

**CONSERVATION AGREEMENT  
FOR THE CONSERVATION OF THE  
BOREAL CARIBOU**

This Conservation Agreement for the conservation of the Boreal Caribou (“Agreement”) is made in quadruplicate as of May 23, 2019 pursuant to sections 10 and 11 of the *Species at Risk Act*, S.C. 2002, c.29 (“SARA”)

**BETWEEN**  
**HER MAJESTY THE QUEEN IN RIGHT OF CANADA,**  
as represented by the Minister of the Environment

(“Canada”)

and

**THE GOVERNMENT OF YUKON,**  
as represented by the Minister of Environment  
and the Minister of Energy, Mines and Resources

(“YG”)

and

**GWICH’IN TRIBAL COUNCIL,**  
as represented by the Grand Chief Bobbie Jo Greenland-Morgan

(“GTC”)

and

**FIRST NATION OF NA-CHO NYAK DUN,**  
as represented by the Chief Simon Mervyn

(“NND”)

(collectively, the “Parties”)

## 1 PREAMBLE

WHEREAS the Government of Yukon has legislative authority under the *Yukon Act*, S.C. 2002, c.7 for the conservation of wildlife and its habitat, including species at risk, and respecting natural resources;

WHEREAS section 189 of the *Wildlife Act*, R.S.Y. 2002, c.229, authorizes the territorial Minister to enter into agreements with the Government of Canada, a Yukon First Nation or other government or person for the purposes of the *Wildlife Act*;

WHEREAS Canada has statutory responsibility for wildlife species located on federal lands and wildlife species listed on Schedule 1 of SARA (“listed wildlife species”), including the authority to address recovery, as well as the protection of listed wildlife species including the individuals, their residences and critical habitat on non-federal land in certain circumstances;

WHEREAS section 10 of SARA provides the federal Minister of the Environment the authority to enter into agreements for the administration of any provision of the Act for which the Minister of the Environment has responsibility, including the preparation and implementation of recovery strategies, action plans and management plans;

WHEREAS section 11 of SARA authorizes the federal Minister of the Environment to enter into conservation agreements with any government in Canada, organization or person to benefit a species at risk or enhance its survival in the wild;

WHEREAS Canada and YG must exercise their respective legislative authority over wildlife and its habitat in Yukon in a manner consistent with the provisions of the First Nation of Nacho Nyak Dun Final Agreement and the Gwich'in Comprehensive Land Claim Agreement;

WHEREAS NND and GTC have, by resolution of each of NND and GTC, authorized their representatives to enter into this Agreement;

WHEREAS the woodland caribou (*Rangifer tarandus*) - Boreal population (“boreal caribou”) is a species that has been listed as “Threatened” under SARA;

WHEREAS the Parties recognize that conservation of boreal caribou, including protection of its critical habitat, is a shared responsibility of the Parties and that it is important for them to work cooperatively and recognizing the value and importance of both the traditional knowledge of NND and GTC and scientific knowledge;

WHEREAS Yukon shares its boreal caribou population (NT1) with Northwest Territories, and there is a need for coordination to meet requirements under SARA to ensure conservation of NT1 and its critical habitat as a whole;

WHEREAS the Parties wish to cooperate in the identification and taking of Conservation Measures to support protection of boreal caribou and their habitat in Yukon;

WHEREAS disturbance of boreal caribou habitat in the Yukon is low, with 20% fire and 4% human disturbance, well below the 35% upper limit in the National Recovery Strategy;

WHEREAS the critical habitat of boreal caribou in the Yukon primarily forms part of the area that is subject to the draft Peel Land Use Plan, and the land use designations therein will support conservation actions that are consistent with the National Recovery Strategy if the Peel Land Use Plan does not substantially change during the consultation period;

WHEREAS there is recognition that other Conservation Measures beyond critical habitat protection may be required to support boreal caribou conservation in Yukon, consistent with the National Recovery Strategy;

WHEREAS there is no documented licensed harvest of boreal caribou in the Yukon;

AND WHEREAS no restrictions on harvesting of boreal caribou, including by Indigenous people, are proposed in this Agreement;

**NOW THEREFORE**, the Parties commit to the following.

## **2 DEFINITIONS**

2.1 In this Agreement, the following terms have the assigned meanings:

“Agreement” means this agreement and all Appendices, as may be amended from time to time;

“Conservation Measures” means the measures identified in Appendix 1 of this Agreement;

“Effective Date” means the date on which the last party to sign this Agreement signed it;

“Federal Action Plan” means the plan set out in *Action Plan for the Woodland Caribou (Rangifer tarandus caribou), Boreal Population, in Canada – Federal Actions*, Environment Canada, 2018, including amendments to the plan published in the SARA public registry;

“Final Agreements” means the First Nation of Nacho Nyak Dun Final Agreement and the Gwich’in Comprehensive Land Claim Agreement;

“Local Population” means the population of boreal caribou that uses the Yukon NT1 range as identified in the National Recovery Strategy;

“Peel Land Use Plan” means the Regional Land Use Plan for the Peel Watershed as approved by the parties to that plan in accordance with the applicable provisions of the Yukon First Nation Final Agreements and Appendix C of the Gwich’in Comprehensive Land Claim Agreement;

“National Recovery Strategy” means the strategy set out in *Recovery Strategy for the Woodland Caribou (Rangifer tarandus caribou), Boreal population, in Canada*, Environment Canada, 2012, including amendments to the strategy published in the SARA public registry;

“Parties” means Canada, YG, GTC and NND collectively, and “Party” means any one of them;

“Self-sustaining” with respect to the Local Population has the same meaning as in the National Recovery Strategy;

“Yukon NT1 Range” means the portion of the NT1 range of the boreal caribou located in Yukon, as described in the National Recovery Strategy; and

“Representative of the Parties” are those persons designated by each of the Parties in accordance with paragraphs 8.1 and 8.2.

### **3 INTERPRETATION**

- 3.1 This Agreement, shall be read collectively and constitutes the whole agreement between the Parties and no oral or written representations on its subject matter are valid unless incorporated into this Agreement.
- 3.2 Schedule 1 of this Agreement describes the current situation of the portion of the NT1 range in Yukon, and its relationship to the draft Peel Land Use Plan. It is attached for information purposes only and does not form part of this Agreement.
- 3.3 This Agreement is not to be interpreted so as to create, diminish or in any manner alter the powers and duties of any Party provided under law, and for greater certainty does not, in any manner, alter the treaty rights of NND or GTC or the Tetlit Gwich'in on Tetlit Gwich'in Yukon Lands, as defined in the Final Agreements.
- 3.4 This Agreement itself may not constitute protection within the meaning of sections 58 or 61 of SARA but plays an important role in setting out the Conservation Measures needed for protection. Any protection or conservation measures proposed in the future would be subject to full consultation with the Parties, and this Agreement does not substitute for those future consultation requirements.
- 3.5 The Parties do not relinquish any jurisdiction, right, power, privilege, prerogative or immunity by virtue of this Agreement.

### **4 GOAL AND PURPOSE**

- 4.1 The overarching goal of this Agreement is to articulate the actions the Parties will take over the next five years to support the conservation of the boreal caribou and to maintain the Self-sustaining status of boreal caribou in Yukon over the long term, in line with the population and distribution objectives, and critical habitat (Yukon NT1 Range) outcomes outlined in the National Recovery Strategy.

### **5 PRINCIPLES**

- 5.1 The following principles shall guide the interpretation and implementation of this Agreement.

- 5.1.1 Build on existing processes including the Peel Land Use Planning process and any other land use plan developed and approved in accordance with the Final Agreements.
- 5.1.2 Collaboration that requires the Parties to work cooperatively and in an open and transparent manner to achieve a common understanding of the measures needed to meet the goal and purpose of this Agreement, including cooperation in the delivery of the Conservation Measures to minimize duplication and maximize efficiency while respecting each Parties' jurisdictional roles and responsibilities.
- 5.1.3 Transparency to the Public by making information related to implementation of Conservation Measures covered by this Agreement available to the public, other governments and other parties with an interest in the conservation of the local population.
- 5.1.4 Results focused to ensure the Self-sustaining status of the Local Population and recognizing the need for and contribution of both habitat and non-habitat measures in achieving that result.
- 5.1.5 Adaptive management that recognizes the need for monitoring the effects of actions taken by the Parties and others that may affect the Local Population and adjusting approaches as necessary to maintain the Self-sustaining status of the Local Population, in line with the National Recovery Strategy.

## ***6 COORDINATION WITH OTHER STRATEGIES, LAND USE PLANS AND ACTION PLANS***

- 6.1 Each Party shall make best efforts, recognizing each Party's capacity, to keep all of the other Parties informed of the timing and content of strategies (including the National Recovery Strategy), plans (including the Federal Action Plan) and policies of that Party that may affect the Local Population or the Yukon NT1 Range, and overall implementation of this Agreement in support of the objectives and efforts to implement the National Recovery Strategy.
- 6.2 For greater certainty, paragraph 6.1 includes finalization and implementation of the Peel Land Use Plan, including related land management regulatory tools that can support critical habitat protection, other recovery strategies that may affect the Local Population, and any planning and implementation documents related to the National Recovery Strategy.
- 6.3 Each Party commits to providing the other Parties with an opportunity for the other Parties to share information that would assist in the preparation of the strategies, land use plans and other planning and action plans that are referenced in paragraph 6.1 and to provide the other Parties with an opportunity to review and comment on drafts of such documents.

## ***7 CONSERVATION MEASURES FOR BOREAL CARIBOU***

- 7.1 The Parties agree that the Conservation Measures listed in Appendix 1 of this Agreement shall be implemented or maintained by each of the identified Parties described as Lead(s) in the Appendix.
- 7.2 The Parties agree that the activities described in Appendix 2 are likely to support conservation and management of the Local Population and may be actioned, pending funding.

## **8 GOVERNANCE**

- 8.1 Each Party shall identify one representative to be responsible for reporting and advising on the actions of that Party to be undertaken to implement this Agreement and to ensure communication, collaboration, and cooperation between the Parties in a timely manner.
- 8.2 The Representatives will identify primary and alternate contacts with respect to the implementation of this Agreement to ensure that communication, cooperation and collaboration between the Parties are clear, timely and effective.
- 8.3 The administration and day-to-day implementation of this Agreement will be carried out on behalf of Canada by officials of the Associate Assistant Deputy Minister of the Canadian Wildlife Service, Environment and Climate Change Canada.
- 8.4 The administration and day-to-day implementation of this Agreement will be carried out on behalf of Yukon by officials of the Assistant Deputy Ministers of Environment and Energy, Mines and Resources.
- 8.5 The administration and day-to-day implementation of this Agreement will be carried out on behalf of GTC by the Chief Operating Officer or their delegate.
- 8.6 The administration and day-to-day implementation of this Agreement will be carried out on behalf of NND by the Manager of Lands and Resources or their delegate.
- 8.7 For the purposes of this Agreement, the representatives from each jurisdiction are:
  - 8.7.1 Canada – The Associate Assistant Deputy Minister of the Canadian Wildlife Service, Environment and Climate Change Canada.
  - 8.7.2 YG – The Assistant Deputy Minister Environmental Sustainability of Environment and the Assistant Deputy Minister Sustainable Resources of Energy, Mines and Resources.
  - 8.7.3 GTC – The Grand Chief of GTC.
  - 8.7.4 NND – The chief of NND.
- 8.8 The Parties shall meet as necessary to review implementation of this Agreement as it affects the boreal caribou local population and its habitat. As a part of this review, the Parties shall review the Conservation Measures listed in Appendix 1 and described in Appendix 2 and recommend changes to the Parties as appropriate.

## **9 INFORMATION SHARING**

- 9.1 The Parties agree, subject to applicable data sharing agreements, or legislative provisions that would prevent them from doing so, to provide the other Party access at no charge to available data and information relevant to the implementation of this Agreement. This includes:
  - 9.1.1 Information on the status and conservation of Yukon NT1 Range and their habitats.
  - 9.1.2 Regular communication of any known changes in Local Population size or trend or habitat condition.

- 9.2 Some data and information may require confidentiality, or may have been obtained with an understanding of confidentiality, for reasons including but not limited to ensuring safe and effective implementation of Conservation Measures. Data and information so identified by a Party, or a collaborator in programs and activities related to this Agreement, will be held confidential by the Parties to the extent permitted by their respective legislation and related policies, procedures, and agreements.

## ***10 FINANCIAL ARRANGEMENTS AND SUPPORT***

- 10.1 The Parties recognize that implementation of this Agreement is subject to their respective appropriations, priorities and budgetary constraints.
- 10.2 Despite paragraph 10.1, recognizing the significant financial investments required to support boreal caribou conservation, the Parties will work together to identify needs, priorities and funding opportunities to support implementation of the Conservation Measures listed in Appendix 1 of this Agreement to achieve the goal and purpose of this Agreement.
- 10.3 It is understood that, should any Party be in a position to provide a financial contribution in the future related in any manner to this Agreement or its implementation, such contribution would be subject to appropriations, priorities, and budgetary constraints of the Parties. It is also understood that any such financial contribution would be the subject of a separate agreement between the Parties.

## ***11 MONITORING AND REPORTING***

- 11.1 The Parties shall monitor and report to each other on the implementation of this Agreement, as well as related caribou Conservation Measures, on an annual basis, to inform both an adaptive management approach and facilitate measurement of progress against the reporting requirements under section 63 and paragraph 126(c) of SARA.
- 11.2 Canada will prepare and issue, annually, a public report on implementation of the activities undertaken as part of this Agreement. YG, NND and GTC will provide input into the report within 60 days of receiving a request from Canada.
- 11.3 Prior to the end of year five of this Agreement, a report on outputs and deliverables in relation to Conservation Measures to date will be produced by the Parties and used to inform discussions on renewal of this Agreement.

## ***12 AGREEMENT DURATION, RENEWAL, AND TERMINATION***

- 12.1 This Agreement will come into effect on the date of the last signature affixed to this Agreement (“Effective Date”) and will remain in force for a term of five (5) years, unless terminated earlier by one of the Parties in accordance with paragraph 12.2 of this Agreement or if the Parties mutually agree to terminate it.
- 12.2 Any Party may terminate this Agreement by giving ninety (90) days written notice of termination to the other Parties provided the dispute resolution process identified in section 14 of this Agreement is unsuccessful in resolving disputes.

- 12.3 The Parties may renew this Agreement or any part of it, and its duration may be extended, with by the written mutual consent of the representative of each Party prior to the expiration of this Agreement.

### ***13 AMENDMENT***

- 13.1 This Agreement may be amended at any time with the consent of Canada, YG, GTC and NND. To be valid, any amendment to this Agreement shall be in writing and signed by all the Parties, while this Agreement is in force.
- 13.2 The signing authorities for the Parties with respect to any written amendments to this Agreement are provided for in paragraph 8.7 of this Agreement.
- 13.3 In particular, the Appendices to this Agreement may be amended in writing from time to time, as required, and automatically incorporated to this Agreement, as amended, by the written consent of the Representatives of the Parties.
- 13.3.1 Further to paragraph 13.3, the Parties will amend, as required, the appendices and schedule once the Peel Land Use Plan is finalized and implemented.
- 13.4 In case of amendments to the National Recovery Strategy, the Parties will consider whether amendments to this Agreement are warranted.

### ***14 DISPUTE RESOLUTION***

- 14.1 If a dispute arises out of, or in connection with this Agreement, including any question regarding its existence, interpretation, validity or termination, the Parties will attempt to resolve the dispute as follows:
- 14.1.1 The primary and alternate contacts identified through paragraph 8.2 will attempt to resolve the dispute through discussions;
- 14.1.2 If discussions in paragraph 14.1.1 do not resolve the dispute, the primary and or alternate contacts will refer the dispute to the Representative of each Party.
- 14.2 However, the Parties intend that nothing in this Article shall affect, alter or modify the rights of the Parties to terminate this Agreement.

### ***15 COUNTERPARTS***

- 15.1 This Agreement may be signed in several counterparts and each counterpart shall constitute an original document. These counterparts taken together shall constitute one and the same Agreement. The Parties agree that executed counterparts may be transmitted electronically and that such counterparts shall be treated as originally executed instruments. Each Party undertakes to provide the others with a copy of the original Agreement bearing actual original signatures within a reasonable period of time following execution of this Agreement.



**IN WITNESS WHEREOF**, the Parties duly authorized representatives have executed this Agreement.

**Government of Canada, Minister of the Environment**

As represented by

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Niall O’Dea  
Associate Assistant Deputy Minister  
Canadian Wildlife Service  
Environment and Climate Change Canada

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Date

**Government of Yukon, Minister of Environment**

As represented by

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Dennis Berry  
Assistant Deputy Minister  
Environmental Sustainability  
Department of Environment

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Date

**Government of Yukon, Minister of Energy, Mines and Resources**

As represented by

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Manon Moreau  
Assistant Deputy Minister  
Sustainable Resources  
Department of Energy, Mines and Resources

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Date

**First Nation of Nacho Nyak Dun,**  
As represented by

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Simon Mervyn  
Chief  
First Nation of Nacho Nyak Dun

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Date

**Gwich'in Tribal Council,**  
As represented by

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Bobbie Jo Greenland-Morgan  
Grand Chief  
Gwich'in Tribal Council

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Date

**APPENDIX 1. CONSERVATION MEASURES TO BE IMPLEMENTED OR MAINTAINED**

Activity	Description	Timeline to completion	Lead(s)
Critical habitat protection	<ul style="list-style-type: none"> <li>• <i>Prohibition of Entry on Certain Lands (Peel Watershed Planning Region) Order</i>, OIC 2015/13, prohibits locating of new quartz or placer mineral claims or prospecting or mining for minerals on new claims (in force and ending on January 1, 2020).</li> <li>• Consultation with Parties by YG prior to any extension, amendment or repeal of OIC.</li> <li>• Adoption of Peel Land Use Plan after consultation and ratification, with land use designations that will support conservation outcomes consistent with the National Recovery Strategy.</li> </ul>	Ongoing	YG
Critical habitat protection	<ul style="list-style-type: none"> <li>• Rights for oil and gas will not be issued under the <i>Oil and Gas Act</i> (Yukon) in the Peel Watershed Planning Area (to January 1, 2020).</li> <li>• Consultation with Parties by YG prior to any extension, amendment or cancellation of this policy.</li> </ul>	Ongoing	YG
Critical habitat protection	<ul style="list-style-type: none"> <li>• All Parties shall exercise any discretion it has in granting an interest in, or authorizing the use of land, water or other resources in conformity with the part of the Peel Watershed Land Use Plan approved by Parties, as appropriate, subject to any limitation stated in the Final Agreements.</li> </ul>	Ongoing	All Parties

## APPENDIX 2. Conservation Measures that May be Implemented

Activity	Description	Lead(s)
Monitoring	FN to share knowledge on boreal caribou to better understand annual changes (habitat use, habitat change, range use, harvest).	NND*, GTC*
Monitoring	Fire risk mapping to better understand probability of fire occurrence and where within the range this occurs. Fire is the dominant disturbance in the range; knowing where and how much will help us understand the likelihood of staying within the disturbance management threshold.	YG*
Monitoring	Collar boreal caribou to better delineate range; identify seasonal ranges; and identify key habitats.	YG*
Monitoring	Aerial surveys to estimate relative density; if repeated over time, surveys may help us understand if relative abundance is changing.  If enough collars are deployed (and if NT deploys collars in northern NT), it may be possible to report on local trends.	YG*
Monitoring	Lichen mapping to identify high priority areas for critical habitat protection.	YG*
Individual protection	Measures to improve chances of caribou survival if declining population trends are detected.	YG, NND, GTC

\*requires funding support from Canada

## SCHEUDLE 1.\*

\*Schedule 1 is non-binding and included in the agreement for information purposes only.

### Boreal caribou in Yukon: background and relationship to the Peel Watershed Regional Land Use Plan

#### 1. National recovery strategy – population and distribution objectives

- Boreal caribou are listed as threatened under the federal *Species at Risk Act*. This listing triggered the need for a recovery strategy for boreal caribou under SARA.
- The National Strategy for the Woodland Caribou (*Rangifer tarandus caribou*), Boreal population, in Canada was released in 2012 (Environment Canada 2012).
- The Strategy identifies 51 local populations of boreal caribou across Canada, including Yukon.

**Yukon shares its population (NT1) with the Northwest Territories (Figure 1).**

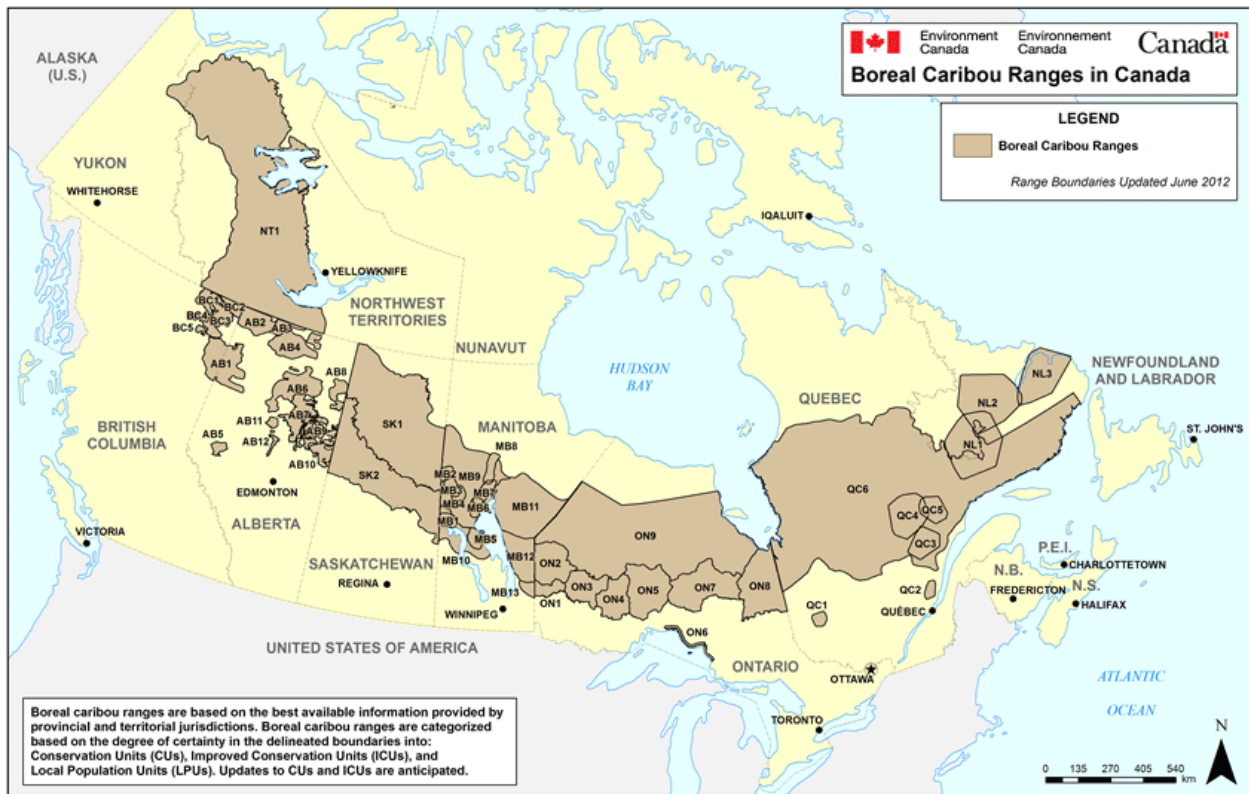


Figure 1. Geographic distribution of the 51 known ranges of boreal caribou in Canada as presented in the 2012 Recovery Strategy (Environment Canada, 2012)

- The Strategy identifies two types of populations, self-sustaining and non self-sustaining, based on individual population and habitat conditions (Figure 2). To the extent possible, the population and distribution objectives for:
  - o Self-sustaining populations (14 out of 51) are to maintain the population and range conditions that continue to support this status. As of 2017, **NT1 is still considered self-**

**sustaining, with an estimated 6,000-7,000 animals in the population** (Environment Canada, 2017).

- Non self-sustaining populations (37 out of 51) are to achieve population stability and a minimum population size of 100 animals; and/or restore or maintain range conditions that support recovery and eventual self-sustaining status.

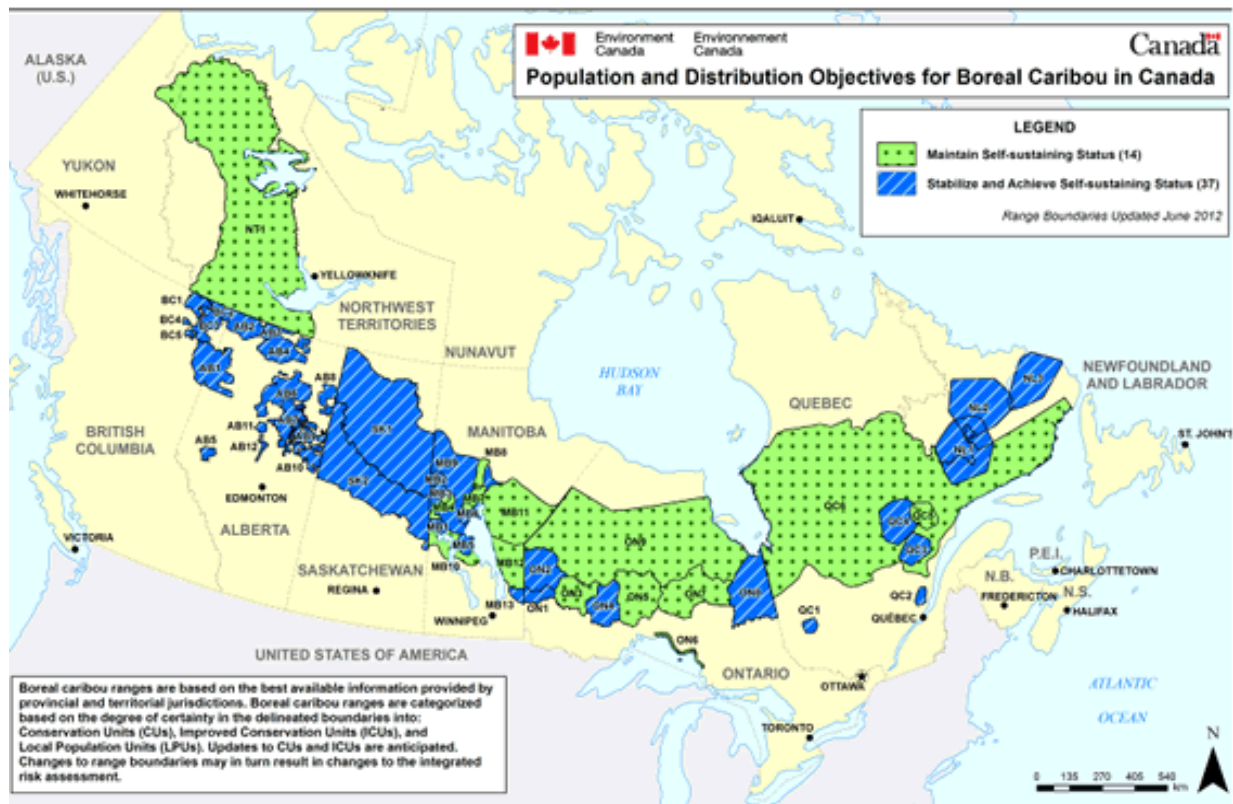


Figure 2. Population and distribution objectives for boreal caribou in Canada (Environment Canada, 2012).

- The primary threat to most boreal caribou populations is unnaturally high predation rates resulting from habitat disturbance (i.e., habitat loss, degradation and fragmentation caused by human activity or fire). These changes can drive up other ungulate populations (moose and deer), resulting in more predators (wolves, bears), which in turn increases incidental predation on boreal caribou.
- The Strategy speaks to what’s needed to minimize these changes through critical habitat protection. Boreal caribou critical habitat is identified as:
  - The area within the boundary of each range that provides an overall ecological condition that will allow for an ongoing recruitment and retirement cycle of habitat, which maintains a **perpetual state of a minimum of 65% of the area as undisturbed habitat**; and
  - The biophysical attributes required by boreal caribou to carry out life processes.
- Maintaining 65% undisturbed habitat in a range (the disturbance management threshold) will result in a 60% chance a local population will be self-sustaining (Figure 3).

- The **precise location of the 65% undisturbed habitat will vary within the range over time** as boreal caribou range is dynamic (i.e., habitat comes “on” and “off-line” as habitat is disturbed/recovered). This means that static protected areas may not meet critical habitat protection needs over the long term, particularly if there are large fires within the protected area.
- Based on updated information released (Environment and Climate Change Canada, 2017), **NT1 has 65% undisturbed habitat; in the 2012 Strategy, NT1 was reported as having 69% undisturbed habitat (Figure 4).**

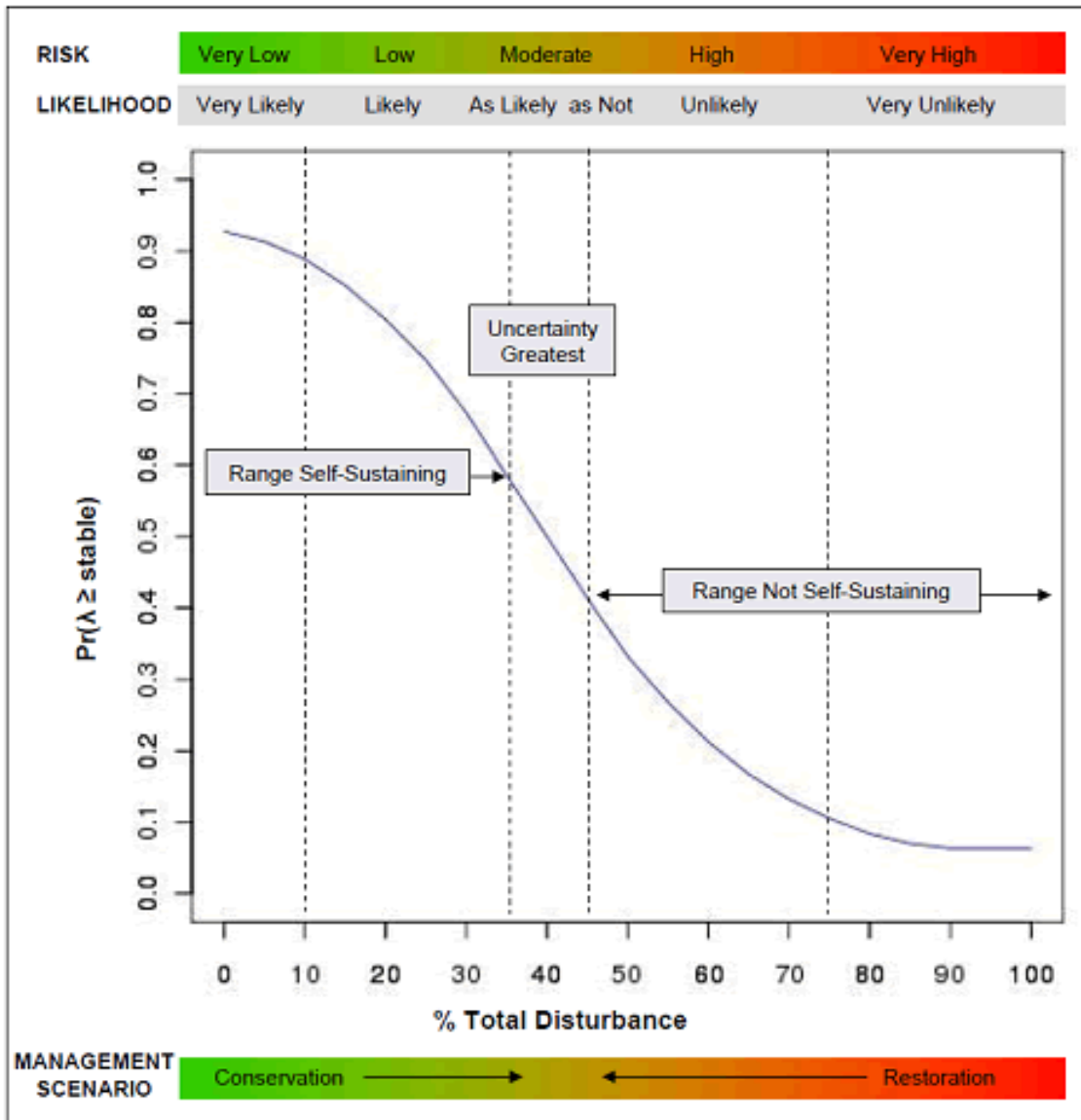


Figure 3. Disturbance management thresholds: the probability of observing stable or positive growth ( $\lambda \geq$  stable) of boreal caribou local populations over a 20-year period at varying levels of total range disturbance (fires  $\leq$  40 years + anthropogenic disturbances buffered by 500 m). Certainty of outcome, ecological risk, and management scenarios are illustrated along a continuum of conditions (Environment Canada, 2011).

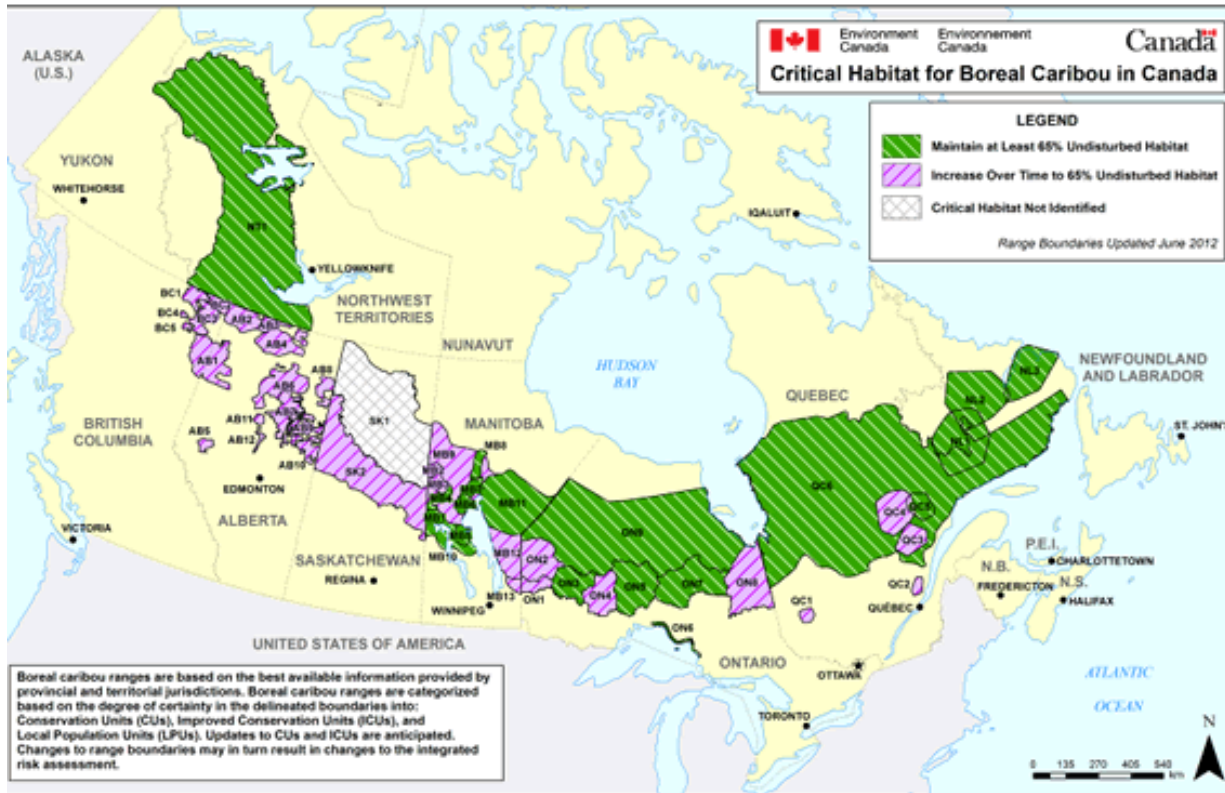


Figure 4. Critical habitat for boreal caribou in Canada (Environment Canada, 2012).

## 2. Population information for Yukon's boreal caribou

- There is no information on boreal caribou population trends for the entire NT1 population, but local information suggests animals in southern NT are declining while animals in northern NT1 are stable or increasing. **Yukon's boreal caribou are found in the northern portion of NT1.**
- **Fewer than 100 boreal caribou are believed to be in Yukon** at any given time (between 1-2% of the NT1 population); most of the NT1 population is in the Northwest Territories.
- The distribution and abundance of predators (wolves, bears), ungulates (moose), and other prey (beavers) in Yukon's boreal caribou range is unknown.

## 3. Range and distribution

- ~2% of NT1's range is found within Yukon (approximately 8,983 km<sup>2</sup>), specifically the north-east portion of the Peel watershed region (Figure 5). The range is found within the area that is slated for management under the Peel Watershed Land Use Plan ("the Peel Plan") (Peel Watershed Planning Commission, 2011), once it is finalized and implemented.
- The range is based on Canada's analysis of boreal caribou collar data from a study GNWT conducted in the "Gwich'in-south" area in the mid 2000s. Some of the collared animals were found in Yukon. When interviewed about boreal caribou distribution, Gwich'in hunters and elders indicated they had not observed boreal caribou outside the range defined by Environment Canada (Gwich'in Social and Cultural Institute, 2011).



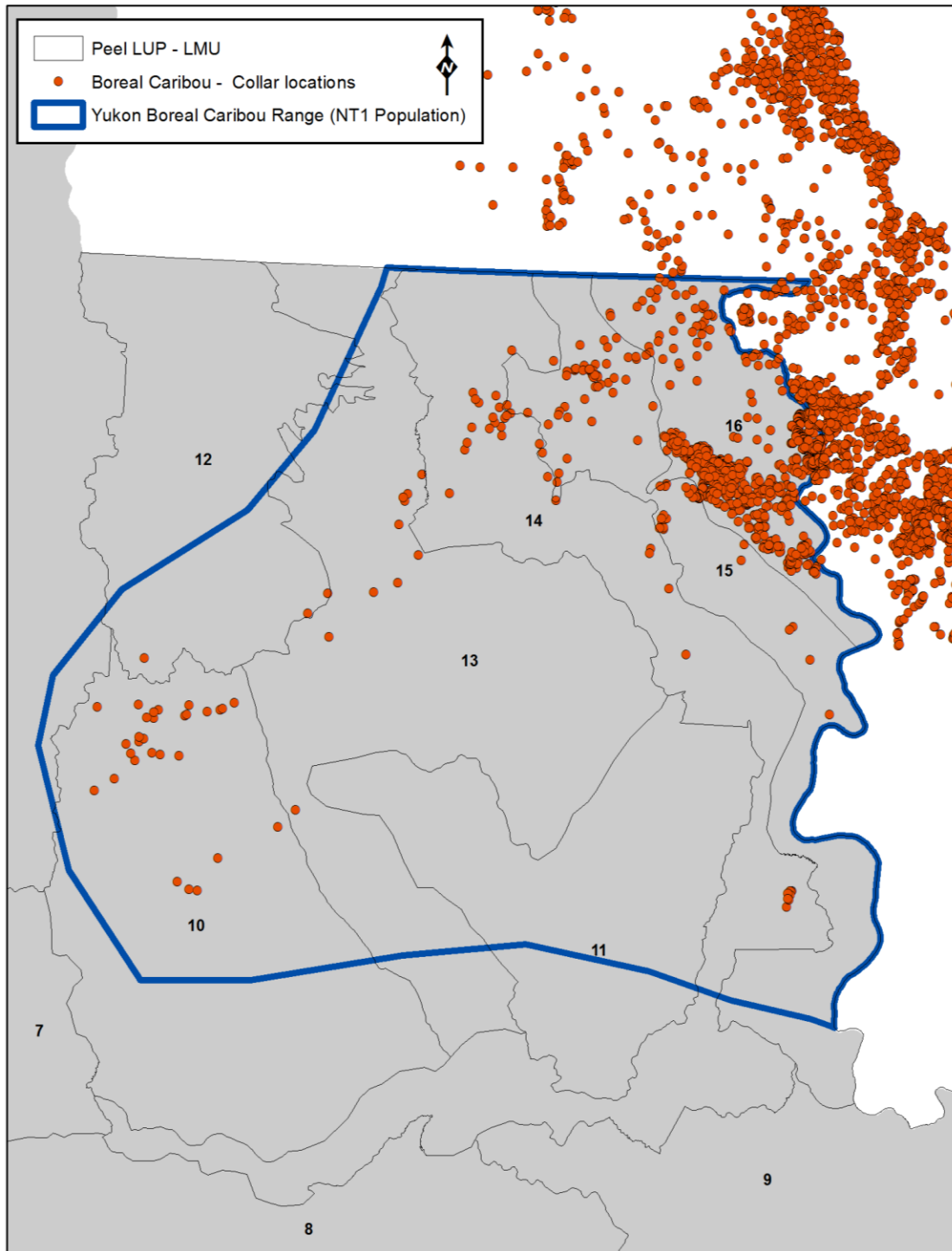


Figure 5. Boreal caribou range in Yukon, as determined by Environment Canada's analysis of existing boreal caribou collar location data. LUP = Land Use Plan; LMU = Land Management Unit.

#### 4. Disturbance

- 35% of the habitat in NT1's range is disturbed: 28% by fire and 9% by human activity, some of which overlap. Overlapping disturbances are only counted once when adding up total disturbance.

- **Within Yukon’s portion of NT1, 24% of boreal caribou range is disturbed: 20% by fire and 4% by human activity** (based on 2015 information provided by Environment and Climate Change Canada) (Table 1). This is below the 35% disturbance management strategy identified in the Recovery Strategy.
- NT and Yukon are not currently undertaking joint planning for the NT1 population (a result of different jurisdictional processes) but it is possible a joint approach will be taken in the future.

Table 1. Current area and percent of human and natural disturbance in Yukon’s boreal caribou range (based on 2015 data from Environment Canada)

Measure	Area (km <sup>2</sup> )	%
Total size of Yukon portion of NT1 range	8,983	
Burns ≤ 40 years	1,800	20.0
Anthropogenic (human) disturbance	349	3.9
Total disturbance	2,149	23.9

- In the Recovery Strategy, habitat is considered disturbed if a fire has occurred within the last 40 years and/or if human disturbance (seismic lines, roads, etc.) are visible on a Landsat 1:50,000 image (Figure 6). Boreal caribou are known to avoid human disturbances (i.e., use areas around the disturbances less than expected by chance). To account for this loss of functional habitat, human disturbance is also buffered by 500 m (Figure 7).
- No work has been done in Yukon’s range to examine the specific impact of habitat change on boreal caribou predation or local population stability.
- Based on Government of Yukon’s finer scale information, there is additional disturbance in boreal caribou range not tracked by Environment and Climate Change Canada, including additional oil and gas and mining activity (Figures 8-10).
- Future development activity in boreal caribou range is expected to be low, based on land use thresholds for current landscape management units identified in the draft Peel Plan (Peel Watershed Planning Commission, 2011).
- Government of Yukon has implemented the following measures to protect boreal caribou critical habitat until the Plan is finalized and implemented:
  - o Pursuant to section 98 of the *Placer Mining Act* (PMA) and section 15 of the *Quartz Mining Act* (QMA), Government of Yukon has prohibited the staking of new mineral claims in the planning area. This withdrawal has since been extended until January 1, 2020.
  - o Pursuant to subsection 57(1) of the QMA, persons holding quartz-mining claims in the planning area have been given relief until January 1, 2020 from their statutory obligation to carry out some mining activity (i.e., annual assessment work).
  - o Under ministerial discretion, Government of Yukon has suspended the issuance of new oil and gas rights within the planning area. There is no termination date for this suspension and the intent is that it remains in place until the Peel Planning process is completed.

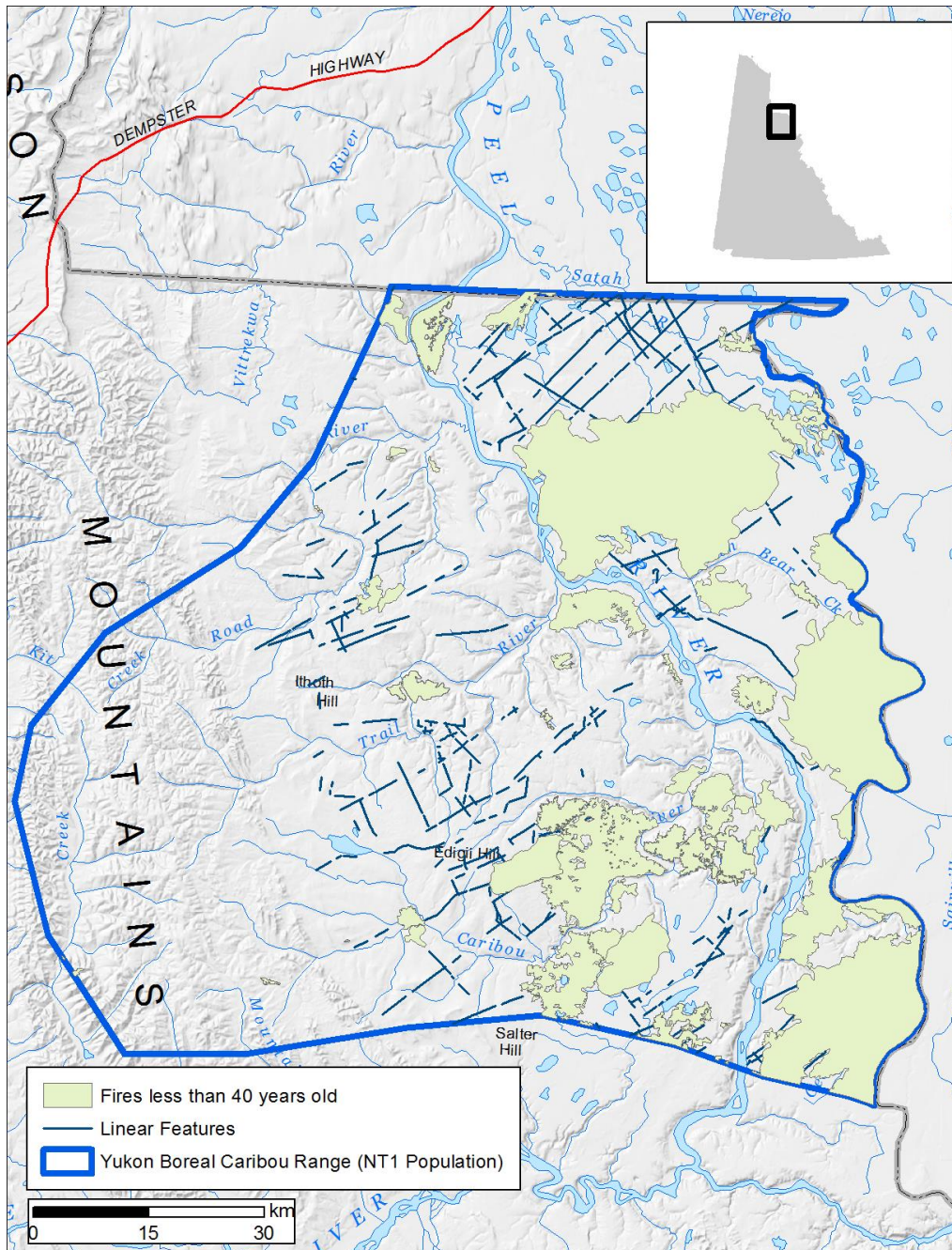


Figure 6. Fire and human disturbance (linear features) based on Environment and Climate Change Canada’s definition of disturbed habitat. Note that human disturbance is not buffered by 500 m in this figure.

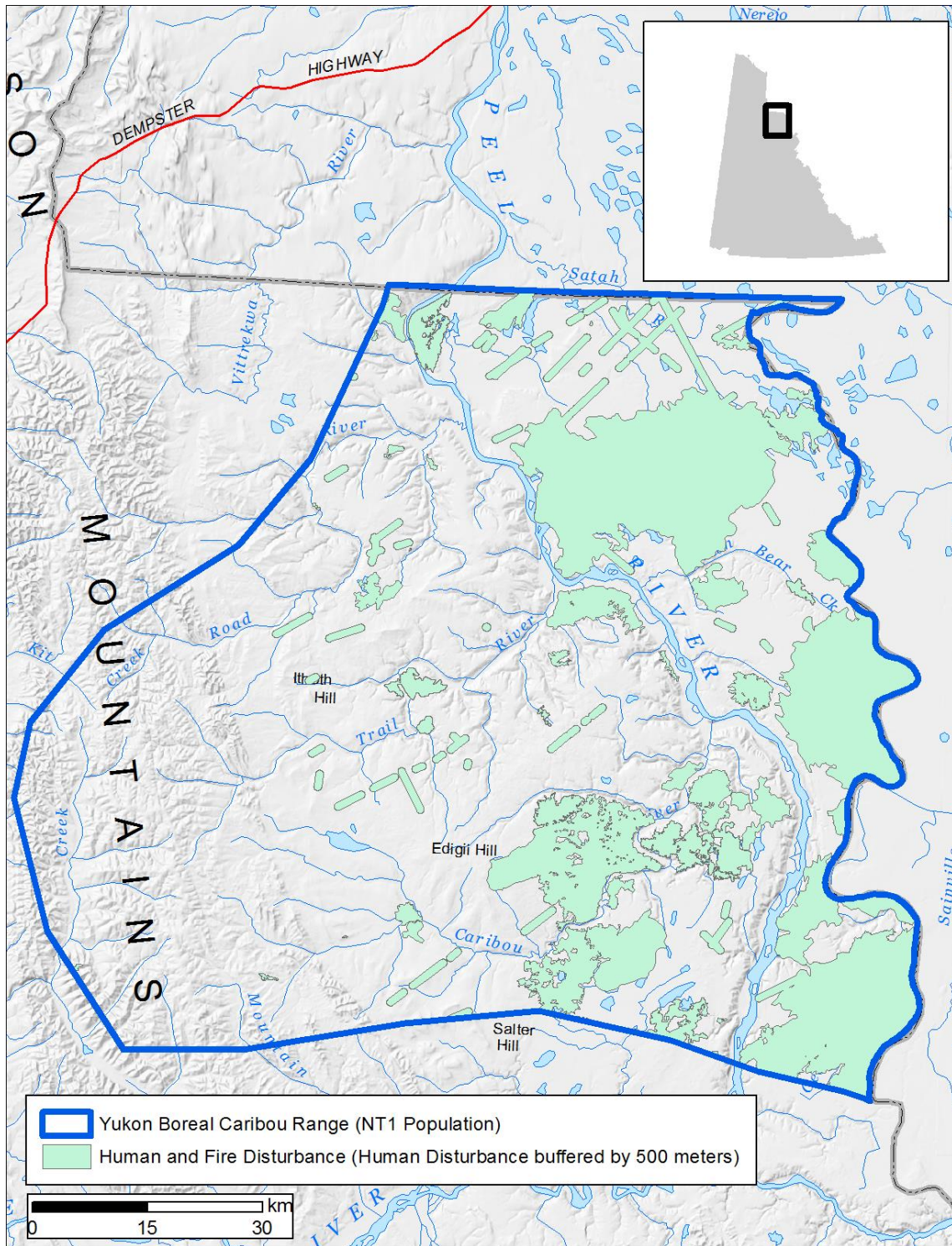


Figure 7. Total disturbance in Yukon’s boreal caribou range based on Environment and Climate Change Canada’s definition of disturbed habitat. Human disturbance is buffered by 500 m in this figure to account for caribou using areas around human disturbance less than expected. This is the information Environment and Climate Change Canada uses to calculate overall disturbance in different boreal caribou ranges.

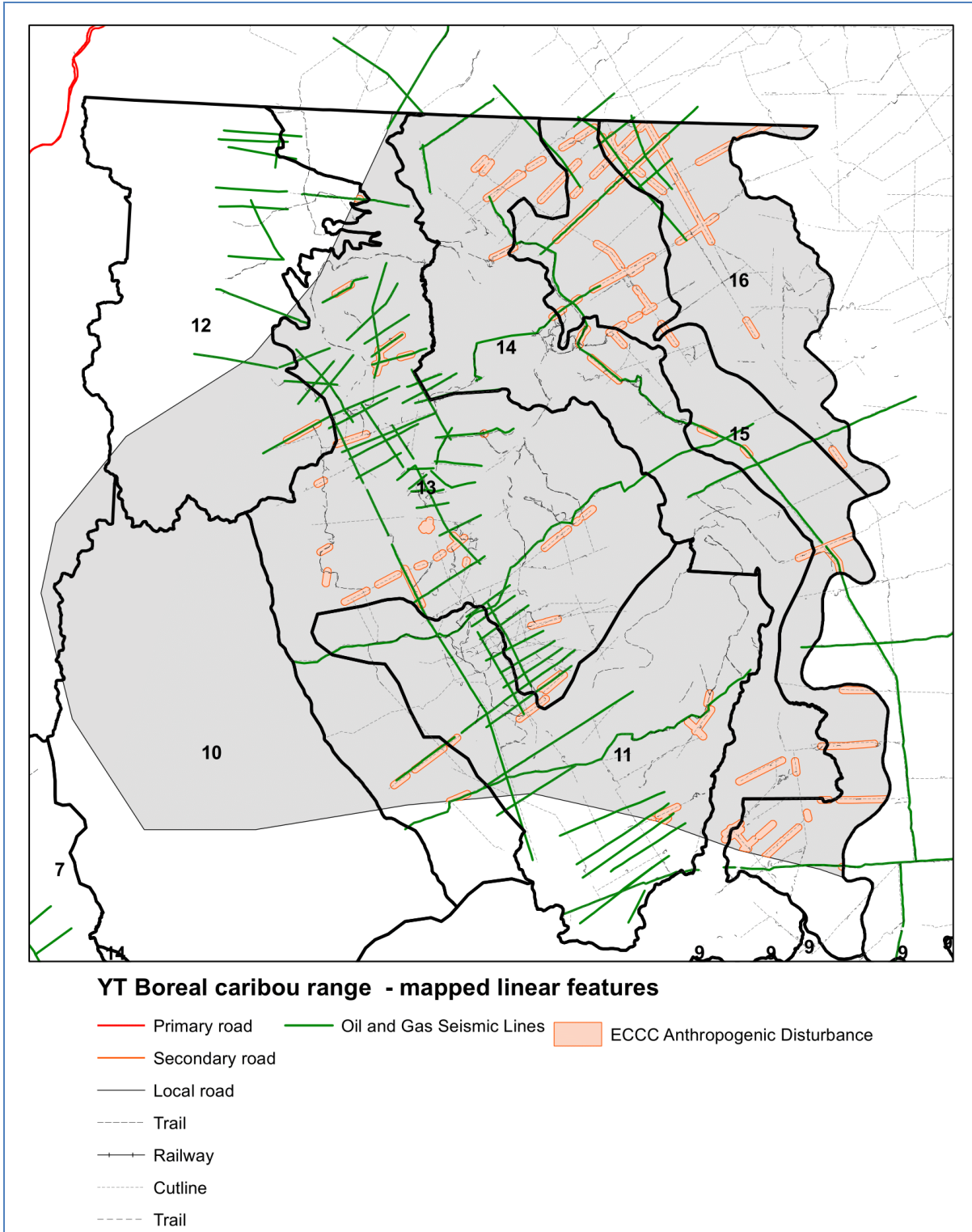


Figure 8. Linear features within boreal caribou range, based on Government of Yukon’s information (linear features, varied colours), and Environment and Climate Change Canada’s information (orange polygons).

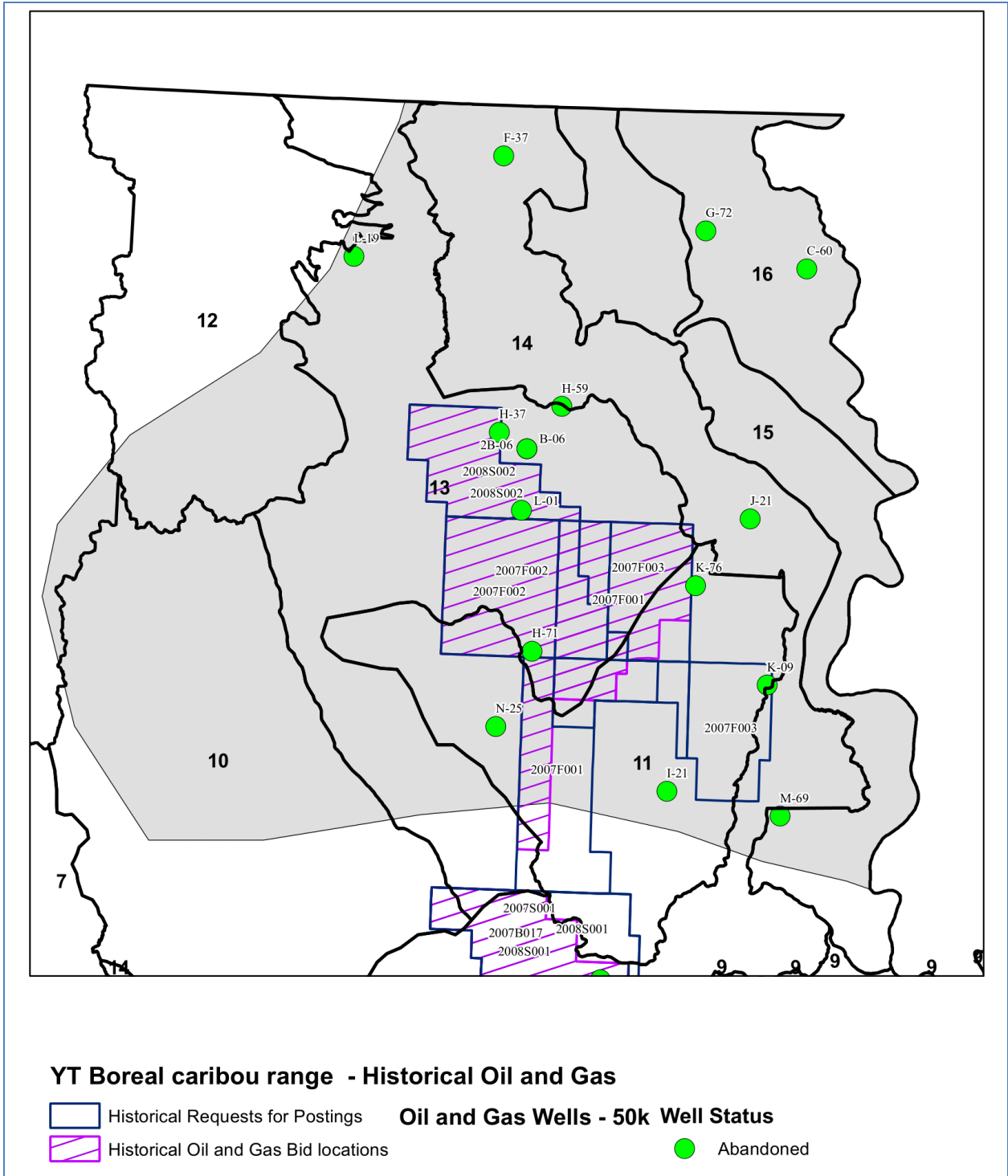


Figure 9. Historic oil and gas activity, including well sites, in boreal caribou range (based on Government of Yukon data).

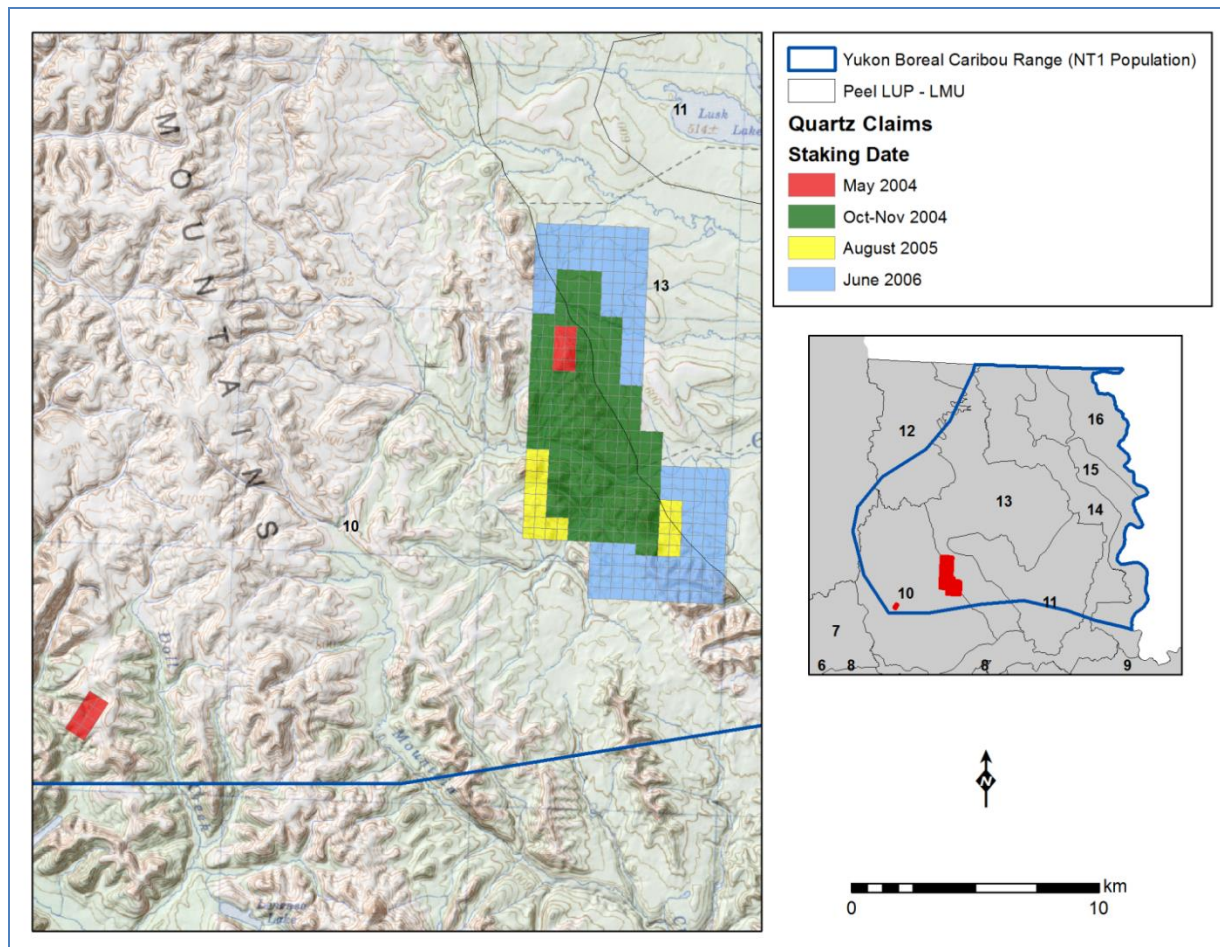


Figure 10. Quartz claims in boreal caribou range, based on Government of Yukon data.

#### 5. Harvest

- 72 caribou have been harvested in boreal caribou range in Yukon since 1978 (60 non-resident; 12 First Nation). Based on the game management subzone these animals were harvested from, all of these caribou were deemed to be from the Porcupine caribou herd (barren-ground caribou), suggesting no licensed or FN harvest of boreal caribou.
- Unreported FN harvest of boreal caribou is considered low/nonexistent.

#### 6. Land ownership and management

- First Nation of Na-Cho Nyak Dun's traditional territory overlaps 100% with boreal caribou range (Figure 11).
- Tetlit Gwich'in's Primary Use area also overlaps with boreal caribou range; in addition, Tetlit Gwich'in has fee simple parcels in boreal caribou range (Figure 12).
- A small portion of Vuntut Gwitchin's traditional territory overlaps with boreal caribou range (Figure 13).
- Trondek Hwech'in's traditional territory overlaps with the Peel planning region, but not boreal caribou range (Figure 14).

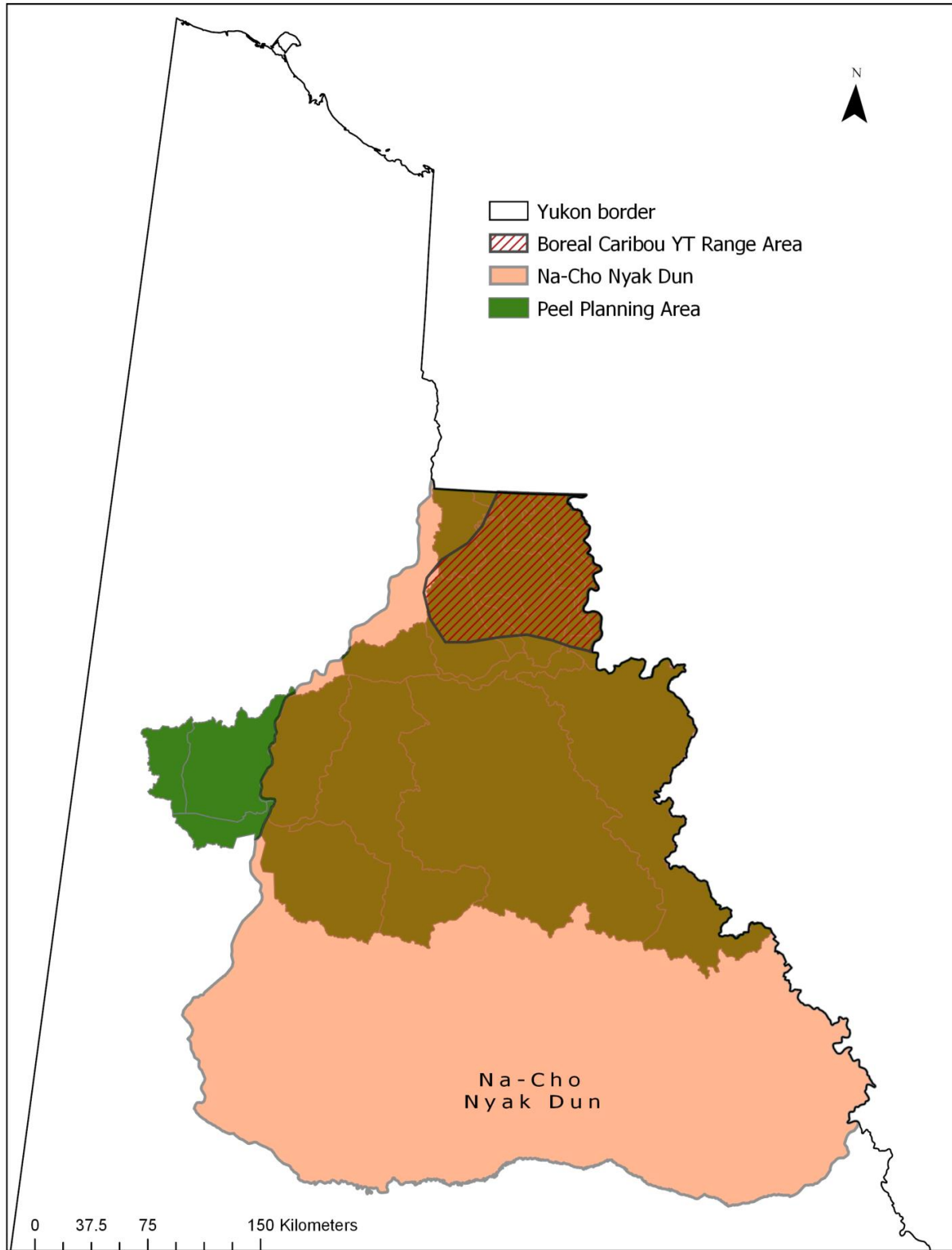


Figure 11. Na-Cho Nyak Dun traditional territory overlap with the Peel planning area and boreal caribou range.



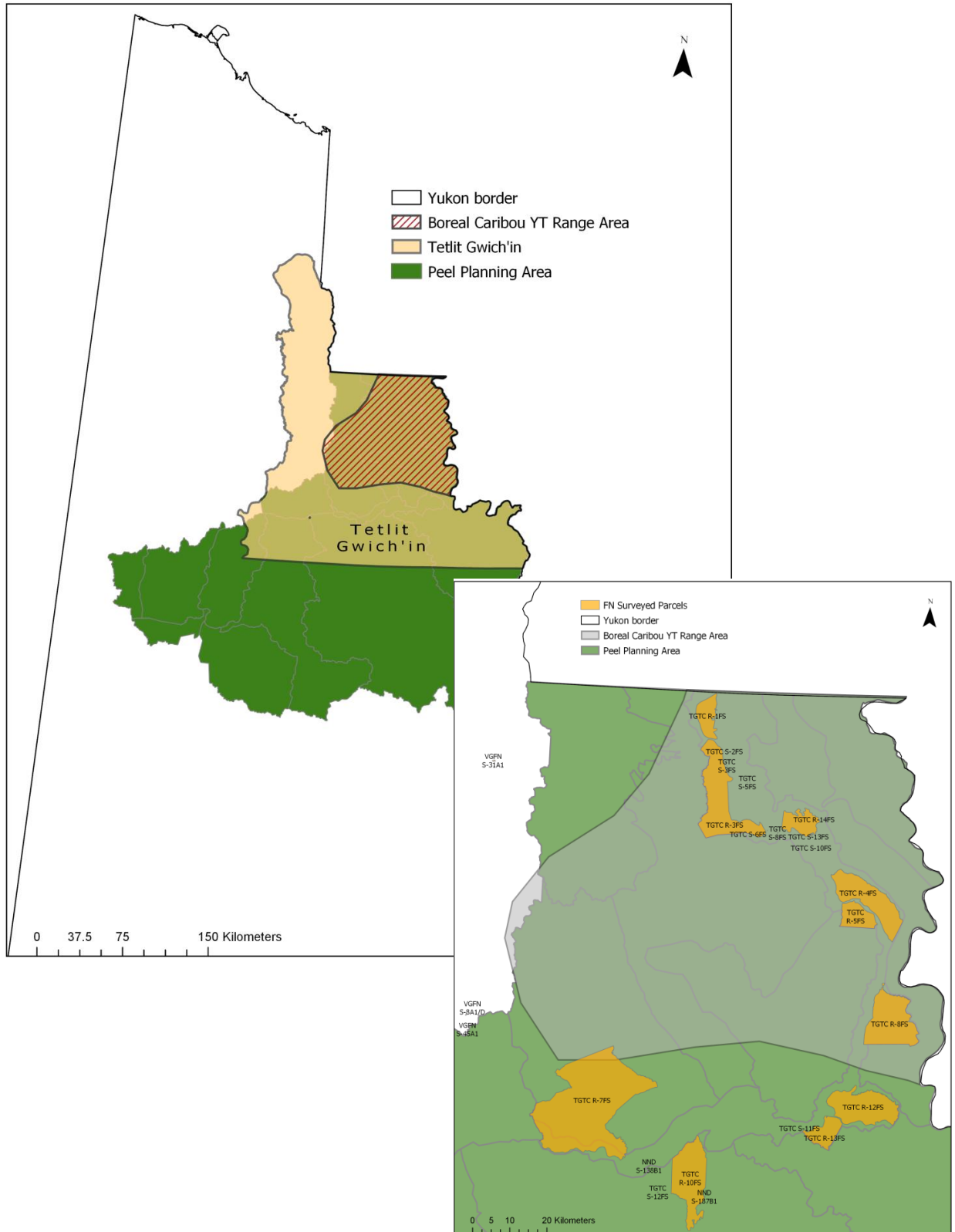


Figure 12. Tetlit Gwich'in Primary Use area overlaps with the Peel planning area and boreal caribou range. Also shown are the fee simple parcels Tetlit Gwich'in own in, and around, boreal caribou range.

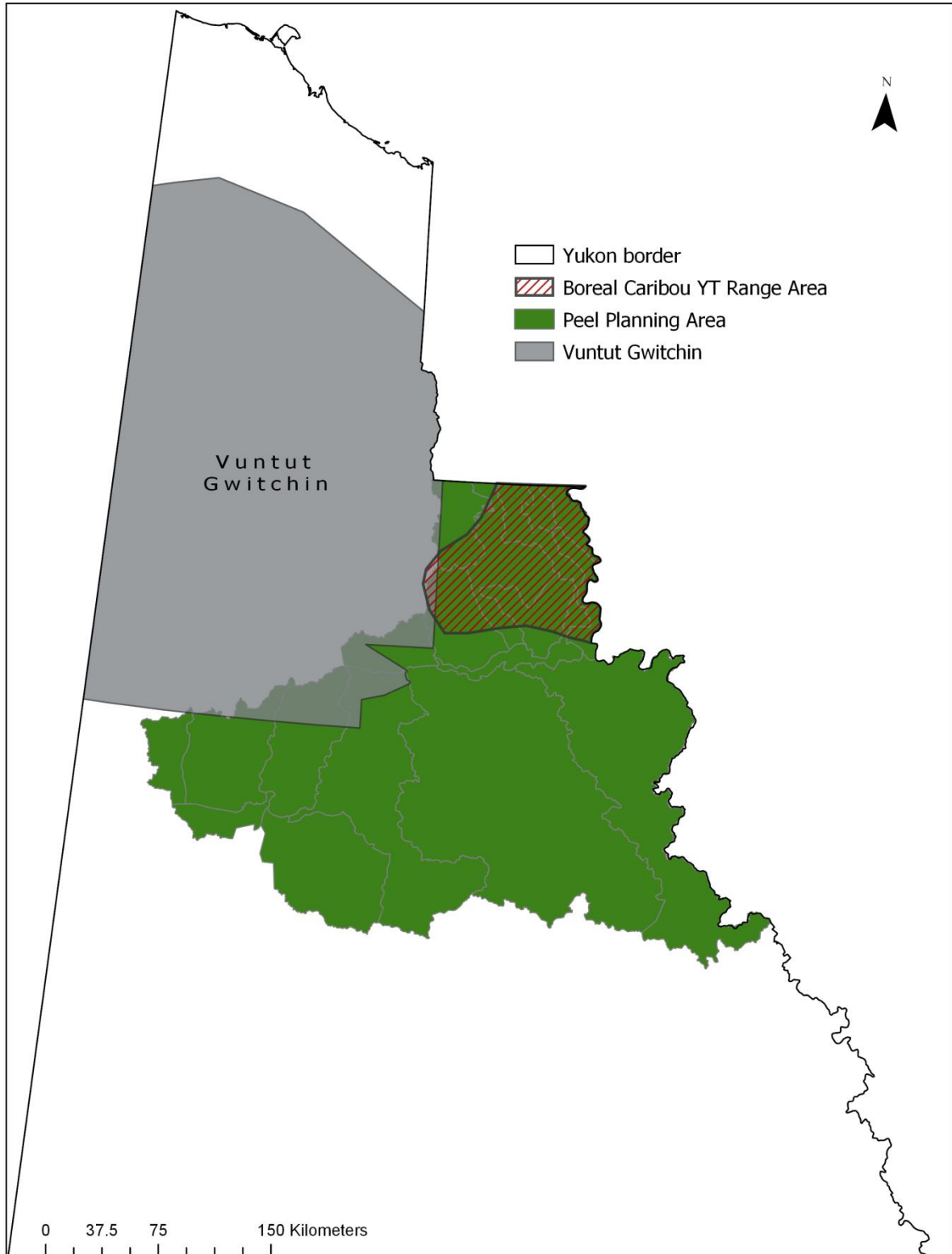


Figure 13. Vuntut Gwitchin First Nation Traditional Territory overlap with the Peel planning area and boreal caribou range.

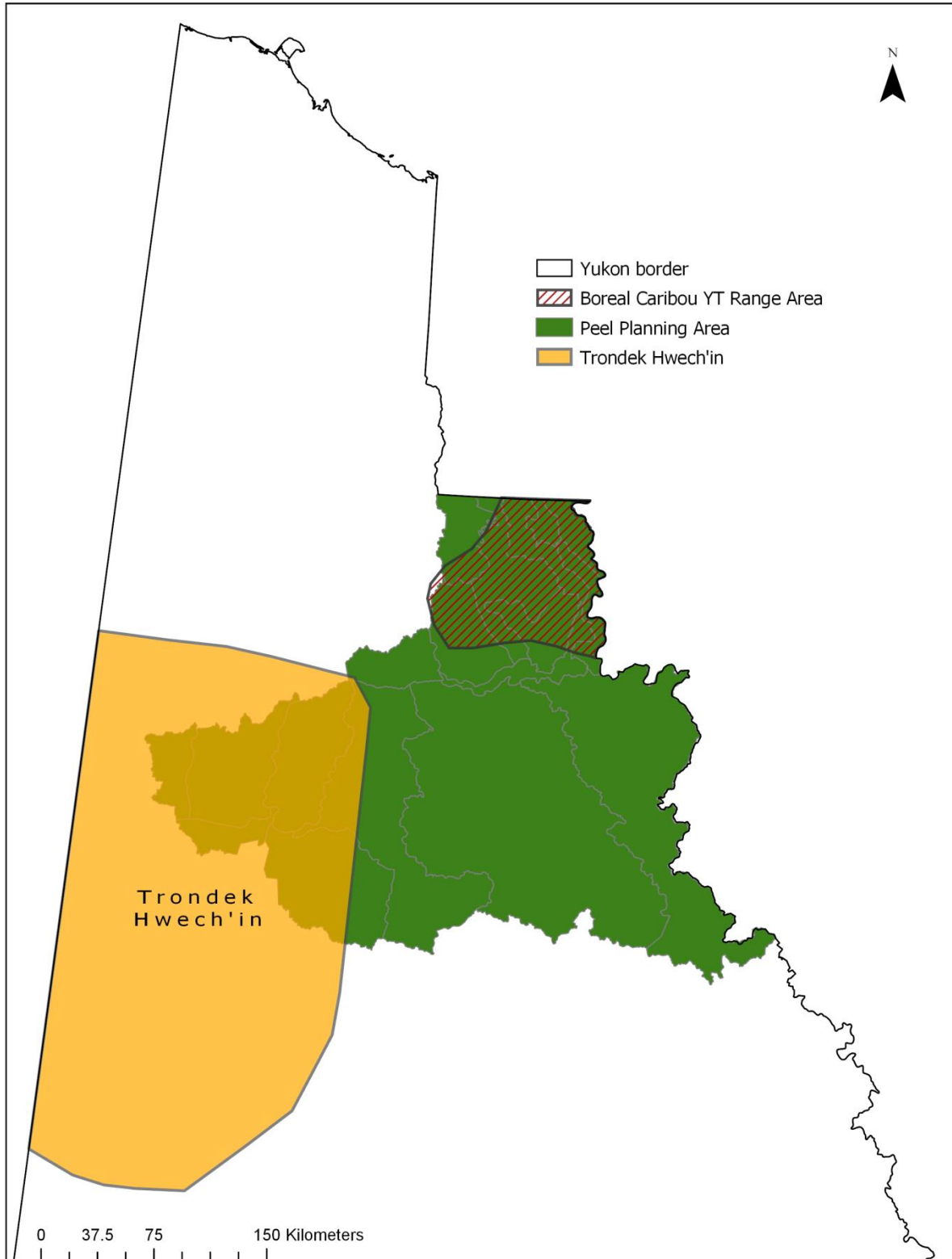


Figure 14. Trondek Hwech'in Traditional Territory overlap with the Peel planning area.

7. *Relation to the draft Peel Watershed Regional Land Use Plan*

- Consistent with First Nation Final Agreements and the Umbrella Final Agreements, the process to develop the Peel Watershed Regional Land Use Plan began in 2004. Planning for the Peel Watershed Region is specifically referenced in the Gwich'in Comprehensive Land Claim Agreement and the First Nation of Na-Cho Nyak Dun Final Agreement.
- The intent of the plan is to provide direction about management of land and resources in the Peel Watershed Planning region.
- The final draft Peel Watershed Regional Land use Plan was recommended to First Nation of Na-Cho Nyak Dun, Vuntut Gwitchin First Nation, Trondek Hwech'in, Gwich'in Tribal Council and Government of Yukon in 2011 (Peel Watershed Planning Commission, 2011).
- In the draft Peel Plan, 80% of the total region is designated as Conservation Areas (Table 2). 20% is designated as Integrated Management Areas.
- Government of Yukon is now undertaking a process to finalize the Peel plan with other Parties to the Plan. The final Plan is expected in early to mid-2019, pending the consultation process and feedback from Parties.

Table 2. Type of land use areas in the draft Peel Plan.

Type of Area	Description				
Conservation Areas	<p>Meant to protect and conserve ecological and heritage resources and maintain wilderness areas. Existing human activity (mineral claims and leases) can be developed, but no new surface rights or surface access is allowed.</p> <p>There are two types of conservation areas:</p> <ol style="list-style-type: none"> <li>1. Special management areas (SMA) – areas with permanent protection. These areas make up 55% of the region.</li> <li>2. Wilderness areas (WA) – areas with interim protection that will be reviewed periodically once the Peel Plan is implemented. These areas make up 25% of the region.</li> </ol>				
Integrated Management area (IMA)	Referred to as the “working landscape”, where different land uses and new surface access can occur. There are 4 different IMA zones, based on management intent.				
	IMA Zone	Management Intent	Cumulative Effects Indicators	Cautionary Level (75% of the critical level)	Critical Level
	Zone I	Lowest development	Surface disturbance	0.075%	0.1%
			Linear density	0.075 km/km <sup>2</sup>	0.1 km/km <sup>2</sup>
	Zone II	Low development	Surface disturbance	0.15%	0.2%
			Linear density	0.15 km/km <sup>2</sup>	0.2 km/km <sup>2</sup>
	Zone III	Moderate development	Surface disturbance	0.375%	0.5%
			Linear density	0.375 km/km <sup>2</sup>	0.5 km/km <sup>2</sup>
	Zone IV	Highest development	Surface disturbance	0.75%	1.0%
			Linear density	0.75 km/km <sup>2</sup>	1.0 km/km <sup>2</sup>

- 99% (8,891 km<sup>2</sup>) of Yukon’s boreal caribou range is contained within the area that is expected to be managed under the final Peel Plan. The other 1% (92 km<sup>2</sup>) falls within the North Yukon Regional Land Use Plan. Under the draft Peel Plan, boreal caribou range is made up of four Land Use Designations (Table 3, Figure 15):
  - o Wilderness Areas
  - o Special Management Areas
  - o Integrated Management Areas Zone II
  - o Integrated Management Areas Zone IV
- Based on these designations, 51% of boreal caribou range is protected from disturbance. 36% of this is permanent (Special Management Areas); 15% is interim protection (Wilderness Areas). 48% of boreal caribou range is made of up Integrated Management Zones, which allow for some development.
- Some historical development has occurred in the areas designated as SMA and WA in boreal caribou range, so they do not have a 0% disturbance baseline.
- Boreal caribou range overlaps ~13% of the Peel planning area.
- Once approved, the Peel Plan and any related land management regulatory tools are expected to be the instruments by which Government of Yukon and First Nation partners will protect boreal caribou critical habitat and satisfy Canada’s requirements under SARA.

Table 3. Land Use Designations within boreal caribou range.

Land Use Designation	km <sup>2</sup> in Yukon’s portion of NT1	% in Yukon’s portion of NT1
Wilderness Area (interim protection)	1,324	~15%
Special Management Area (permanent protection)	3,245	~36%
Integrated Management Area (some development)	4,332	~48%
N/A (in North Yukon planning region)	92	~1%
Total area	8,993	100%

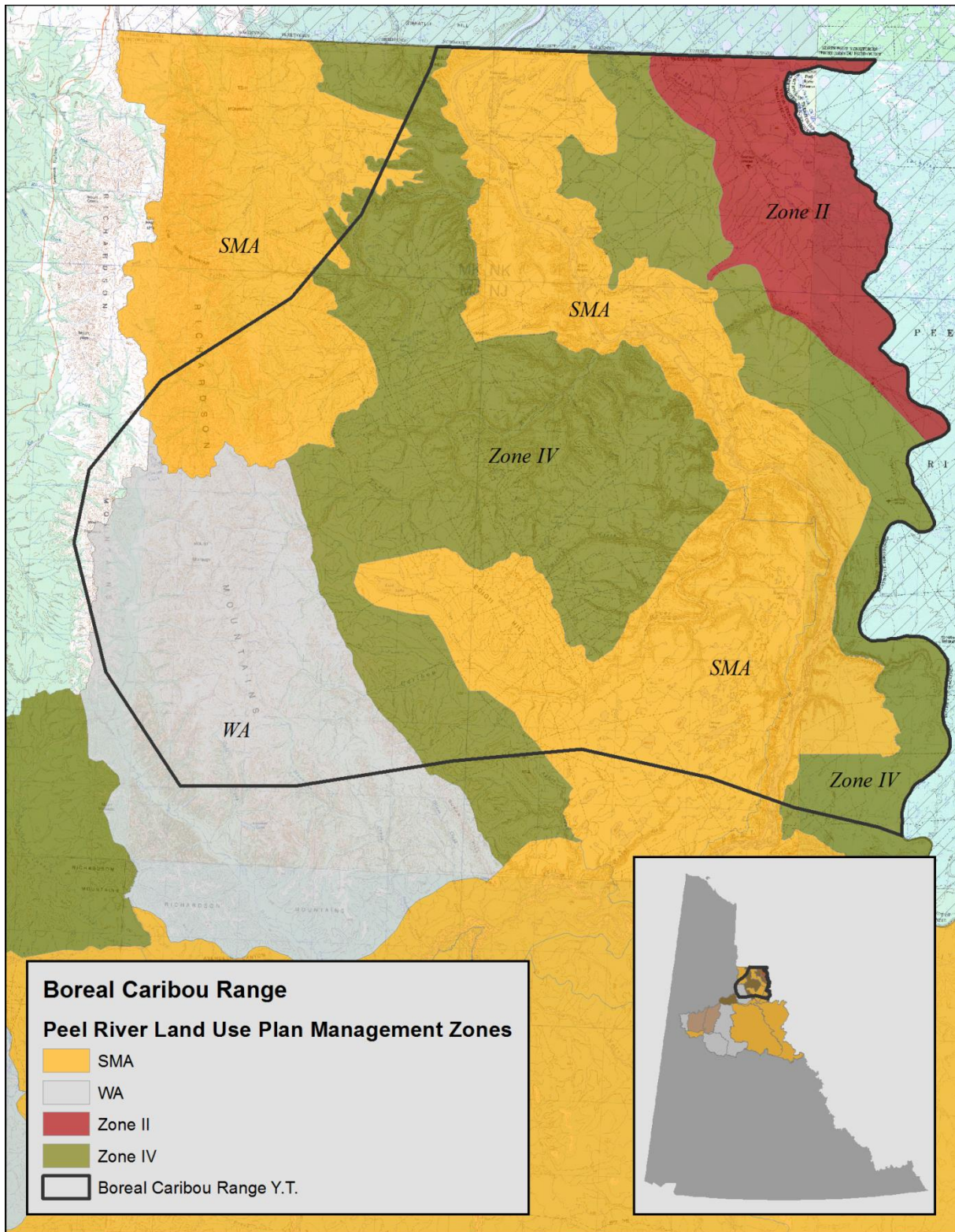


Figure 15. Land Use Designations within Boreal Caribou Range, as described in the Peel Watershed Regional Land Use Plan. No additional development is allowed in Wilderness Areas or Special Management Areas.

- Based on Environment and Climate Change’s current data, 23.9% of the range is disturbed by human and natural activity, well below the allowable 35% identified in the federal recovery strategy.
- Assuming all existing disturbance in the four zones is grandfathered and the allowable limits from Table 2 are implemented, then a maximum of 37 km<sup>2</sup> of additional anthropogenic disturbance is expected (noting this disturbance is not buffered by 500 m) (Table 4). **This would increase the total amount of human and fire disturbance in boreal caribou range from 23.9% to 24.3%+buffer – still well below the 35% disturbance management threshold.**
- This means that if regulatory limits are imposed that implement the development limits described in the draft Peel Plan, **critical habitat for boreal caribou would be protected in the Yukon vis a vis the Peel Plan.**

Table 4. Current and maximum possible disturbance in boreal caribou range.

Land Use Design	Area km <sup>2</sup>	Area disturbed by human activity km <sup>2*</sup>	% human additional human disturbance allowed under the Peel Plan**	% human disturbance in boreal caribou range (13% of Peel)	Maximum additional km <sup>2</sup> of human disturbance allowed (applied to boreal caribou range only; not buffered).	total maximum km <sup>2</sup> (%) human disturbance possible in future (plus the buffer around new human disturbance)	
North Yukon Plan	92	0		0.0%		0	
WA	1,324	0		0.0%		0	
SMA	3,245	84.7		2.6%		84.7 (2.6%)	
IMA	Zone II	772	67.7	0.20%	8.8%	1.5	69.2 (8.9%)
	Zone IV	3,550	196.5	1%	5.5%	35.5	232.0 (6.5%)
<b>Total (km<sup>2</sup>)</b>	<b>8,983</b>	<b>348.9</b>		<b>3.9%</b>	<b>37.0</b>	<b>385.9 (4.3%)</b>	

\*Environment and Climate Change data, buffered by 500 m.

\*\*Assumes old disturbance is grandfathered or adjusted for recovery, so maximum allowable is added to the current disturbance. This also assumes the percent allowable applies to portions of zones outside of boreal caribou range.

#### 8. S. 11 agreement

- In April 2018, Canada released the “Progress Report on Unprotected Critical Habitat for the Woodland Caribou (*Rangifer tarandus caribou*), Boreal population, in Canada”, as per Section 63 of SARA (Environment Canada, 2018). No jurisdiction has shown how critical habitat protection for individual populations meets the standards required under SARA (mandatory and enforceable measures equivalent to SARA). **Canada’s April 2018 Section 63 progress report states that measures to protect critical habitat in Yukon cannot be fully assessed until the Peel Plan is completed and implemented.**
- Canada is encouraging jurisdictions enter into Section 11 agreements under SARA with them to definitely show what legislative and regulatory actions will be taken to protect critical habitat and maintain/recover boreal caribou populations.

- Section 11 agreements are conservation agreements under SARA. The federal Minister of Environment and Climate Change Canada may enter into a Section 11 agreement with another government, organization or person to benefit and conserve a species at risk. As defined under SARA, this agreement could be in place for up to five years and would include: identification of the species at risk, the geographic area to which the agreement applies, the conservation measures that would apply to critical habitat, conservation measures that would address any gaps in critical habitat protection, and assurance that conservation measures will be undertaken and maintained.
- Government of Yukon has cabinet approval to enter into multilateral Section 11 discussions with Environment and Climate Change Canada, First Nation of Na-Cho Nyak Dun, Tetlit Gwich'in, and Gwich'in Tribal Council.
- Government of Yukon intends to work with all parties to the Peel plan to finalize the plan that meets boreal caribou critical habitat obligations (First Nation of Na-Cho Nyak Dun; Tetlit Gwich'in, Gwich'in Tribal Council, Trondek Hwech'in and Vuntut Gwitchin First Nation).
- The Section 11 agreement is considered an interim measure that shows how boreal caribou and their habitat will be protected until the Peel Plan is finalized and implemented.
- The agreement will not impact Aboriginal harvesting rights within boreal caribou range.

## 9. References

- Environment Canada, 2011. Scientific Assessment to Inform the Identification of Critical Habitat for Woodland Caribou (*Rangifer tarandus caribou*) Boreal Population, in Canada: 2011 Update. Ottawa, Ontario, Canada. 102 pp. plus appendices.
- Environment Canada. 2012. Recovery Strategy for the Woodland Caribou (*Rangifer tarandus caribou*), Boreal population, in Canada. *Species at Risk Act Recovery Strategy Series*. Environment Canada, Ottawa. xi + 138 pp.
- Environment and Climate Change Canada. 2017. Report on the Progress of Recovery Strategy Implementation for the Woodland Caribou (*Rangifer tarandus caribou*), Boreal population in Canada for the Period 2012-2017. *Species at Risk Act Recovery Strategy Series*. Environment and Climate Change Canada, Ottawa. ix + 94 pp.
- Environment and Climate Change Canada. 2018. Progress Report on Unprotected Critical Habitat for the Woodland Caribou (*Rangifer tarandus caribou*), Boreal Population, in Canada. *Species at Risk Act Critical Habitat Report Series*. Environment and Climate Change Canada, Ottawa. 19 pp.
- Gwich'in Social and Cultural Institute. 2011. Gwich'in Traditional Knowledge: Woodland Caribou, Boreal Population. 52 pp.
- Peel Watershed Planning Commission. 2011. Final Recommended Peel Watershed Regional Land Use Plan. Whitehorse, Yukon.