

**Addendum to Environment and Natural Resources Responses to Bluenose-East
Caribou Herd Management Proposal Sahtu Renewable Resource Board
Information Requests Round 1**

In Round One of the Sahtu Renewable Resource Board (SRRB) Information Requests on the Bluenose-East (BNE) Caribou Herd Management Proposal the SRRB requested copies of the meeting summaries for the five meetings with Aboriginal leaders and technical meetings, including tracking of the Department of Environment and Natural Resources (ENR)'s responses to the input from Aboriginal organizations.

Summaries for the leaders meetings that occurred in in August and November 2014 and the technical meetings held during October 2014 were provided to the SRRB on January 29, 2016. At that time, ENR committed to providing a summary of responses to Aboriginal inputs under separate cover with the responses to the second round of information requests. This addendum provides that summary. It is important to note that these meetings discussed both the Bathurst caribou herd and the BNE caribou herd and some of the actions below relate to the Bathurst herd.

1. Aboriginal Consultation

Please provide copies of the meeting summaries for the five meetings with Aboriginal leaders and technical meetings referred to on page 4, including tracking of ENR responses to Aboriginal inputs.

ENRs Response:

Update on caribou management actions recommended by Aboriginal caucus at leaders' meeting November 28, 2014 at Northern United Place.

During the political leaders meeting of November 28, 2014, the caucus of Aboriginal leaders reached consensus on a series of inputs from Aboriginal groups and presented them to then ENR Minister Michael Miltenberger.

Brief updates on ENR responses to each action recommended in the November 28 2014 meeting are provided below. We have also attached a more detailed list of activities that have been undertaken since the November 2014 meeting.

1. Land Use

i. Prioritize land use planning.

ENR has led a collaborative process to develop a range plan for the Bathurst herd that will include recommendations on limits to industrial development on seasonal and annual ranges of this herd. Participants include all user groups of the herd from the Northwest

Territories (NWT), Nunavut (NU) and Saskatchewan in addition to non-government groups, industry and other department from the GNWT (the Departments of Lands and Industry, Tourism and Investment). Information on the herd's seasonal ranges and important areas has been assembled from scientific sources and traditional knowledge. The range plan approach could be used to develop a similar plan for the BNE herd in the future.

ii. Implement interim moratorium on development in key caribou habitat.

ENR has engaged in all environmental assessment processes that may affect migratory barren-ground caribou herds like the BNE and Bathurst herds, including possible developments in Nunavut for trans-boundary herds. ENR participated in meetings in Nunavut in 2015, including a meeting of the Nunavut Land Use Planning Commission and a meeting of the Nunavut Wildlife Management Board, to support the Government of Nunavut's (GN) position and oppose any development on calving grounds and support protection of key habitats like traditional water crossings and post-calving habitats. ENR notes, however, that limits on development, including possible moratoria on development, would need to involve a number of government agencies and regional land use planning processes.

iii. Send strongly worded letter to Nunavut Environment and NWMB –management planning, land use planning, commercial harvesting and face-to-face meeting.

GNWT has worked with the GN on monitoring and management of trans-boundary caribou herds for a number of years, and the level of collaboration has increased in the last 5 years as a number of herds have reached very low numbers, are declining, or both. Harvest of BNE and Bathurst caribou in NU will be reviewed in 2016 by the Nunavut Wildlife Management Board and will consider 2015 survey numbers for these two herds as well as harvest proposed for the two herds in the NWT.

ENR has expressed in Minister's level discussions with GN the strong concerns in the NWT over continuing commercial harvest of Bathurst in NU when all harvest, including Aboriginal harvest, has been closed in the NWT for conservation reasons. The Premier of the NWT also sent a letter to that effect to Nunavut Premier Taptuna in January 2015.

In 2015 ENR participated in a meeting in Iqaluit on the NU land use plan to support the GN's position opposing any development on calving grounds and limits to development on other key seasonal ranges, and will participate in a further meeting in March 2016 in Iqaluit on this subject. GN staff participated in a meeting on January 20, 2016 on BNE harvest allocation and on January 21-22, 2016 on Bathurst long-term management planning, and have participated in Bathurst range planning meetings since the beginning of the process, along with NU community participants and regional wildlife boards. Both GN

and GNWT have expressed opposition to mineral exploration occurring on the calving grounds of the BNE herd.

iv. Complete report on range management plan and cumulative effects program by March 31, 2015.

ENR has developed a cumulative effects framework for the Slave Geological Province that is posted on the ENR web-site and was presented at a Regional Monitoring Workshop for the Slave Geological Province in Yellowknife November 8, 2013:

GNWT-ENR, Wildlife Division. 2013. Discussion paper: Guidance for developing a multi-scale cumulative effects monitoring program for wildlife in the Slave Geological Province.

Meetings to develop a Bathurst caribou range plan have been on-going for about 2 years and will continue in 2016. Summaries of each meeting have been made available to all participants and can be made available on request from ENR. The range plan is anticipated to be completed in 2018. Again, a similar approach could be used for the BNE range.

2. Long term management and action planning

i. Continue and prioritize the long term planning process for the Bathurst herd and finalize terms of reference for a Bathurst caribou management board as soon as possible.

Three workshops were held prior to 2016 to convene traditional users and co-management boards to develop a long-term management process for the Bathurst herd, as required by the Tłı̄chǫ Agreement. A further 2-day meeting was held on January 21-22, 2016 in Yellowknife and consensus was reached on a draft terms of reference for an advisory committee on Bathurst caribou management and on priority tasks for this group to address. Further meetings are expected in 2016. ENR has supported and funded these meetings and will continue to support and promote this process.

ii. Continue ACCWM (Advisory Committee for Cooperation on Wildlife Management) process, including action planning.

The ACCWM, of which the SRRB is a member, in winter 2014-2015 requested from ENR funding to support development of an Action Plan for the BNE caribou herd. Development of the action plan is now underway in 2016. The ACCWM recommended a harvest limit for the 2014-2015 harvest season for the NWT of 1800 caribou (80% bulls), which ENR accepted. Results of the June 2015 BNE calving photo survey and other monitoring were made available as quickly as possible to wildlife management boards with an interest or responsibility for the BNE herd in 2015, and management proposals for the BNE herd were sent to the SRRB, WRRB and the Wildlife Management Advisory Council NWT

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(WMAAC(NWT)) in late 2015, with hearings under the SRRB and WRRB being held in March 2016. A meeting was held January 20, 2016 for all user groups of the BNE herd in NWT and NU to consider an allocation formula or sharing approach for Aboriginal harvest of BNE caribou, as had been requested by the ACCWM.

iii. Establish working group to identify key caribou habitat for priority fire management in 2015.

A working group has not yet been established, but a recent review of the GNWT fire management program in NWT communities has included the identification of some key unburned caribou winter ranges considered important by community members. These will be considered during the fire season in fire-fighting programs. It must be emphasized, however, that the highest priorities for fire suppression will remain communities and human infrastructure. In big fire years with a very high drought index, like 2014, the GNWT does not have the ability to action all fires, and it is also important to note that fire has been a natural part of the boreal forest ecosystem for thousands of years.

3. Environmental Monitoring

i. Develop vegetation mapping and monitoring protocols and partnership agreements.

This was identified as a longer term commitment. ENR has taken the first step in this process and contracted Don Russell (caribou biologist in Whitehorse) to provide a summary of environmental trends from 1979-2014 for NWT barren-ground caribou herds based on NASA's MERRA (Modern Era Retrospective-Analysis for Research and Applications) climate database maintained by the CARMA group (Circum Arctic Rangifer Monitoring and Assessment), with an interpretation of herd-specific trends and their implications to each herd. ENR expects those results in the early part of 2016 and will make them available to the SRRB and other interested parties as soon as a report is available. A recent paper by Chen et al. (2014) found a time lagged correlation between spring calf:cow ratios in the Bathurst herd and a composite index of summer range productivity, with the suggested mechanism being poor summer feeding conditions leading to poor cow condition and low pregnancy rates the following winter and reduced calf ratios the following year. These are two examples of partnerships that increase understanding of how long-term changes in vegetation and environmental trends may be affecting caribou.

ii. Conduct TK and science literature review on the potential impacts of insects on caribou and insect control methods.

This was identified as a longer term commitment. ENR has not yet carried out a literature review as such but the following references were the result of a thesis study on effects of insect harassment on the Bathurst herd in 2008-2009. In general terms, controlling insects on large, remote caribou ranges is not likely to be practical, and would potentially have unforeseen and possibly adverse environmental effects on a large scale.

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Witter, L. A. 2010. Interrelationships between weather, parasitic insects, and barren-ground caribou (*Rangifer tarandus groenlandicus*) behaviour in Northwest Territories and Nunavut. MSc thesis, University of Northern BC, Prince George, BC, Canada.

Witter, L.A., C. J. Johnson, B. Croft, A. Gunn and L. M. Poirier. 2012. Gauging climate change effects at local scales: weather-based indices to monitor insect harassment in caribou. *Ecological Applications*, 22(6), 2012, pp. 1838–1851.

Witter, L.A., C. J. Johnson, B. Croft, A. Gunn and M. P. Gillingham. 2012. Behavioural trade-offs in response to external stimuli: time allocation of an Arctic ungulate during varying intensities of harassment by parasitic flies. *Journal of Animal Ecology* 2012, 81, 284–295.

4. Education and communication

i. Organise voluntary “sight in your rifle” events.

ENR has organized rifle sighting-in events in NWT communities for many years and wildlife officers are available in all communities to organize these events as needed, in collaboration with communities and leaders. Most recently, sight in your rifle events were held in Behchokò and Délı̄nè in 2015. In the Sahtu region, ENR’s goal is to work with the communities and Renewable Resource Councils (RRCs) to make these annual events that are included related conservation education topics.

ii. Collaboratively develop communication tools to promote reducing harvest.

See response below (iii): In addition, ENR has a wide range of materials and tools available to assist in the education of hunters and the general public. Using these in the most appropriate ways will require a collaborative effort tailored to individual communities. Some of the current caribou publications developed to assist in the education of hunter and the general public include:

- “Care of our caribou. I take Bull do you?” Joint effort magnet
- Poster illustrating the effect of shooting a cow compared to shooting a bull
- Community based caribou sample collection guide
- The Caribou Hunters DVD (Updated)
- Meat cache tags
- Barren-ground caribou post cards (along with Peary, Woodland and Dolphin-Union post cards)
- HARVEST WISELY TAKE BULL bumper sticker
- Flying Low? Think Again pamphlet
- Updated information on caribou contained in the annual Summary of Hunting Regulations booklet.
 - Field dressing big game
- Caribou identification cards (how to tell male from female)

- Lens cloths (for sighting in your rifle, reducing wounding and wastage) with RAP and hunting licence blurb
- Can you tell the difference (female and male caribou poster)
- How to Sight-in Your Rifle card
- Updated disease information sheets (Field Guide to Common Wildlife Diseases booklet once finalized)

iii. Continue and increase meetings and activities in the communities and on the land to encourage responsible harvesting practices.

For a number of years, ENR, in collaboration with co-management partners, has promoted sound hunter harvest practices, the reduction of wastage, harvesting bulls instead of cows, and other related conservation education in NWT communities. In response to community demands, ENR is currently developing a Hunter Education program. A working group, with participants from regional organizations and communities, is developing hunter education materials which are currently out for review with individuals, boards, agencies and organizations across the NWT.

ENR recognizes that increasing public acceptance and participation in caribou conservation will require increased collaboration with communities regarding the serious issues facing caribou, the actions being taken to address declines, and the need for reporting on harvest and on-the-land wildlife observations. ENR looks forward to continued cooperation in these areas.

5. Predator control

i. Increase the wolf incentive program payment to \$800, reinstitute the carcass collection program.

As of late 2015, ENR has revised the incentives for NWT wolf hunters and trappers to increase incentives for wolf harvesting. Three options are available: \$200 for an intact (unskinned) wolf, \$400 for a wolf pelt skinned to traditional standards and an additional \$50 for the skull, and up to \$800 for a wolf pelt skinned to Genuine Mackenzie Valley Fur auction standards if the pelt sells for more than \$200 at auction and the skull is turned in. These incentives are available to Aboriginal and non-Aboriginal hunters.

ii. Form a Working Group and Terms of Reference with input from Aboriginal groups to develop approach to wolf control.

The Tłı̄chǫ Government has developed a proposal with ENR to train and support Tłı̄chǫ wolf hunters to target the Bathurst winter range for increased wolf harvest carried out in culturally appropriate ways. Other Aboriginal groups have expressed interest in similar programs to increase wolf harvest in the ranges of declining caribou herds.

ENR will lead a collaborative feasibility assessment of wolf reduction options (methods, costs, likelihood of success) in 2016. While the technical aspects of the feasibility assessment will be under ENR's lead, an assessment of acceptable wolf reduction options in the NWT will need extensive discussions with Aboriginal groups and co-management boards, given the diversity of views about predator reduction and approaches that might be acceptable. As a first step, ENR held a 2-day ENR biologists meeting in January 2016 to review scientific methods of monitoring wolf abundance and begin to collect information on how other jurisdictions have approached wolf control programs. This information will provide useful background for the collaborative feasibility assessment.

iii. Coordinate program with Nunavut Environment.

GNWT has had initial discussions at meetings about management of trans-boundary caribou herds with representatives of GN and community representatives from Nunavut. These discussions have included options for increased wolf harvest from ranges of the BNE and Bathurst herds. Cultural reservations about killing wolves found in some NWT communities and Aboriginal groups generally are less apparent in NU. There are practical advantages to hunting wolves north of treeline, where access to landscapes by snowmachine is not limited in the ways that access south of treeline is limited to trails and water bodies. Representatives from NU expressed interest in working with NWT communities and GNWT in increasing wolf harvest to assist in recovery of shared caribou herds. ENR will follow up on these discussions and include this option in options that may be considered as part of the wolf reduction feasibility assessment.

iv. Develop a method to immediately report and record wolf sightings\caribou sightings and interactions.

Wildlife officers in NWT communities have been, and continue to be, available to record interesting and unusual observations of wildlife, including wolves, bears and caribou. A better system is needed to collate these observations and draw patterns.

6. Harvest management

i. Prioritize collection of harvest information; no resident, outfitter or commercial harvest.

Collection of harvest information is always a priority for the GNWT. At present resident, outfitter and commercial harvest of barren-ground caribou is closed in the NWT with the exception of Unit U in the southeast NWT which is in the Beverly and Ahiak range and areas within the Porcupine caribou herd range – In both areas Aboriginal harvest of caribou remains unrestricted. ENR is working with communities to develop methods to work together to collect better harvest information.

ii. Majority bulls harvest, emphasizing young/small bulls, not big breeders.

ENR agrees that a bull-focused harvest should emphasize younger and smaller bulls so that many of the prime bulls are left to breed cows in the fall. Thus far there has been limited success in some communities in shifting the harvest away from a high percentage of cows to a high percentage of bulls partially due to seasonal accessibility of the caribou. A winter harvest of primarily cows has become established as the accepted preference for many Aboriginal hunters. A greater and sustained effort in hunter education is needed in the communities to increase the acceptance of a bull-focused harvest and to teach inexperienced hunters how to distinguish young bulls from cows. This will need the support and collaboration of RRCs and community leaders.

An 80% or more bull caribou harvest was recommended and implemented for the Bluenose-West herd in 2007 and helped to stop a rapid decline in this herd 2000-2006, together with improved calf recruitment.

A much reduced harvest from the Bathurst herd with an 80% bull component was recommended and implemented 2010-2014, and along with improved calf recruitment helped shift the herd from a rapid decline to an approximately stable trend 2009-2012.

A harvest of at least 80% bulls was recommended for the BNE herd for the 2014- 2015 harvest season and a bull-focused harvest is under discussion for this herd in early 2016.

The Porcupine Caribou Management Board has emphasized sparing cows and taking mostly bulls in public/hunter education in the last 5-10 years.

iii. Recommend harvest of alternate species, encourage sharing and barter of traditional foods.

Hunters in a number of NWT communities, have shifted their harvest from BNE and Bathurst caribou to use fish (e.g. Tłı̄chʔ), bison, moose (S. Slave region), muskoxen (Kugluktuk, NU) and other caribou populations. However, it is important to ensure this new harvest is sustainable... The Beverly and Qamanirjuaq Caribou Management Board has expressed concern over increased harvest of these herds, as a result of declines in Bathurst and BNE herds.

iv. Increased enforcement, including community monitors.

During winter 2014-2015, the Bathurst mobile conservation zone was monitored regularly by aerial fixed-wing flights and ground patrols by wildlife officers on winter roads to the diamond mines. ENR has had collaborative community monitoring programs in the Tłı̄chʔ communities, in Lutsel K'e and in some years with the Yellowknives Dene First Nation (YKDFN). There have also been community monitors in some of the Sahtu communities and regular patrols by wildlife officers in Sahtu and North Slave communities. ENR regional wildlife staff in the Sahtu region have been engaged in various meetings with the SRRB and Sahtu communities in 2015-2016 to collaborate on community-based initiatives like the

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Déline community caribou plan that call for additional monitoring and identify mechanisms for community enforcement for violations of community values (ie. bringing snowshoes to track wounded animals).

LIST OF ACTIONS: BATHURST AND BLUENOSE-EAST CARIBOU 2014-2016

Listed by “Key Areas of Action” (identified at November 2014 Leaders Meeting)

1. Land Use

- Bathurst Caribou Range Plan (BCRP): ongoing multi-stakeholder inter-jurisdictional process
 - BCRP Working Group – 5 meetings (Dec 2014, Feb 2015, May 2015, Sept 2015, Dec 2015)
 - BCRP Steering Committee – 2 meeting (May 2015, Feb 2016)
 - BCRP Economic Task Group – 1 meetings (Feb 2015)
 - Cumulative Effects modeling presentation to BCRP WG (March 2015)
 - Identification of important habit for Bathurst caribou herd (BRCP working group)
 - Bathurst relative range sensitivity analysis
- Exploring a cumulative effects model to distinguish the relative contribution of environmental and industrial influences on caribou productivity (energy-protein population model)
- Technical hearings for draft Nunavut Land Use Plan
 - Participated in two technical hearings during wildlife/caribou sessions (one in-person in Iqaluit, one by phone)
 - GNWT supported GN position regarding no develop on caribou calving grounds
- NWT wide spatial database of land disturbance developed by CIMP for use in cumulative effects assessment and other planning processes (being used in BRCP process)
- Land Use Planning
 - Land Use Planning scoping exercise for Wek’èezhù area (initiated by GNWT Lands)
 - Technical hearings for draft Nunavut Land Use Plan
 - Participation in three technical hearings during wildlife/caribou sessions (one in-person in Iqaluit, two by phone)
 - GNWT supported GN position regarding no develop on caribou calving grounds
 - Nunavut Wildlife Management Board (NWMB) workshop on protection of caribou habitat (November 2015)

- Environmental Assessment: ENR participation in projects with implications for BG caribou:
 - Jay Project (DDC)
 - submission/response to information requests (IR's), participation/presentation at public hearings, participation in Wildlife Road Mitigation Plan workshop, consideration of the MVEIRB Report of Environmental Assessment
 - Muskox Diamond Project (APEX) – on Bathurst calving & post-calving ground range
 - submission to NIRB screening process
 - Submission to NIRB screening process
 - Tundra Copper –on BNE caribou calving & post-calving ground range
 - submission to NIRB screening process
 - Submission to NIRB screening process
- Cumulative Effects Assessment, Monitoring and Management Framework (CEAMF)
 - Framework for monitoring, assessing and managing cumulative effects on Bathurst herd
 - Posted on MVEIRB registry (April 2015)

2. Long term management and action planning

- Advisory Committee for Cooperation on Wildlife Management (ACCWM)
 - Continued to support operation of the ACCWM (including financial support)
 - Participated in ACCWM technical working group developing the Taking Care of Caribou Bluenose Herds action plan.
- Bathurst Caribou Herd Cooperative Advisory Committee
 - Held several meetings with government, traditional uses and Aboriginal governments (most recent January 2016)
 - Agreement reached on the need for a Bathurst Caribou Herd Cooperative Advisory Committee that includes representatives of traditional user groups to make recommendations to government on Bathurst caribou management.
 - Agreement reached on the roles and responsibilities of such a board.
 - Draft terms of reference developed and distributed for review.

3. Environmental Monitoring

- Slave Geological Province Wildlife Monitoring Workshop
 - Hosted workshop with a wide range of participants
 - Discussed draft Zone of Influence guidelines
- Continued collaboration with Canadian Centre for Remote Sensing (Wenjun Chen) on research looking at vegetation and development impacts on caribou productivity

4. Education and communication

- Produced caribou sex identification cards (winter/spring) cards to support hunter identification of bulls vs. cows
- Produced a series of posters on caribou (eg. importance of harvesting bulls, sex identification, respect for caribou)
- Reprinted and widely distributed copies of “The Caribou Hunters” DVD
- Wide range of meetings and discussions with aboriginal governments, co-management boards, individuals and others over winter 2014/2015 to discuss caribou issues.
- Information/consultation sessions in all Tłıchǫ communities (February 2015)
 - Requested by Tłıchǫ Government
 - Provided updates on status of Bathurst herd (from 2014 recon survey) and new harvest restrictions
- Meetings between the Minister and Aboriginal Leaders between December 2014 and February 2015 to work towards a consensus on short term management actions.
- Barren-ground Caribou Technical Working Group (WRRB, Tłıchǫ Government, ENR) – two meetings to date in summer 2015)
- ENR/ Tłıchǫ Government meeting of technical staff to discuss survey results and joint management proposal

5. Predator Control

- Implemented new wolf harvest incentives
 - \$200 for unskinned wolf
 - \$400 for a prime, well-handled pelt prepared in the traditional way, \$50 for the skull
 - \$400 for a prime, well-handled pelt prepared to Genuine Mackenzie Valley Fur Program standards, \$50 for the skull, and an additional \$350 prime fur bonus if the pelt sells for more than \$200 at auction.
- Continued documentation of wolf sightings on Bathurst spring classification surveys

6. Harvest Management

- Implemented and maintained a Bathurst mobile conservation area with no harvest permitted
 - Mobile zone based on location of collared Bathurst cows with an outer buffer
 - Mobile zone location readjusted every 4 days
 - ENR produced maps and signs identifying the location/boundary of no-hunting zone
 - Sent to Aboriginal groups and WRRB
 - Posted on winter roads by wildlife officers
 - Posted on ENR website
- Patrols and check stations on the range of the Bathurst herd to enforce new management actions
 - Check stations in place on all North Slave Region winter roads
 - Periodic aircraft flights over Bathurst range and mobile conservation zone

- Community Caribou monitors hired in Tłıchǫ communities
- YKDFN members hired to work with wildlife officers on Tibbitt-Contwoyto winter road check stations
- Provided funding for the Lutsel K'e winter monitoring program
- ENR provided funding for Wekweètì community hunt on winter road by Gah Cho Kue
- ENR provided funding to Tłıchǫ Government and YKDFN for a community hunt on the winter range of the Beverly herd.
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Caribou Monitoring Activities

- Calving ground photographic survey (June 2015)
 - Included representatives from Tłıchǫ Government, WRRB, YKDFN, NWT Métis Nation, Kugluktuk and Government of Nunavut
- Spring recruitment classification survey for both the Bluenose-East and Bathurst herds (March 2015)
- Systematic pre-collaring reconnaissance survey (February 2015)
- Fall classification survey for the Bathurst herd.(October 2014)
- Satellite collars deployed (March 2015) – brought total to 50 for the Bathurst and Bluenose-East herds and to 43 for the Beverly/Ahiak herd