE THEY COULD BE USED

- Across the range for all road developments
- Scenarios show a few different versions of what road development could look like in the future

KEY QUESTIONS

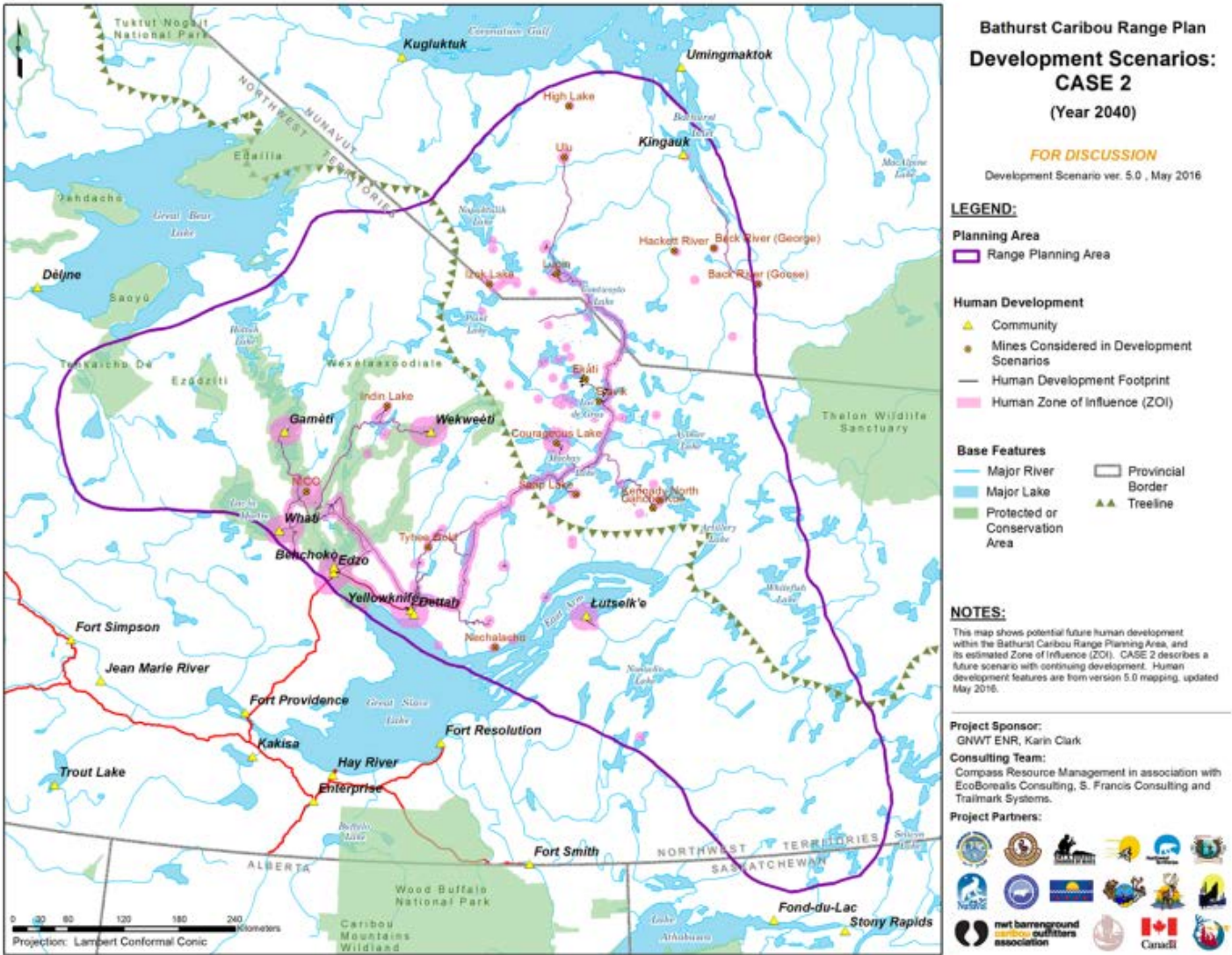
- Could community guardianship be used as an effective access management tool?
- Are winter roads an effective management tool in the Bathurst winter range?
- In times of warmer winters is it realistic to expect winter road use to continue?
- Are other approaches to managing human access possible?



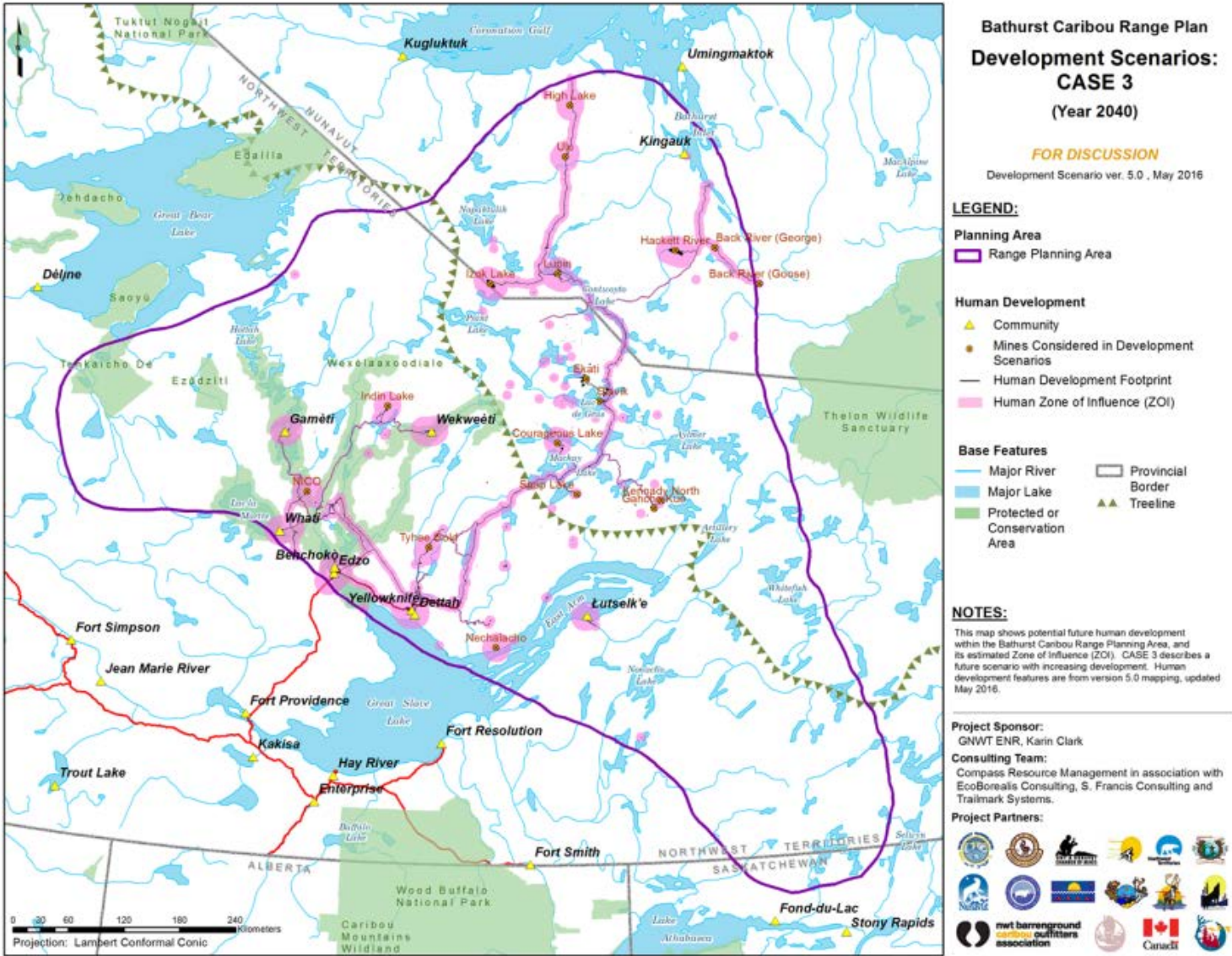
Current activity on the Bathurst range – roads, mines, camps, communities

For more information: <http://www.enr.gov.nt.ca/programs/barren-ground-caribou/bathurst-caribou-range-plan>

To submit comments: Bathurst_rangeplan@gov.nt.ca



Potential future activity on the Bathurst range if development continues in similar manner as in past



Potential future activity on the Bathurst range if development increases as compared to the past

ACTIVITY GUIDELINES

Activity guidelines for industry would specify the conditions when activity needs to shut down or be reduced to protect caribou. These could include:

- Time of year
- Number of caribou nearby
- Distance of caribou to the site
- Sex and age of caribou in group—females, males, yearlings, calves

PURPOSE

- Stop on-site operations or reduce the intensity of activity when caribou enter a certain development area, to reduce impacts to caribou

BENEFITS

- Maintains flexibility for industry because operations are unaffected when caribou are not within the development area
- Directly addresses concern of sensory disturbance to caribou during sensitive time periods
- Supports opportunities for community-based monitoring

CHALLENGES

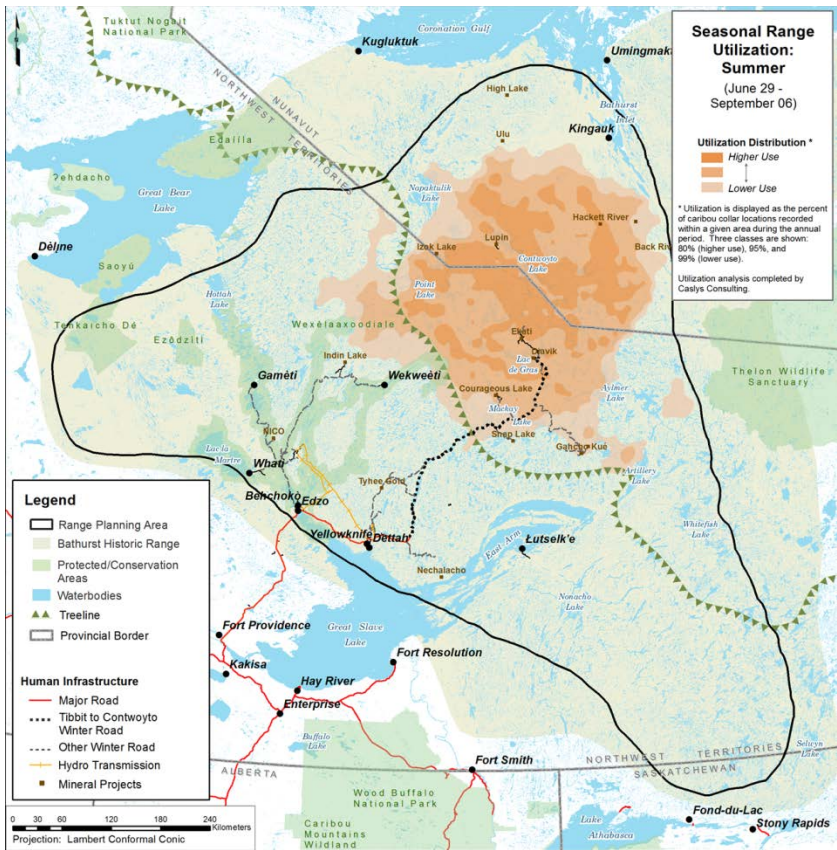
- Requires real-time monitoring of caribou, and therefore can be difficult and costly to implement
- Does not address direct habitat loss or disturbance—for example, construction of roads, mines, location of exploration camps
- Results in unpredictable—and therefore costly—restrictions to work scheduling for industry

WHERE THEY COULD BE USED

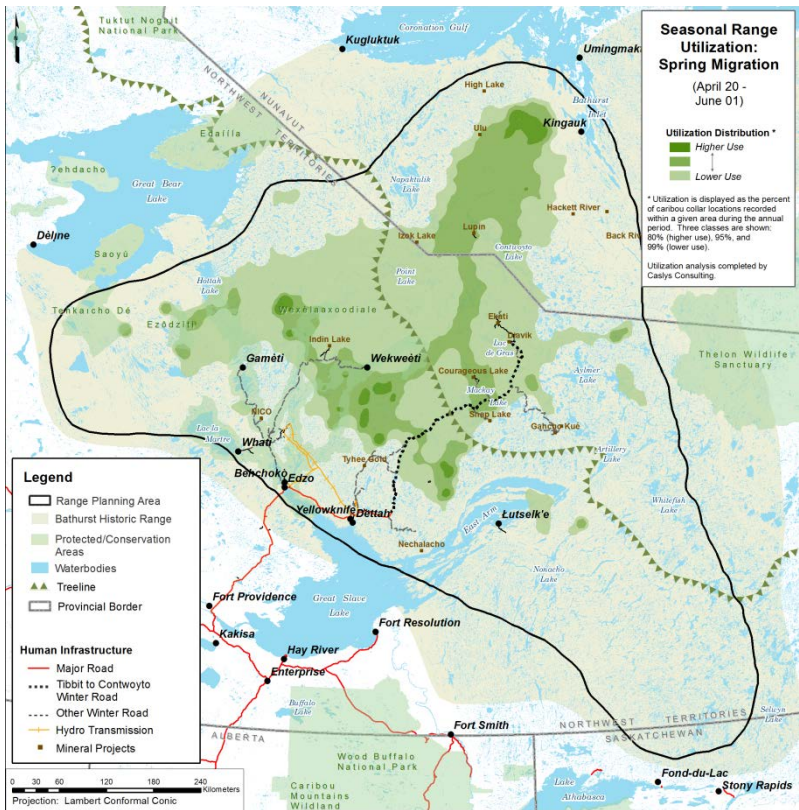
- Calving and post-calving areas are considered the most sensitive habitats to disturbance followed by summer range areas
- Water crossings and land bridges have also been identified as important migratory paths

KEY QUESTIONS

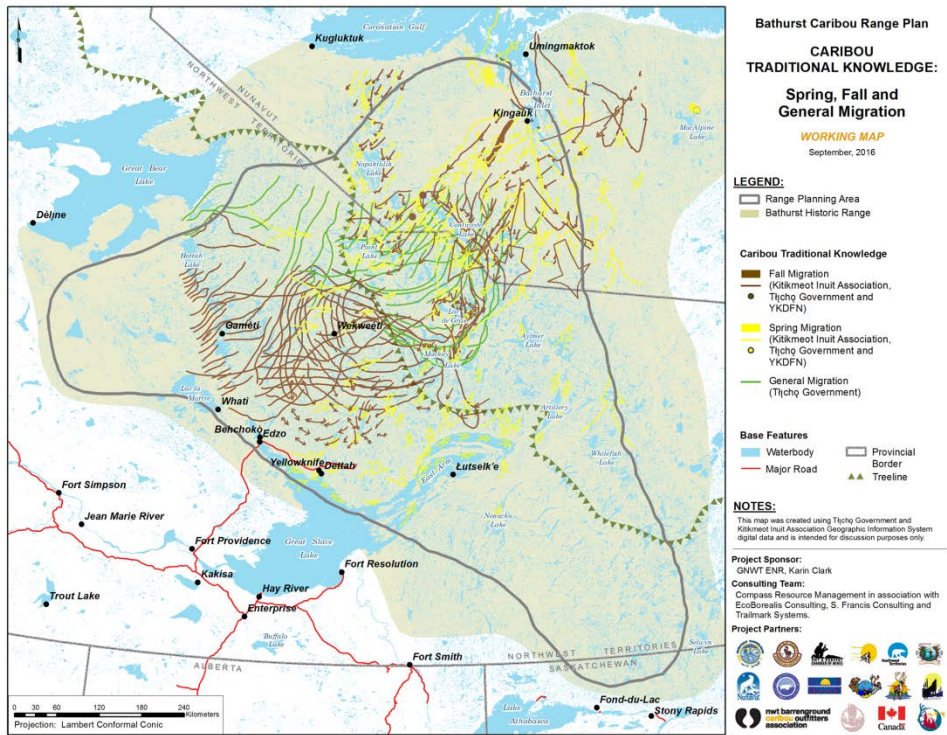
- When is temporary protection of migratory pathways and seasonal ranges appropriate?
- When is one preferred over the other?
- What is an appropriate zone around migratory corridors, water crossings where caribou should not be disturbed?



Summer range



Spring migration



Spring, fall and general migration

For more information: <http://www.enr.gov.nt.ca/programs/barren-ground-caribou/bathurst-caribou-range-plan>

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