



BCRP Planning Status – Working Group Report to Steering Committee

This report briefly describes the items that have been addressed by the Working Group (WG) since its first meeting (by teleconference) on June 25, 2014 and two additional meetings in 2014.

Agreement on membership

The WG has a practical size limit of 20 in order to operate efficiently. Its membership is representative of Aboriginal Governments and Organizations, industry, GNWT and Government of Nunavut agencies, and NGOs. Observers such as Elders have also joined meetings to date. The membership includes:

- | | |
|---|---|
| 1 Thcho Government | 12 Kitikmeot Regional Wildlife Board |
| 2 Lutselke Dene First Nation | 13 Nunavut Tuungavik Inc. |
| 3 Athabasca Denesuline | 14 GNWT – Lands |
| 4 North Slave Metis Alliance | 15 GNWT – ITI |
| 5 NWT Metis Nation | 16 GNWT – ENR |
| 6 Government of Nunavut Environment | 17 AANDC (Nunavut) |
| 7 Government of Nunavut Economic Development and Transportation | 18 CPAWS |
| 8 Chamber of Mines – Mineral Development | 19 Barren Ground Outfitters Association |
| 9 Chamber of Mines – Mineral Exploration | 20 NWT Wildlife Federation |
| 10 Kugluktuk HTO | 21 Wek'èezhìi Renewable Resources Board |
| 11 Kitikmeot Inuit Association | |

Scope and Process Principles

The WG has refined the BCRP planning scope as follows:

The focus of range planning is to recommend an approach to manage cumulative disturbance of Bathurst caribou habitat. The approach will consider other values supported by land use, including traditional practices and economic development, and focus on range and population scale effects and solutions. The goal is to provide greater clarity for land use decision making across the range.

Discussions have included strategies to:

- prevent or minimize disturbance in areas and during time periods when caribou are relatively more sensitive to disturbance;
- maintain caribou use of space including migratory pathways;
- manage access related to infrastructure development.

Items that are out of scope include harvest levels and allocation, predator control, climate change adaptation, and land use planning. However, this does not exclude providing recommendations to land use planning processes.

The WG recognizes that the Bathurst caribou herd is at a very low population level, such that concern for caribou welfare is high.

The WG has followed several principles to allow for a fair, yet practical discussion of potential management approaches:

1. Focus on near-term planning, with recommendations and their implementation reviewed over time (e.g. every 5-10 years, or if significant changes occur). This allows decision making to proceed in the face of considerable uncertainty regarding future economic and ecological conditions.
2. Assess management approaches using an evaluation criteria developed by the WG.
3. Rely upon best available information, including scientific, traditional and local knowledge
4. Identify important factors of uncertainty and acknowledge that WG Members have different opinions on how much uncertainty is acceptable.
5. Allow for and respect differing opinions when developing initial management approaches
6. Rely upon the WG members to report back to, and seek input from, their respective organizations.

The WG has the ability to form subgroups, or “Task Groups”, to more efficiently research and complete supporting tasks. The WG established a Terms of Reference for such Task Groups – it is attached as Appendix 1 to this briefing note.

Draft management objectives

To define a working set of management objectives for the purposes of range planning, a Task Group was convened to identify and scope the potential outcomes of land use decisions that:

1. Affect caribou, cultural and economic values;
2. Are in scope for this process; AND,
3. Can be influenced by BCRP recommendations.

The Task Group created “influence diagrams” that highlight how land use decisions affect identified values of interest. The factors were purposely described in terms of *outcomes on the landscape that can be realistically estimated*. These diagrams are attached as Appendix 2.

The WG identified management objectives, or “things that matter” for *this* planning process as:

Value	Things that matter in THIS process
Caribou *	Spring Migration (April 20 – June 01)

Calving Period (June 02 – June 28)

Summer And Fall Tundra Range (June 29 – November 30)

Winter Taiga Range (December 1 – April 19)

** The focus is on caribou due to the scope of this process and to maintain process efficiency. However, the WG recognizes that improving habitat conditions for caribou will likely improve habitat for other species and habitat.*

While there are many activity periods of the caribou life cycle, the WG has summarized them into the periods above to allow for more efficient decision making.

To understand the implications of management strategies on cultural and economic values, the WG identified the following ‘things that matter’ to consider in *this* planning process:

Value	Things that matter in THIS process
Traditional Practices	Natural Landscape
	Traditional Trails
Economic	Country Food / Food Security
	Mineral Exploration Sector
	Mineral Development Sector
	Regional Infrastructure
	Natural Landscape - Nature-based Industry
	Local Jobs
	Government Revenue
	Efficiency Of Land Use Decision Making

Evaluation criteria

Maps and evaluation criteria will be used to estimate the pros and cons of different management approaches. While the estimation techniques are still under development, they are expected to include:

	Things that matter in THIS process	Evaluation Criteria (how to measure better from worse)
Objectives	Spring Migration (April 20 – June 01)	Cumulative disturbance as % of range
	Calving Period (June 02 – June 28)	Cumulative disturbance as % of range
	Summer And Fall Tundra Range (June 29 – November 30)	Cumulative disturbance as % of range
	Winter Taiga Range (December 1 – April 19)	Cumulative disturbance as % of range

Implications	Natural landscape	<i>To be determined</i>
	Traditional hunting trails	<i>To be determined</i>
	Mineral exploration sector	<i>To be determined</i>
	Mineral development sector	<i>To be determined</i>
	Regional Infrastructure	<i>To be determined</i>
	Local jobs	<i>To be determined</i>
	Government revenue	<i>To be determined</i>
	Efficiency of land use decision making	<i>To be determined</i>

Potential management strategies

The WG has considered many potential management strategies, or actions, for application in various parts of the Bathurst range. These have included access management, seasonal shutdowns, fire management and others. A list of those currently under review is included in Appendix 3. The WG will be evaluating these strategies in terms of their effectiveness in reducing disturbance impacts, implications for economic and traditional values, and feasibility of implementation.

Analysis Approach

Key elements of the analysis approach under consideration include using:

1. Seasonal ranges and TK on range use to distinguish the relative sensitivity of caribou to disturbance across space and time.
2. Seasonal use intensity to distinguish areas of higher or lower use by caribou over time.
3. A reference Cumulative Development Scenario to test different management approaches (based on input from WG members, the recent Jay Project “Reasonably Foreseeable Projects” and CIMP Inventory of Landscape Change).
4. Use of GIS to overlay caribou sensitivity, cumulative development scenario, and management approach layers to produce comparative maps and evaluation criteria estimates.

Knowledge and data

Traditional Knowledge (TK) / Inuit Qaujimajatuqangit (IQ): Several of the WG Aboriginal members, including the Tłı̨cho Government, Athabasca Denesuline, North Slave Metis Alliance, and Kitikmeot Inuit Association have provided TK/IQ data or maps for use in identifying caribou migration corridors and water crossings, traditional hunting trails, and historic range. This knowledge will be combined, as allowable by knowledge holders, to create regional TK/IQ perspectives.

Caribou Range: Seasonal range and intensity of use data, based on satellite telemetry collar data from the past two decades, was updated to 2014. Historic annual range boundaries have also been researched.

Land Use, Fire and Resources: Up to date spatial data has been acquired for the following features:

- CIMP Inventory of Landscape Change (human disturbance dataset), based on satellite imagery and project permits
- Existing development projects, including mines, advanced exploration projects, and other land use permits.
- Potential development projects, included within the Cumulative Development Scenario
- Mineral tenure
- Historic and recent fire disturbance, including 2014.
- Thcho and Draft Nunavut Land Use Plans
- Protected areas, including proposed protected areas being considered in the PAS process and the draft Nunavut Land Use Plan
- Infrastructure, including transportation and utility features, and communities

Group Learning

The WG discussions to date have fostered greater group appreciation of caribou, cultural and economic conditions in both GNWT and Nunavut. In addition, invited speakers have presented on the following topics:

- Mike Palmer, CIMP: Disturbance database product, methodology and User tools
- Adrian Boyd, Nunavut Planning Commission: Potential ways to incorporate BCRP land use recommendations into future versions of the Nunavut Land Use Plan.
- Pamela Strand, ITI: Mining investment and development lifecycle and dependencies.

Workplan for 2015/16

The WG is working towards presenting draft recommendations to the Steering Committee in Spring 2016. During this time, the WG will tentatively meet according to the following timeline:

Fall 2015: Evaluate potential management approaches

Winter 2015: Refine potential management approaches and develop draft recommendations

Spring 2016: Refine and present draft recommendations to the Steering Committee

Technical tasks to be conducted during the year include:

- Continuing to integrate and use TK/IQ;
- Improve and refine the evaluation criteria estimation techniques;
- Research the feasibility of draft recommendations with respect to their implementation.

Additional guest speakers are being considered to inform the WG on how recommendations could influence regulatory permitting and conditions, e.g. Mackenzie Valley Land and Water Board project screening and permitting, and wildfire management.

Appendix 1 | Task Groups Terms of Reference



Bathurst Caribou Range Plan - Task Groups - Terms of Reference
Jul 09 2014

Bathurst Caribou Range Plan - Task Groups - Terms of Reference

Purpose and Approach

Task Groups will be established on an ad hoc basis to support the Bathurst Range Plan Working Group (WG) in developing the Bathurst Range Plan.

The Task Groups will be led by the consulting team, and may include WG members, Steering Committee members, and invited external knowledge experts approved by the Working Group. GNWT ENR will support the Task Groups with various secretariat services.

Their main purpose will be to investigate, deliberate and produce information products on specific technical matters required by the Working Group and/or consulting team in the areas of biological/ecological, socioeconomic, cultural and policy information.

In many cases, the Task Groups will require the provision of datasets and analytical services (potentially GIS) from WG members.

The best available information including scientific, local, and traditional and policy information – will support the planning process. Given budget, resource and schedule constraints only existing and readily available information will be used; no new research will be conducted.

To ensure transparency the Task Groups will:

- document all data sources and analytical approaches;
- make all information available for review by the WG (with the exception of confidential or proprietary information); and,
- outline any known limitations or uncertainty of the data and analytical approaches.

Tasks

Task Groups are anticipated to assess and advise on:

- influence diagrams for the three main focus areas: biological/ecological, socio-economic and cultural;
- biological/ecological, socio-economic, cultural and policy datasets relevant to the range of the Bathurst caribou herd and scope of the project;
- options for appropriate measures or indicators that reflect management objectives
- alternatives to meet management objectives; and,
- estimating the consequences of the different management alternatives on the values identified by the Working Group.

Composition and Term

Task Groups will be initiated as helpful to resolve specific technical matters in a more efficient manner, or when required by the consulting team. Membership is expected to be fairly small and by voluntary participation. Members will be approved by the WG.

Any new members who join the Technical Task Group once they have started will be required to become familiar with past work completed and accept all previously made agreements and decisions.

Each Task Group will be formed around a specific task, and dissolve once its purpose is met.

Role of ENR

ENR will provide secretariat support for the Technical Task Group(s) including:

- organize meetings and conference calls, distribute minutes etc.;
- coordinate the preparation and distribution of background information;
- provide financial support, where needed and as appropriate, for members to participate in Task Group meetings;
- coordinate data gathering within the GNWT, members of the Working Group and Steering Committees, and any other organizations;
- provide support for data analysis as needed.

Modification of the Terms of Reference

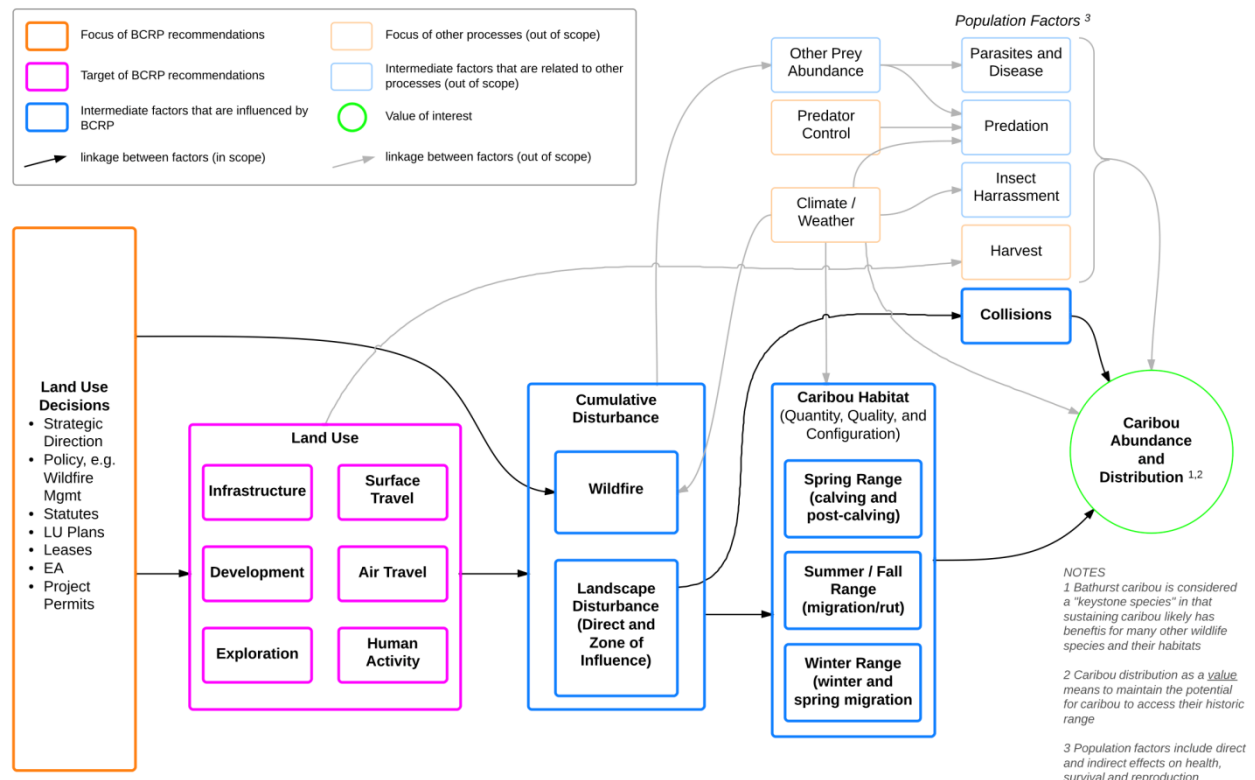
This Terms of Reference may be amended, varied or modified in writing after consultation and agreement of the Bathurst Range Plan WG members.

Appendix 2 | Influence Diagrams

What disturbance impacts on caribou could be addressed by range management recommendations?

The Task Group identified key intermediate effects, or risk factors, associated with land use decisions that influence caribou and its habitat and therefore, ultimately, caribou abundance and distribution (Figure 1). Note that as a value, distribution refers to the potential for caribou to access their historic range, rather than an attempt to “direct them” to certain places.

Figure 1 - Caribou risk factors influenced by range management



The Task Group identified several cumulative disturbance impacts affecting caribou and its habitat that could likely be addressed by range management recommendations. They include direct and indirect (zone of influence) landscape disturbance, issues related to road access, and possibly wildfire management.

How could range management recommendations affect cultural values?

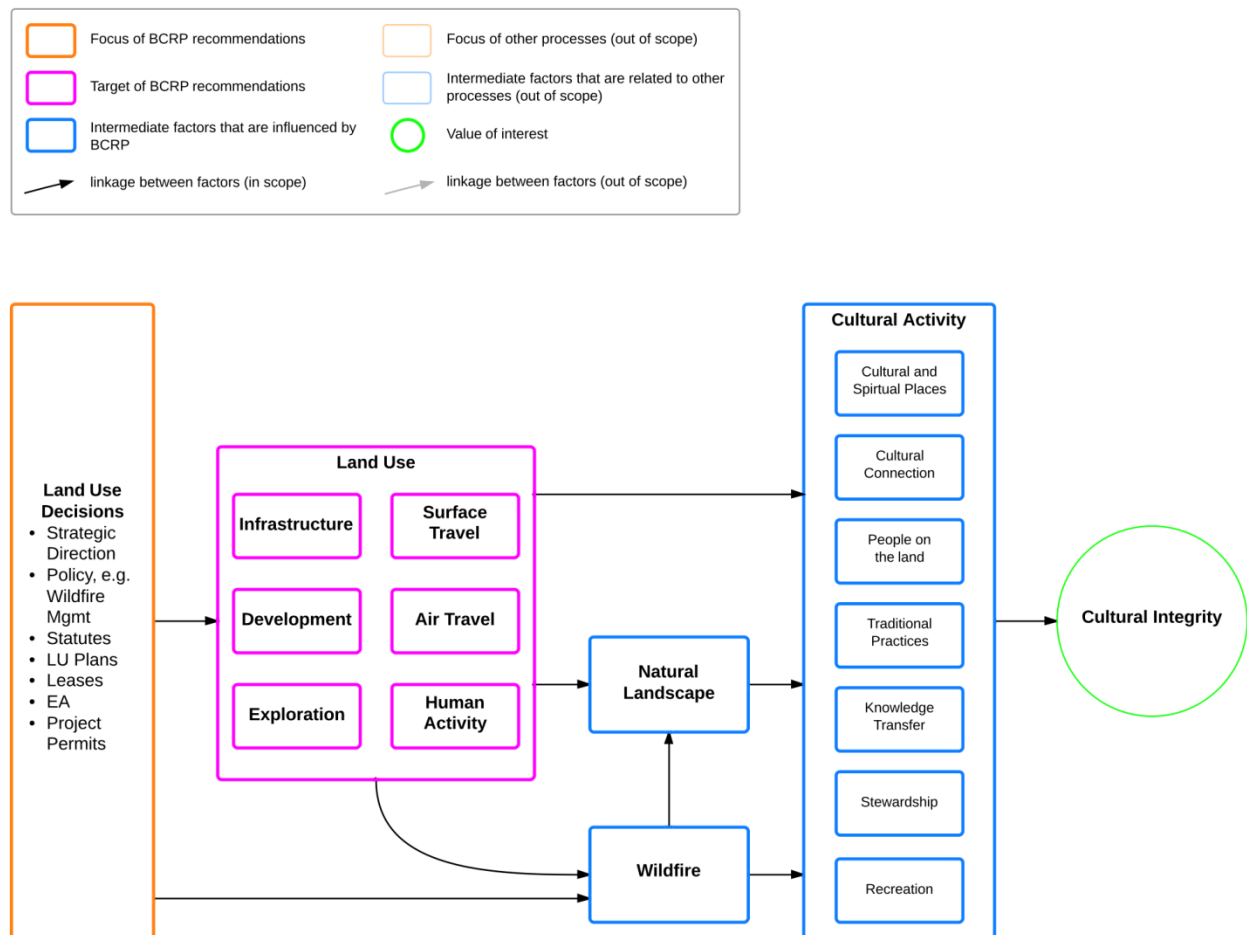
The lands within Bathurst caribou range are valued for the significant cultural resources, activities and practices that sustain the cultural integrity of the region. These include:

- Cultural and spiritual places
- The connection of culture and people to the land

- Traditional practices, i.e. a “hunting lifestyle”
- Knowledge transfer between generations
- Stewardship of the land

The Task Group identified the amount of natural landscape and wildfire as key intermediate factors that could be influenced by range management recommendations (Figure 2).

Figure 2 - Cultural values affected by range management

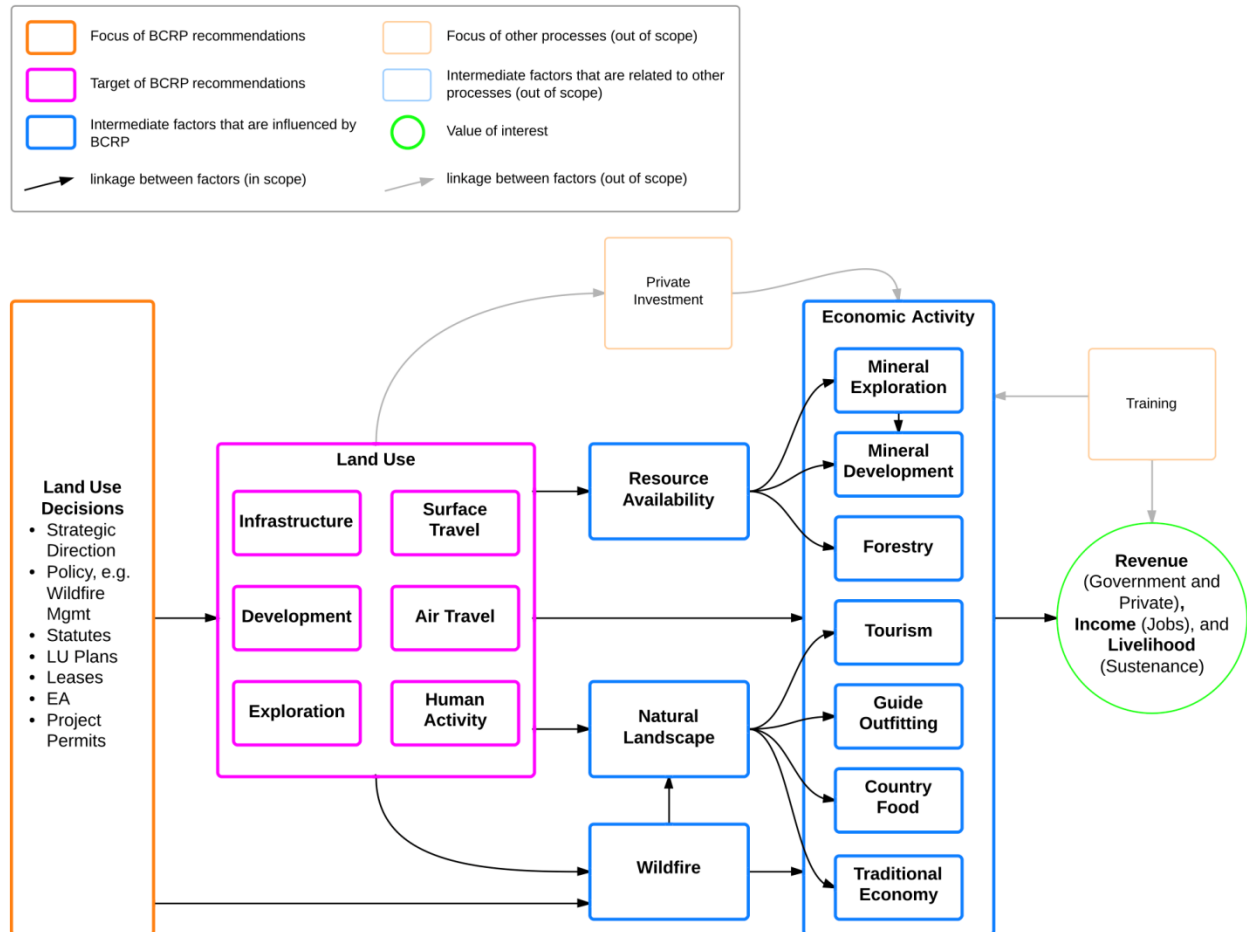


How could BCRP recommendations affect economic values?

The lands within Bathurst caribou range also support mineral development/exploration and other activities that maintain government (both territorial and Aboriginal) and private revenue, jobs and income, and traditional means of livelihood and sustenance across the region.

The Task Group identified resource availability, amount of natural landscape, and wildfire as key intermediate factors that could be influenced by range management recommendations (Figure 3).

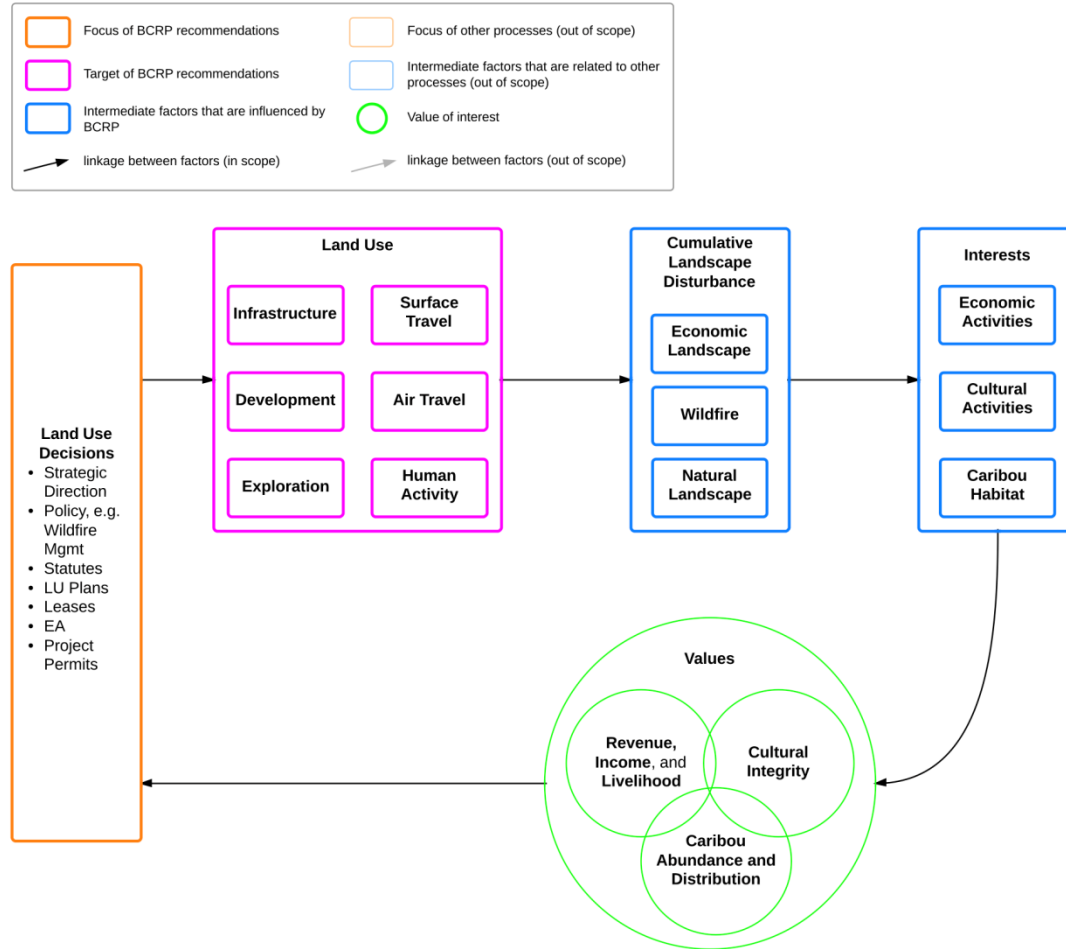
Figure 3 - Economic values affected by range management



Interdependence of land use and values

The Task Group recognized that land use decisions and underlying values are in a relationship of mutual benefit and dependence. The governance of land use decisions is based on societal values, which are themselves affected by the effects of land use. This interdependent relationship is visualized in Figure 4.

Figure 4 – Relationship between land use and underlying values



Appendix 3 | Potential management strategies

Management Strategy	Where to Implement?
Footprint Threshold	Spring Calving range
Fixed Seasonal Activity Restrictions	All ranges, but most important in Spring Calving range
Variable Seasonal Activity Restrictions based on timing or location of caribou activity	All ranges, but most important in Spring Calving range and Summer/Fall Tundra range
Best Practices regarding aircraft (fixed-wing and helicopter) over-flights	All ranges, but most important in Spring Calving range and Summer/Fall Tundra range
Avoid locating human land use in important places, most critically migration corridors and key travelling areas (Water Crossings, Eskers)	All ranges, but most important in Summer/Fall Tundra range
Improved wildfire protection in key winter range areas	Winter Taiga range
Access Management	All ranges where roads and trails exist
Better coordination of project monitoring flights	All ranges, but most important in Spring Calving range
Better coordination of research and monitoring	All ranges