Caribou Range Assessment and Technical Information

APPENDIX C:

Interim Range Assessment Areas

1 Background

At approximately 390,000 km² the Bathurst range planning area is large and diverse. The range spans from the Taiga forests in northern Saskatchewan to the Arctic Coast Tundra in Nunavut. Different types and intensities of land use occur in different parts of the range, some areas have been affected to a greater extent by wildfire, and the amount of human activity and access varies greatly. To better understand the potential land use and management issues affecting caribou in the different parts of the range, the BCRP Working Group developed the concept of range assessment areas (RAAs). Figure 1 shows the five RAAs developed as part of the Bathurst Caribou Range Plan. They were created by considering Bathurst caribou range use and habitat conditions (Figure 2) and levels of habitat disturbance, human land use patterns, and administrative boundaries (Figure 3). Each RAA is summarized in Table 1.

The RAAs are part of the Bathurst Range Plan Cumulative Land Disturbance Framework. They are used to assess the level of disturbance and range conditions in different parts of the Bathurst Planning Area. The RAAs are considered interim until better spatial units can be developed through land claim agreements, land use planning, or other processes.

The interim RAAs and the overall BCRP planning area are not legal boundaries and have no relationship to traditional territories, interim land withdrawals, or land claim negotiations; they were created for use only in the Bathurst Caribou Range Plan.

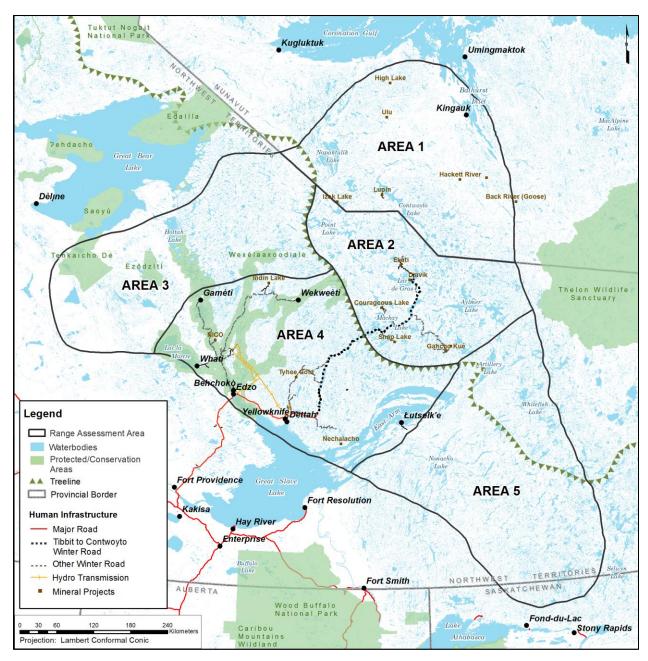


FIGURE 1: INTERIM RANGE ASSESSMENT AREAS IN THE BATHURST CARIBOU RANGE PLANNING AREA. RANGE ASSESSMENT AREAS ARE PART OF THE CUMULATIVE LAND DISTURBANCE FRAMEWORK. THEY ARE USED TO ASSESS THE LEVEL OF DISTURBANCE AND RANGE CONDITIONS IN DIFFERENT PARTS OF THE BATHURST PLANNING AREA.

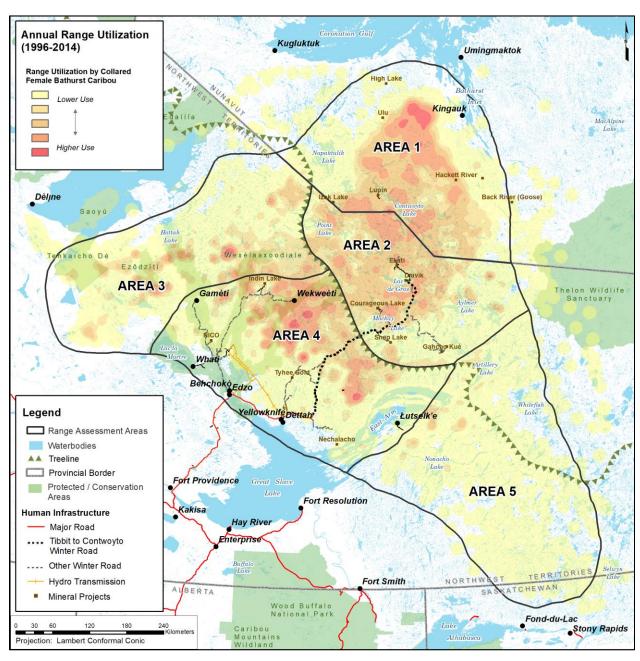


FIGURE 2. FACTORS CONSIDERED IN THE DEVELOPMENT OF INTERIM BATHURST RANGE ASSESSMENT AREAS. BATHURST CARIBOU RANGE UTILIZATION (DARKER COLOURS INDICATE HIGHER USE).

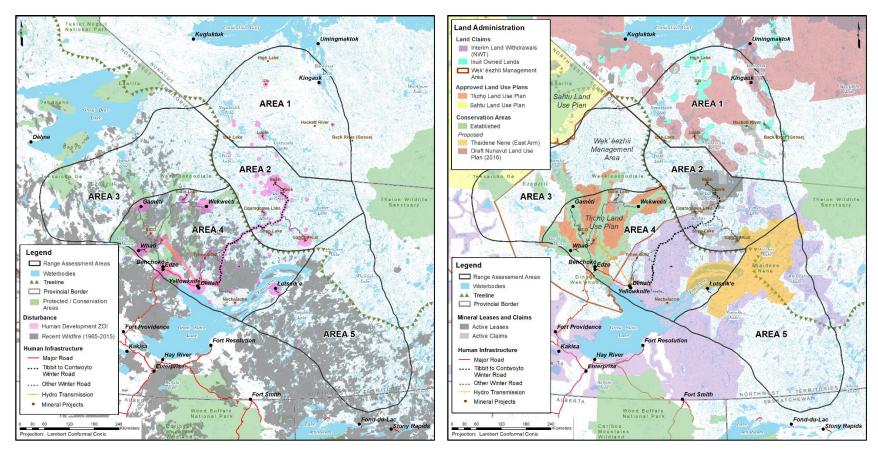


FIGURE 3: FACTORS CONSIDERED IN THE DEVELOPMENT OF INTERIM BATHURST RANGE ASSESSMENT AREAS. RECENT (1965-2015) WILDFIRE AND HUMAN DISTURBANCE (LEFT MAP), AND LAND USE AND LAND ADMINISTRATION CONSIDERATIONS (RIGHT MAP).

TABLE 1: SUMMARY OF BATHURST INTERIM RANGE ASSESSMENT AREAS.

Range	Area	Rationale for	Caribou Habitat	Land Use	Land Management
Assessment Area	(km² and %)	Creating RAA	and Range Use		
AREA 1: Nunavut	75,902 km ² (20%)	Nunavut is a separate jurisdiction with different land administration, environmental assessment and land ownership than NWT. Most of the Bathurst calving and post-calving area is within Nunavut.	 Area 1 is in the tundra biome; it contains the majority of the Bathurst calving grounds as well as important post-calving and summer habitat. Area 1 may also be used in winter by other caribou herds – Dolphin and Union, and Beverly-Ahiak. Wildfire is not a major source of natural disturbance on the tundra. 	 A number of active mineral claims and leases, and advanced mineral exploration projects are within the area. While the current level of land use is relatively low, Area 1 has the potential to experience the largest amount of near-term future increase in human land use, including new producing mines, surface transportation and marine ports. 	 A large part of Area 1 is Inuit Owned Land. The Draft Nunavut Land Use Plan (2016) is being considered and proposes new protected areas for the core calving and post- calving area, as well as identified freshwater crossings.
AREA 2: NWT Central Tundra	56,134 km ² (14%)	The central NWT tundra contains the four diamond mines developed since the late-1990s, and is currently the area of highest mineral interest and activity in NWT.	 Area 2 is central to the Bathurst herd annual range, with summer, fall and spring migration all occurring in this area. Wildfire is not a major source of natural disturbance on the tundra. 	 Area 2 is the 'diamond fields' of the North Slave Geological Province, with three currently active diamond mines. The majority of active mineral claims and leases in the NWT portion of the Bathurst Range are in RAA2. The diamond mines are important economic drivers for NWT. 	 Land use plans are not currently in place or in development. The western part of Area 2 is in the Wekeèzhii Management Area. A small part of this area is under interim land withdrawal for land claim negotiations (Akaitcho Dene).
AREA 3: NWT Winter Range - Northwest	77,001 km ² (20%)	This part of the NWT winter range has low human land use and has experienced a lower amount of wildfire disturbance than other	 Area 3 has been used as winter habitat by Bathurst caribou with increasing frequency over the past decade. 	Area 3 is remote and currently receives low levels of industrial land use.	 Most of Area 3 is in the Wekeèzhii Management Area. Part of RAA3 is covered by the Tłįcho Settlement Area,

Range Assessment Area	Area (km² and %)	Rationale for	Caribou Habitat	Land Use	Land Management
Assessment Area	(KIII dilu 76)	parts of the winter range.	and Range Use Wildfire has been less active in this part of the winter range. The Bathurst and Bluenose East herds overlap in this wintering area.	 There are currently very few mineral interests or active mineral claims. Area 3 represents an important winter caribou hunting area with access centered on trails extending north to Hottah Lake; there is considerable inter-annual overlap in winter distribution between the Bathurst and Bluenose East herds. 	and the approved Tłįchǫ Land Use Plan.
AREA 4: NWT Winter Range - Central	84,858 km ² (22%)	This part of the winter range has the highest level of human land use in the Bathurst annual range. Most of NWTs human population lives in RAA4 – it contains all of the permanent settlements and infrastructure, including the City of Yellowknife, the Snare and Bluefish electrical facilities, and all-season highways.	 Area 4 has the highest level of combined human and wildfire disturbance in the range. This part of the winter range has received consistent winter use by Bathurst caribou. A large part (18%) of the area was burned by wildfire in 2014, with approximately 36% of the area being affected by wildfire since the 1960s. 	 All permanent settlements and road infrastructure within the Bathurst range are in Area 4. All-season and winter roads provide a high level of access into this part of the winter range. The southern part of the Tibbit-Contwoyto Lake winter road begins in RAA4. There are existing mineral interests and several past mines. Area 4 represents an important area for winter caribou hunting. Prior to harvest restrictions established in 2009 on the 	 Part of RAA4 is covered by the Tłįchǫ Settlement Area, and the approved Tłįchǫ Land Use Plan. Large interim land withdrawals for land claim negotiations (Akaitcho Dene) are in place. The western part of Area 4 is in the Wekeèzhii Management Area.

Range	Area	Rationale for	Caribou Habitat	Land Use	Land Management
Assessment Area AREA 5:	(km² and %) 95,127 km² (24 %)	This part of the winter range is remote and currently has low land use pressures, but has experienced a large amount of wildfire disturbance.	Caribou Habitat and Range Use This part of the winter range has received lower use by caribou in recent years Area 5 experienced many large wildfires over the past decades, and most (60-70%) of the forested area south of treeline has experienced a burn since	Bathurst herd, this area received the most use by all NWT hunters due to the high level of road and trail access. • Area 5 is remote and currently receives low levels of industrial land use. • There are few mineral interests or active mineral claims. • Area 5 has been an important winter caribou hunting area for	 Area 5 includes the proposed Thaidene Nene (East Arm) National Park (or Territorial Park). In addition to Thaidene Nene, other large interim land withdrawals are in place for land claim negotiations (Akaitcho Dene, Athabasca
			the 1960s. • Area 5 is considered to be part of the winter range of the Bathurst and Beverly-Ahiak herd. Occasional and variable overlap with Bathurst and Qamanirjuaq caribou has also occurred.	communities in NWT and northern SK, with primary winter range use by Beverly-Ahiak caribou, and variable use by the Bathurst and Qamanirjuaq herds.	Denesuline and Northwest Territories Métis Nation).
Total	389,022 km ²				