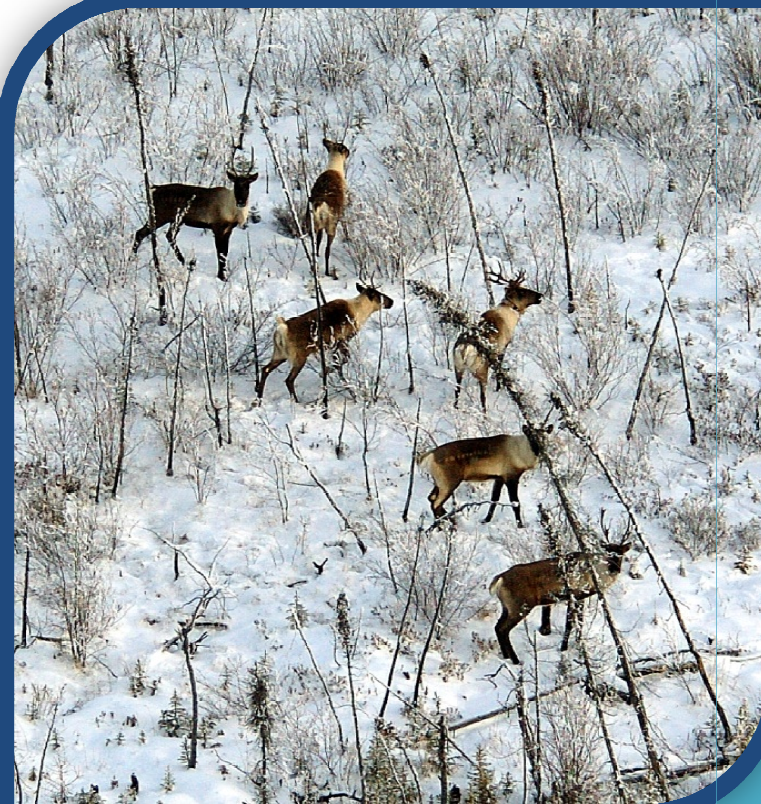


ENVIRONMENT AND NATURAL RESOURCES



Implementation Plan for the *Action Plan for Boreal Woodland Caribou in the Northwest Territories:* 2010-2015

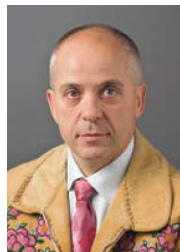
NWT
Species
at Risk



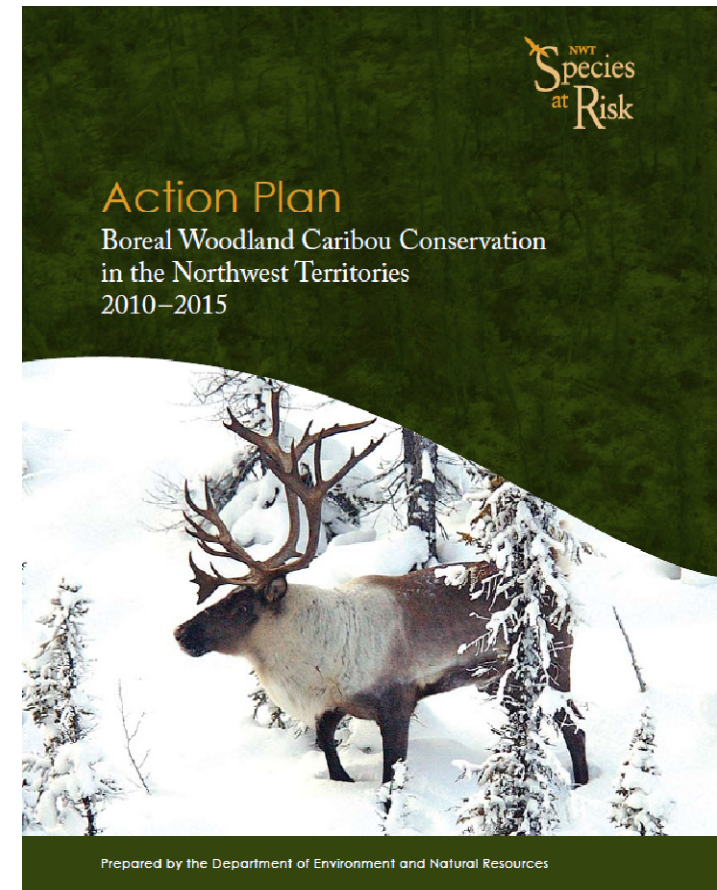
The *Action Plan for Boreal Woodland Caribou Conservation in the Northwest Territories* was released after consulting with Management Authorities, Aboriginal organizations, communities, and interested stakeholders.

This Implementation Plan is the next step of the Action Plan and will be used by Environment and Natural Resources to implement the actions in cooperation with the Tłıchǫ Government, Wildlife Management Boards and other stakeholders. In the future, annual status reports will be provided detailing the progress of the actions undertaken and implemented by Environment and Natural Resources.

Implementation of these 21 actions will contribute to the national recovery effort for boreal woodland caribou under the federal *Species at Risk Act*. Implementation of certain actions will be coordinated with Alberta as part of our mutual obligations outlined in the signed *Memorandum of Understanding for Cooperation on Managing Shared Boreal Populations of Woodland Caribou*. This MOU acknowledges boreal caribou are a species at risk that are shared across jurisdictional lines and require co-operative management.



J. Michael Miltenberger
Minister
Environment and Natural Resources



IMPLEMENTATION PLAN

Boreal Woodland Caribou Conservation in the Northwest Territories 2010–2015

Environment and Natural Resources

July 2010

Action	Initiative	Headquarters Involvement	Inuvik Region	Sahtu Region	North Slave Region	Dehcho Region	South Slave Region
1	<i>Prepare and implement comprehensive boreal caribou range management plans in areas where development may create significant access or loss of habitat. Specific range management plans for boreal caribou habitat will provide guidance for the regulation of proposed and ongoing land use activities and development projects.</i>	Co-lead the Dehcho Boreal Caribou Working Group. Allocate funding where needed. Provide assistance to ENR Regional offices or Management Authorities as needed. Facilitate the use of cumulative effects models or other landscape simulators by Regional offices.	Not currently needed.	Currently not needed. Dependent on exploration activities in the Colville Hills.	Not currently needed.	To be developed by the Dehcho Boreal Caribou Working Group.	To be developed by the Dehcho Boreal Caribou Working Group. Range management important for boreal caribou as development pressure is high.
2	<i>Support the establishment of conservation zones to conserve habitat within the NWT throughout regional land use planning processes and the NWT Protected Areas Strategy.</i>	Provide technical support as needed. Provide policy advice on establishing critical wildlife areas. Lead the Buffalo Lake Protected Areas Strategy Working Group.	No new initiatives planned.	Ongoing. Completed the Saoyú-ᑭᑦᑲᑦᑲᑦ Protected Areas Strategy initiatives.	No new initiatives planned.	Ongoing. Involved with Samba K'e and Edehzhie Protected Areas Strategy initiatives.	Ongoing. Involved with Ka'a'gee Tu and Buffalo Lake Protected Areas Strategy initiatives.

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3	<i>Continue to monitor distribution of boreal caribou using a combination of Traditional Knowledge and Scientific studies to monitor movements. This may include use of resource selection modelling, or other data modelling analyses, to identify seasonally preferred habitats and responses to human disturbances.</i>	Assist ENR Regions to validate Resource Selection Function (RSF) modeling maps by 2012. Coordinate RSF models with Forest Management.	Revise RSF model using EOSD data. Validate existing RSF models with new Boreal Caribou collar data in 2012.	Revise RSF model using EOSD data. Validate existing RSF models with new Boreal Caribou collar data in 2012.	In collaboration with the WRRB and Tẖcẖo Government, conduct a second occupation and occurrence survey in the Taiga Plains ecozone keying in on areas where boreal caribou were and where not found any longer. Develop student projects exploring the perception of competition with Wood Bison using Traditional Knowledge and historical maps.	Ongoing. Additional collars deployed in 2010. Collars, with existing deployments, will be active through 2014 and 2015. Validate RSF model in 2010 and 2015.	Ongoing. Apply Dehcho RSF model to South Slave land cover types in cooperation with Forest Management.

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4	<i>Determine vegetation regeneration rates and patterns for various types of disturbances across different habitat types and environmental conditions in the NWT to assist development of range management plans.</i>	Develop a workplan with Regional ENR staff and Forest Management. Facilitate the use of cumulative effects models or other landscape simulators by Regional offices.	Forest Management will be engaged to develop a research plan and included habitat as a value at risk.	Forest Management will be engaged to develop a research plan.	No new initiatives planned.	Completed. 100 years; Boreal caribou habitat has been added as a value at risk.	Forest Management will be engaged to develop a research plan and include habitat as a value at risk.
5	<i>Establish long-term monitoring of adult female mortality and calf survival or track population trends to determine whether local boreal caribou numbers are increasing, decreasing or stable. This may include using: A) radio, satellite or GPS collars on adult cows or B) density estimates.</i>	Allocate funding. Assist Regions to develop NWT wide study protocols for monitoring by 2012. Coordinate Alberta and Forest Management involvement.	Done from 2004 until 2011; If Mackenzie Gas Project is approved the program will be reactivated.	Done from 2004 until 2011; If Mackenzie Gas Project is given approval and development of project starts, then program will be reactivated.	In collaboration with the WRRB and Tłıchǫ Government, conduct a second occupation and occurrence survey in the Taiga Plains ecozone keying in on areas where boreal caribou were and where not found any longer.	Established and ongoing. \$45-55K per year data collection. Develop workplan with Alberta on shared caribou.	Established and ongoing. Develop workplan with Alberta on shared caribou.

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6	<i>In areas of the NWT where development may create significant access or loss of habitat, or where specific boreal caribou range management plans are being developed (see Action 1), work with wildlife co-management boards to monitor harvest to ensure boreal caribou populations remain sustainable.</i>	Allocate funding.	Working with GRRB and IGC to collect harvest data from RRCs and HTC.	Harvest data collected by SRRB Harvest Study 1998-2005; No current harvest data are available. Work with the SRRB to seek avenues to fund Harvest Study.	Work with WRRB to collect harvest data.	No co-management boards.	No co-management boards.
7	<i>In cooperation with harvesters collect samples and comments (a piece of hide from harvest along with location, sex and number seen) and perform ongoing DNA analysis to better understand Boreal Caribou populations.</i>	Coordinate analysis of samples.	Working to collect samples from harvested animals; Samples routinely collected from collared animals.	Established and trained two Wildlife Health Monitors in Fort Good Hope to collect samples (2009); Both are regular boreal caribou harvesters.	No new initiatives planned. Very few animals are harvested; Previous attempts to collect samples unsuccessful.	Samples ongoing from collared animals; Harvest estimates remain low.	Can provide samples as available.
8	<i>Monitor the response of boreal caribou to land use activities where appropriate by tracking their movements and habitat use in relation to land use activities.</i>	Develop Best Management Practices by 2012 with Regional involvement and Forest Management.	Done from 2004 until 2009. If Mackenzie Gas Project is approved, a monitoring program will be required.	Done from 2004 until 2009. If Mackenzie Gas Project is approved, a monitoring program will be required.	There are limited land-use activities; No new initiatives planned.	Complete current analyses. Monitoring will be required if Mackenzie Gas Project is approved.	Complete current analyses. Monitoring ongoing.

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9	<i>Where possible, identify and map the impacts of various types of land use on boreal caribou range and habitat. Maintain a database of all human disturbances on boreal caribou range, including seismic lines, roads, well sites, mine sites, transmission lines, trails, cutlines, forestry blocks, land leases and collision locations with highway traffic.</i>	Discuss and coordinate with Forest Management and establish a database of activities (i.e. spatial data warehouse).	Habitat maps with RSF models completed. Linear features and avoidance completed.	Have habitat maps developed (GNWT and Ducks Unlimited Landsat 7 imagery); Mapped linear landuse in region where possible.	There are limited land-use activities; No new initiatives planned.	Develop range management plans through Dehcho Boreal Caribou Working Group.	Develop range management plans through Dehcho Boreal Caribou Working Group.
10	<i>Define what makes an effective travel corridor for predators. This may involve mapping the extent of vegetation regeneration of older cutlines and the locations of all recent cutlines to determine the stage of regeneration where a cutline or seismic line is no longer an effective travel corridor for predators. In some cases, defining corridors will have to be done on the ground, on a site-by-site basis.</i>	Discuss with Forest Management to facilitate a literature review and summary. Develop a student project to investigate further.	No new initiatives planned.	No new initiatives planned.	No new initiatives planned.	No new initiatives planned.	No new initiatives planned.

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11	<i>Develop best practices guidelines for industrial and commercial activities to manage or reduce/mitigate habitat impacts and sensory disturbances on boreal caribou. Guidelines may include appropriate thresholds for the acceptable amount of linear features, human development and natural habitat change at a scale relevant to boreal caribou in the NWT for specific regions.</i>	Develop Best Management Practices by 2012 with Regional involvement and Forest Management.	Will adopt guidelines being developed by Headquarters.	Will adopt guidelines being developed by Headquarters.	Will adopt guidelines being developed by Headquarters.	Will adopt guidelines being developed by Headquarters.	Will adopt guidelines being developed by Headquarters.
12	<i>Assess whether, and where, effects of other wildlife species on boreal caribou in other jurisdictions are applicable for the NWT.</i>	Literature review by Headquarters and Forest Management; Develop research proposal.	No new initiatives planned.	No new initiatives planned.	No new initiatives planned.	No new initiatives planned.	No new initiatives planned.

Action	Initiative	Headquarters Involvement	Inuvik Region	Sahtu Region	North Slave Region	Dehcho Region	South Slave Region
13	<i>Track trends of prey species and carnivores in boreal caribou ranges where development may create significant access or loss of habitat. Include information from communities and industrial companies.</i>	Allocate funding. Ensure consistency in research protocols.	Some moose surveys completed, collection of local information on bear and wolf trends is ongoing. Wolf and wolverine carcass collections ongoing.	Initiating a moose monitoring project in Fort Good Hope that will also keep track of trends in predators. Muskox surveys have been initiated. Wolf and wolverine carcass collections ongoing.	Moose surveys conducted every 3 years. Regular wood bison surveys. Wolf and wolverine carcass collections ongoing.	Regular surveys for moose, beaver, and wood bison. Wolf and wolverine carcass collections ongoing.	Regular surveys for moose and wood bison. Wolverine carcass collections ongoing.
14	<i>Monitor and identify boreal caribou diseases and parasites.</i>	Coordinate analysis of samples.	Working to collect samples from harvested animals; Samples routinely collected from collared animals.	Established and trained two Wildlife Health Monitors in Fort Good Hope to collect samples (2009); Both are regular boreal caribou harvesters.	No new initiatives planned. Very few animals are harvested.	Baseline information exists; Harvest estimates remain low.	Baseline information exists; Continue to collect and archive samples.

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15	<i>Involve community members in boreal caribou monitoring, conservation actions and field research, ensuring that the information collected is communicated to all community members.</i>	Develop a common reporting format.	Ongoing; Annual regional and community meetings; Community members involved in field work.	Traditional Knowledge study completed with Inuvik and Gwich'in. Many meetings with RRCs and SRRB to discuss scientific and traditional knowledge about boreal caribou. SRRB report on workshop.	Ongoing; Key participation during occurrence and occupation surveys.	Talk to harvesters, elders compiling TK on Boreal caribou, have proven TK with collars. Biannual wildlife workshops and communities updated and actively involved in discussions.	Community /First Nation members involved in field work. Information shared during community meetings and regional workshop (both directions). Annual progress reports.
16	<i>Encourage cooperative work with Aboriginal organizations, co-management boards, industry, and others on stewardship activities.</i>	Facilitate where necessary.	Ongoing.	Ongoing.	Ongoing.	Have provided expertise to track count studies in Trout Lake.	Ongoing.

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17	<i>Promote awareness and knowledge of boreal caribou and boreal forest ecosystems among the public and industry operating within boreal caribou range in the NWT.</i>	Discuss with Forest Management. Developing boreal caribou fact sheets for public distribution.	Annual updates provided to the RRCs and HTC's. Regional staff always consider Boreal Caribou in EA assessments.	CWS held public meetings in Sahtu March 2010 to update RRCs and interested people in communities. SRRB Environmental Assessment Specialist is kept updated on boreal caribou work in the Sahtu and NWT.	Annual regional wildlife workshops are the forum where updated boreal caribou info is provided to industry and the public.	Biannual wildlife workshops. Updated boreal caribou info is provided to industry and ENR staff have meetings with local First Nations regularly. Yearly progress reports are also filed.	Information shared at (biannual) regional wildlife workshop; Meetings with local aboriginal groups; Annual progress reports on monitoring program.
18	<i>Encourage NWT participation at national and international conferences on caribou to foster learning and networking opportunities.</i>	Hosting the August 2011 Arctic Ungulate Conference. North American Caribou Conference attendance.	CARMA; Regular North American Caribou Conference attendance.	Sahtu Region participates in CARMA.	No new initiatives planned.	North American Caribou Conference attendance.	CARMA, North American Caribou Conference.
19	<i>With co-management partners, review NWT legislation and policy and enact regulations or directives to protect boreal caribou and their habitat as needed.</i>	Develop Best Management Practices by 2012 with Regional involvement and Forest Management. Assist with developing regulations recommended by Management Authorities.	Ongoing with other regions.	Ongoing with other regions.	Ongoing with other regions.	Ongoing, as needed.	Ongoing, as needed.

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20	<i>Following the five-year time frame of this Action Plan, the Minister will prepare a report on the progress made towards meeting the goals, and the status and outcome of each action. The plan will be updated as needed.</i>	Headquarters will coordinate.	Provide status on regional actions for report.	Provide status on regional actions for report.	Provide status on regional actions for report.	Provide status on regional actions for report.	Provide status on regional actions for report.
21	<i>Continue to provide information on boreal caribou and their habitat to environmental assessment processes.</i>	Ongoing.	Ongoing in coordination with Regional Environmental Assessment Coordinator (REAC).	Ongoing.	Ongoing in coordination with REAC.	Ongoing.	Ongoing in coordination with REAC.

List of acronyms used:

CARMA – CircumArctic Rangifer Monitoring & Assessment Network
CWS – Canadian Wildlife Service (Environment Canada)
DNA – Deoxyribonucleic acid
EA – Environmental assessment
ENR – Department of Environment and Natural Resources
EOSD – Earth Observation for Sustainable Development of Forests
GNWT – Government of the Northwest Territories
GRRB – Gwich'in Renewable Resources Board
HTC – Hunters and Trappers Committee
IGC – Inuvialuit Game Council
MOU – Memorandum of Understanding
NWT – Northwest Territories
REAC – Regional Environmental Assessment Coordinator
RRC – Renewable Resource Council
RSF – Resource Selection Function
SE – Southeast
SRRB – Sahtu Renewable Resources Board
TK – Traditional Knowledge
WRRB – Wek'èezhii Renewable Resources Board

**For more information in a specific region of the NWT, please contact the appropriate regional office, or visit:
www.enr.gov.nt.ca**

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