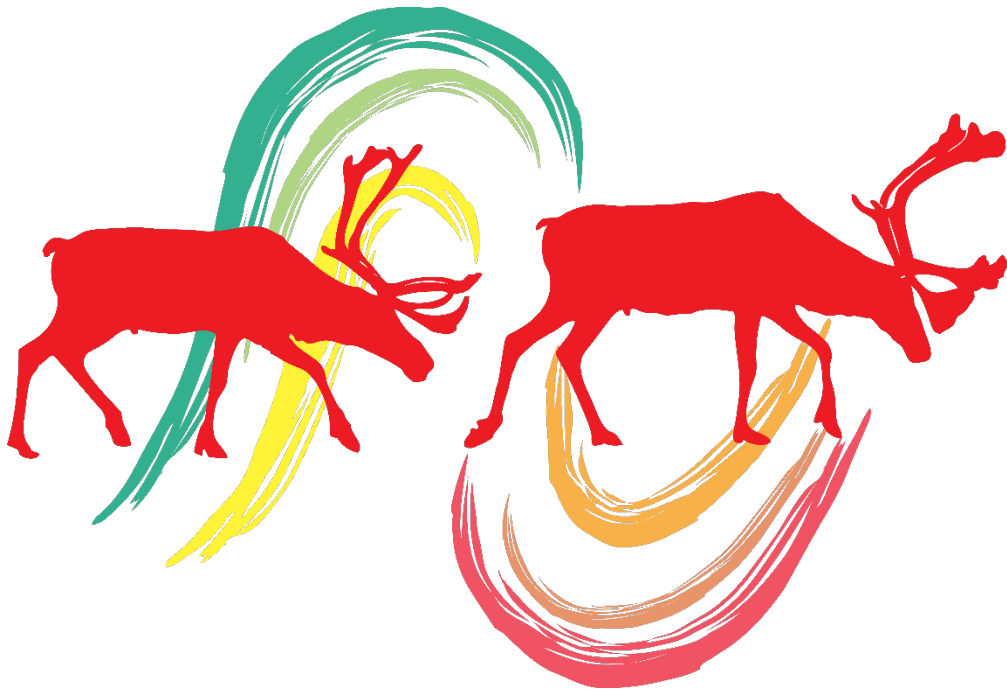


Action Plan for 2019/2020

CAPE BATHURST CARIBOU

– *RED STATUS* –



Tuktuvialuk (Inuvialuktun, Siglitun dialect)
Vadzaih (Teet'it and Gwichya Gwich'in)

**Prepared by the Advisory Committee for
Cooperation on Wildlife Management**

January 2019

Suggested citation:

Advisory Committee for Cooperation on Wildlife Management. 2019. Action Plan for the Cape Bathurst Caribou Herd 2019/2020 – Red Status. Yellowknife, NT.

Production note:

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About the ACCWM

The Advisory Committee for Cooperation on Wildlife Management was established to exchange information, help develop cooperation and consensus, and make recommendations regarding wildlife and wildlife habitat issues that cross land claim and treaty boundaries. The committee consists of Chairpersons (or alternate appointees) of the Wildlife Management Advisory Council (NWT), Gwich'in Renewable Resources Board, ʔehdzo Got'ıne Gots'ę Nákedı (Sahtú Renewable Resources Board), Wek'èezhì Renewable Resources Board, Kitikmeot Regional Wildlife Board, and Tuktut Nogait National Park Management Board.

**About Taking Care of Caribou and the associated Action Plans**

In late 2014 and early 2015, members of the ACCWM approved *Taking Care of Caribou: the Cape Bathurst, Bluenose-West, and Bluenose-East barren-ground caribou herds management plan*. The Plan was developed in consultation with most of the communities that harvest from the three herds. The intent is for the Plan to address caribou management and stewardship over the long term. It was presented to the Minister of Environment and Natural Resources (Government of the Northwest Territories), the Minister of Environment (Government of Nunavut), and the Environment Minister (Government of Canada) in 2014. The Management Plan is supported by two companion documents: a report summarizing recent scientific information about the herds, and a report that provides a summary of the information that was shared during community meetings to develop the Plan. Individual Action Plans were then developed for each of the three herds. These Action Plans provide details on the types of actions that are recommended based on a herd's status, as well as who is responsible for the actions, and when they should be done.

Disclaimer:

The ACCWM recognizes that the implementation of management actions moving forward is subject to appropriations, prioritizations, and budgetary restraints of the participating agencies and organizations.

ACCWM and the Taking Care of Caribou Management Plan

The **Advisory Committee for Cooperation on Wildlife Management** (ACCWM) was established in 2008, to exchange information, help develop cooperation and consensus and make recommendations regarding wildlife and wildlife habitat issues that cross land claim and treaty boundaries. In 2014 the ACCWM recommended the **Taking Care of Caribou management plan** to the governments with management jurisdictions of these three herds. That plan can be found here: [link](#)

How a Herd's Status and Appropriate Management Actions are Determined

The ACCWM is responsible for determining herd status each year and developing appropriate management actions based on that status. Each fall, the member boards meet for the Annual Status Meeting (Terms of Reference [TOR] can be found [here](#)) to share information and make collaborative decisions regarding the herds, including herd status, according to the requirements of regional legislation and land claims agreements. The implementation of the Action Plans is also reviewed at this time and actions for the CB herd can be found in Table 2.

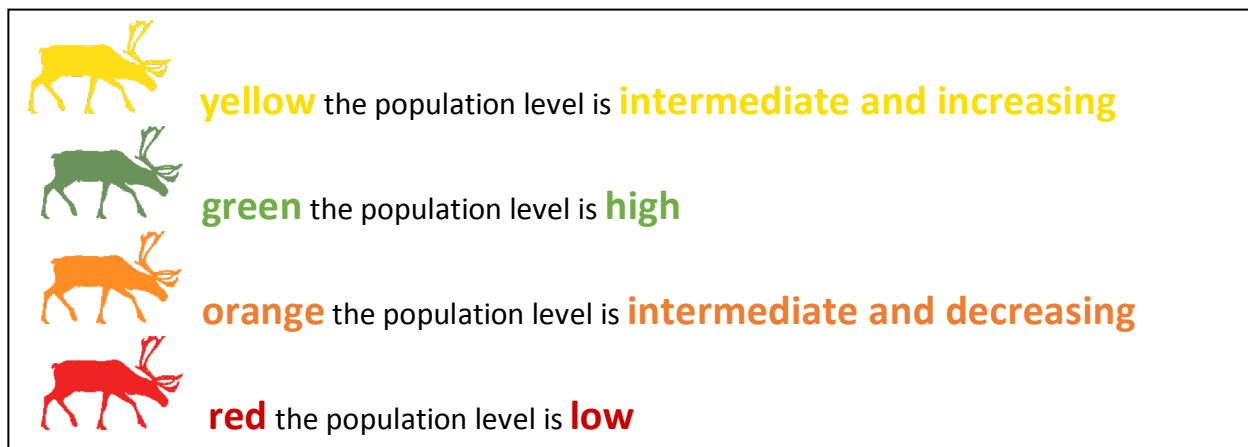


Figure 1: Phases of the population cycle with the colour-coded "traffic light" approach used in the Management Plan and associated Action Plans.

Time (population cycle approximately 30 to 60 years)

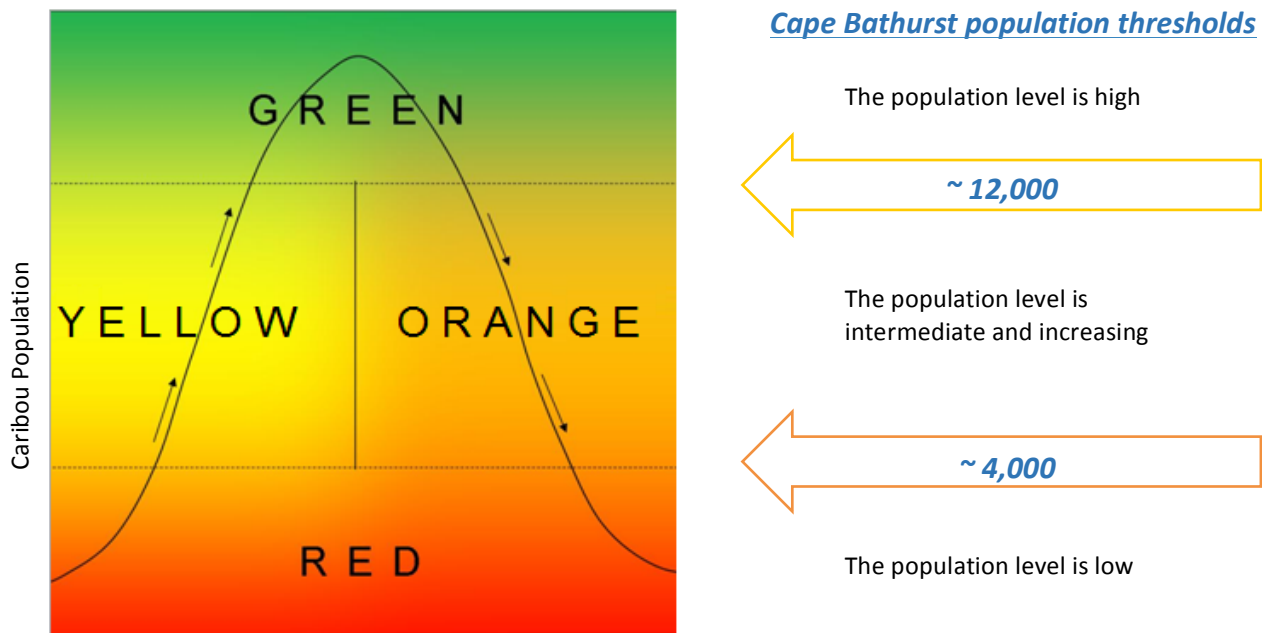


Figure 2: Phases of the population cycle with the colour-coded "traffic light" approach used in the Management Plan and associated Action Plans.

Status Decision 2018

Management actions are based on these phases of the population cycle, using approximate levels or "thresholds" as a guide. Thresholds for the herds were determined by the ACCWM based on known historic highs and lows, with input received from community and technical experts in a consensus-based process. **However, it is not only the threshold value that is used to determine the colour zone – the determination of herd status takes into account all available information.** The traffic light approach to understanding risk in caribou population cycles is shown in Figure 2 along with the approximate thresholds for the Cape Bathurst herd.

According to the process outlined in the Management Plan, numerous criteria are used to make an annual status decision. Information considered by the ACCWM in making the 2018 decision is summarized in Table 1 below.

Based on the information provided, the ACCWM determined the Cape Bathurst herd status colour zone to be **red (low)** in November 2018. The ACCWM noted that while the population appears to be slowly recovering based on the numbers presented by the Department of Environment and Natural Resources (ENR) the confidence interval from ENR's survey indicates that there is still a possibility that the herd is still declining. Given that there are concerns about increased hunting pressure along the Inuvik-Tuktoyaktuk Highway and the potential use of

Bluenose-West caribou tags for harvesting Cape Bathurst caribou in the areas where the ranges of the two herds overlap, the ACCWM felt that the status for the herd should remain **red (low)** as precautionary measure despite the possibility that the population numbers may be above low threshold.



In 2018/19

the Cape Bathurst caribou population status is

RED: low

Table 1: Criteria used to assess Cape Bathurst herd status in 2018.¹

Criteria	Community-Based Information	Scientific Information	Comments
Population size	<p>Tuktoyaktuk (WMAC): noted in the past 4 years have seen more caribou than prior to 5 years ago, and last year was more. Inuvik members noted it is the same as last year.</p> <p>Inuvik (GRRB): This is more for the biologist to say with the surveys they conducted this year. From preliminary results, it seems that the population is stable.</p>	Estimated number of adult caribou at least 1.5 year old in 2018 Rivest: 4,521 ± 875	<p>Estimated based on July post-calving ground survey</p> <p>It is believed that the 2018 population is biased high because there were some bulls that did not clump up with the main group. The distribution pattern was not normal with small groups of bulls not joining the herd.</p>
Population trend and rate of change	<p>Tuktoyaktuk (WMAC): community members are seeing a few more caribou and the caribou bunches/herds are getting bigger compared to last year</p> <p>Inuvik (GRRB): From preliminary results, it seems that the population has increased.</p>	There is no significant increase per year between 2005 and 2018 (Confident Interval [CI] -3 to 10%).	<p>TAH based on 4% of 2006 LP population estimate 2,434 ± 257.</p> <p>Trend analysis is based on Rivest estimates:</p>

¹ This table is populated with information presented to the ACCWM to assess herd status in 2018 and is adapted from the monitoring criteria table included in *Taking Care of Caribou*.

			<p>2015: 2,524 ± 284 2012: 2,447 ± 350 2009: 2,925 ± 1,252 2006: 2,039 ± 319 2005: 3,566 ± 1,373</p>
Productivity and recruitment	<p>Tuktoyaktuk (WMAC): community members observed there is a good number of calves with cows, including older calves (yearlings). Calves were seen in April this year, in the past calves weren't seen until May. The reindeer are usually calving in April, but this was caribou that we were seeing.</p>	<p>No new information since 2017. In 2017, there were a high number of cows with calves in early April. Estimated number of calves per 100 cows in 2017: 48.2 ± 3.8 (95% CI)</p>	<p>2017 recruitment survey included both Cape Bathurst and Tuktoyaktuk Peninsula herds.</p>
Adult composition	<p>Tuktoyaktuk (WMAC): community members are seeing lots of lone bulls in July/August but later in August they start mixing with the cows and calves. There are less community observations because people were not able to get out this fall due to bad weather.</p>	<p>No new information since 2015 There is only one bull to cow ratio for Cape Bathurst (2015) so trend is unknown but the 2015 results is considered normal. Estimated number of bulls per 100 cows in 2015: 43 ± 4.6 (SE)</p>	<p>The bull ratio is monitored because a bull dominated harvest was recommended.</p>
Body condition and health	<p>Tuktoyaktuk (WMAC): community members observed the young bulls had 1-1.5 inches of fat in March; most caribou harvested are healthy; one caribou harvested was sick with pneumonia; one caribou harvested had tapeworms (looked like white rice); some non-typical antlers seen recently – flat and twisted, really wide; The bulls in July were already fat and had big antlers and some bulls lost their velvet early this year; bulls had 2.5-3 inches of fat by end of July; and, by August they were almost obese.</p> <p>Inuvik (WMAC): Community members observed that not many of the caribou had nose bots.</p>	<p>Conditions of bulls was on average 'fair' and cows was on average 'good' in the 2017/2018 harvest season. Average back fat in 2017/2018 season was 1.42 cm (range 0 to 4 cm) for cows and 0.71 cm (range 0 to 2 cm) for bulls.</p>	<p>Scientific information based on harvester reported samples for Tuk Peninsula and Cape Bathurst herds. Condition information was reported for 70 cows and 34 bulls, back fat information was reported for 80 cows and 26 bulls in the 2017/2018 season.</p>

<p>Harvest levels</p>	<p>Tuktoyaktuk (WMAC): harvesters noted that there are less people were able to get out for the fall harvest (boating season) this year because of the weather; the first harvesters out see the most during both the fall boat harvest and snow machine harvest after freeze up; it is harder to harvest by ATV because the caribou are becoming more started from the noise. Now you have to park your bike and walk about ½ kilometer to get in range; the season change for zone I/BC/06 is helping encourage bull harvest; human conservation measures have had an impact. Some people hunt without a tag or in the closed zone. Some people are wasting meat (i.e. killing caribou and only taking hind quarter and leave the rest); sale of dry meat has slowed down on social media since last year, but there is still some ongoing that is not advertised.</p> <p>Inuvik (WMAC): community members stated this year all the tags were filled. The HTC increased the per household allotment from 3 to 5 to encourage harvest; there is concern about people selling dry meat on facebook; CBMP should be able to provide harvest data; there was a community harvest last year, 25 caribou were taken that was a mix with mostly bulls.</p> <p>Inuvik (GRRB): There is poaching of Cape-Bathurst caribou on the ITH.</p>	<p>I/BC/07 is a closed zone for Cape Bathurst 171 I/BC/06 tags possibly used in TP/CB area in 2017/2018– (134 of those have reported sex: 46 males, 75 females)</p>	<p>In 2014/15, the I/BC/06 area was enlarged and now includes some of the winter range of the Tuk Peninsula and Cape Bathurst herds. Some of the I/BC/06 tags are now being used on these herds</p>
<p>Predator populations</p>	<p>Tuktoyaktuk (WMAC): community members think there are always predators around (grizzlies, wolverines, wolves);</p>	<p>Tuktoyaktuk and Inuvik submitted 30 wolves in the 17/18 season.</p>	<p>Changes in wolf harvest does not necessarily reflect changes in wolf</p>

	<p>there are lots of golden and bald eagles and every year you see more. A few year back a bald eagle was observed taking a calf; This year there are way more grizzly bears, there are some sows with 4 cubs and lots of 3 cubs; the by-law restricts hunting females with cubs so that makes it hard to harvest.</p> <p>Inuvik (WMAC): community members observed lots of small grizzly bears.</p>	<p>Of the wolf stomach content analyzed, 68% was caribou.</p>	<p>abundance.</p>
<p>Range and movement patterns</p>	<p>Tuktoyaktuk (WMAC): community members observed that the caribou move all over and can switch herds; the caribou are moving further up into the bush because the snow levels are lower; small caribou herds are being seen near small muskox herds in May, so they are sharing the same feeding areas near Mason River area.</p> <p>Inuvik members observed in the spring of 2018, there were a few bunches seen near the Inuvik-Tuktoyaktuk highway and then not as many seen during the summertime.</p> <p>Inuvik (GRRB): People used to see caribou around Inuvik when growing up (around 30 years ago). Now there is none. The Cape Bathurst caribou hangs out around Husky lakes in winter.</p>	<p>In 2018, 16 CB collars were still active from 2017 and all returned to CB calving ground.</p>	
<p>Environment and habitat</p>	<p>Tuktoyaktuk (WMAC): community members noted that there was rain last December that caused a lot of ice – the ptarmigan were slipping around; more slumps and landslides, including landslides right near the caribou trails; the snow levels are lower and the caribou are moving</p>	<p>ENR is not currently conducting any range work on the Cape Bathurst range.</p> <p>There were very few fires in the 2018 season.</p>	

	<p>further up into the bush; creeks are plugged up by beavers, so there is overflow and creeks are widening; last few years have been way less bugs (warble flies, etc.) so the caribou are staying where there is better food and not running around as much; had a cold spring and summer, lots of rain and wind.</p> <p>Inuvik (WMAC): community members noted there was rain on the snow this winter.</p> <p>Inuvik (GRRB): Climate change is changing a lot of things. There is more thawing, it's warm and wet. It used to be colder (a long time ago). Now, it's still 2-3 degrees in September. Lots of landslides around Caribou hills north of Inuvik.</p>		
<p>Human disturbance</p>	<p>Tuktoyaktuk (WMAC): community members stated there are lots of helicopters and planes flying around, end of June/early July, up the peninsula past Campbell Island; Caribou are more startled by noise (i.e. ATV) than they used to be.</p> <p>Inuvik members stated there is concern about the Inuvik-Tuktoyaktuk highway now that is it open and there is a lot of traffic and the caribou will leave the area; the caribou seen near the highway in the Spring 2018 didn't seem bothered.</p> <p>Inuvik (GRRB): The highway makes it easier to poach Cape-Bathurst caribou. Numbers seems to have gone up, but there is still concerns about poaching along the ITH.</p>	<p>The largest development in the range of the Cape Bathurst herd is the Inuvik – Tuktoyaktuk highway that opened in November 2017 and passes through the winter range of the herd.</p>	

Red Status Management Actions for Cape Bathurst Caribou

Management actions described in *Taking Care of Caribou* fall into five main categories: *Education*, *Habitat*, *Land Use Activities*, *Predators* and *Harvest Management*. We have included a sixth category here to capture the *Monitoring* actions that were also identified in the Management Plan. Monitoring is a key part of learning and assessing the success of management actions. For the most part, monitoring actions differ from management actions as they are not as dependent on herd status – they are ongoing in many cases, but their frequency or intensity may change with changing status.



To make it easier to find specific information for each of these action categories they have been colour-coded throughout this document.

Different actions are often required depending on whether a herd’s status is determined to be green, yellow, orange or red. Please refer to A table summarizing appropriate management actions for all status levels as agreed to in *Taking Care of Caribou* is included in **Appendix B**. As the status of the Cape Bathurst herd is **red (low)**, each of the bulleted actions outlined for red status in that table has now been developed into a series of specific tasks in the **Management Actions Table** of this Action Plan.

Because most activities under *Education* and *Habitat* require very long-term approaches to be effective, the suggested management actions remain the same no matter the status of the herd. For actions in the *Land Use Activities*, *Predators*, and *Harvest Management* categories to be responsive to different phases of the population cycle, different actions are required depending on a herd’s status – for example, when setting a herd Total Allowable Harvest.

Management Actions Table for Cape Bathurst Caribou: Red Status

Following principles laid out in *Taking Care of Caribou*, all actions and tasks described in this table will draw upon both community-based knowledge (including traditional knowledge) and scientific information. The ACCWM recognizes that documenting and using traditional knowledge is a priority for all member boards.

A. Education ²					
A – 1. Develop education strategy <i>Objective – address community concerns regarding a lack of education (see various themes identified in Taking Care of Caribou) and clarify an approach</i>					
Task	Partners ³	Performance Measure	Deliverable date	Priority level ⁴	Status November 2018 – plans for 19/20
A.1.1 Strike an Education and Communication Working Group	ACCWM and government partners ⁵	Education and Communication Working Group meeting	2017/18	Top	Done
A.1.2 Develop a Terms of Reference	ACCWM Working Group	Finalized TOR, approved by ACCWM	2017/18	Top	Approved (2018)
A.1.3 Determine existing materials, programs, gaps, and opportunities for collaboration	Education and Communication Working	List of existing materials and programs, and opportunities for	2017/18 2018/19	Top	Ongoing; Dropbox with existing materials has been created.

² Education specific to industrial land uses is dealt with in section C – Land Use Activities (C.3.1 and C.3.2).

³ Potential partners have been identified for individual tasks. Leads on tasks may vary, and will be determined at a later date.

⁴ While the ACCWM member boards feel that most of the management actions included here have a high priority, only those tasks and actions that call for immediate attention have been given a priority and deliverable deadline to date. These actions/tasks are categorized as ‘Top’ priority in the table. Further

	Group	collaboration			
A.1.4 Engage community organizations ⁶ for input on educational strategy	Education and Communication Working Group, with assistance from ACCWM	Summary of input / guidance from communities and related revisions	Every year before annual status meeting	Top	Input from annual community tours
A.1.5 Develop educational strategy, allowing for regional differences	Education and Communication Working Group	Document outlining strategy	2017/18 2018/19	Top	The strategy is done (2018). Ask for ACCWM guidance on priorities (e.g., Respect, Wounding, Why ACCWM?)
A.1.6 ACCWM reviews educational strategy and provides advice to member boards ⁷ for approval	ACCWM	Advice provided to member boards	2018/19	Top	
A.1.7 Implementation of educational strategy	Member boards, government partners and	Summary report	2018/19 and onwards	Top	The strategy is was discussed at the 2018 meeting.

⁶ Throughout this document, “Engage community organizations” means that the member boards of the ACCWM will decide in any circumstance whether the community perspective is adequately represented within each boards’ discussions, or whether a further process of community/community organizations’ engagement is necessary. ACCWM member boards have discretion as to what community organizations are engaged and how the engagement takes place.

⁷ Throughout this Action Plan, the term ‘member boards’ refers to the six boards which are members of the Advisory Committee for Cooperation on Wildlife Management (ACCWM), including the Wildlife Management Advisory Council (NWT), Gwich’in Renewable Resources Board, ʔehdzo Got’Inę Gots’ę Nákedı (Sahtú Renewable Resources Board), Wek’èezhıı Renewable Resources Board, Kitikmeot Regional Wildlife Board, and Tuktut Nogait National Park Management Board.

	regional partners ⁸				
A – 2. Develop education materials <i>Objective – address community concerns regarding a lack of education on sustainable and respectful use, as well as caribou ecology</i>					
A.2.1 Develop draft materials based on results of A.1.3 and A.1.4	Education and Communication Working Group	Draft education materials	2018/19	Top	Several materials have been developed by the Communications and Education Working Group. This includes, thank you notes and posters, post cards, shooting targets, etc. WMAC (NWT): Sent out Thank you posters for the 2018 community input ENR provided an animated map of herd movements that was useful as a decision-making tool. This should be updated yearly.
A.2.2 Engage community organizations regarding types of materials and distribution		Summary of input / guidance from communities and related revisions	2018/19	Top	
A.2.3 Revise and distribute materials		Send finalized educational materials	2018/19	Top	
A – 3. Community education events / programs <i>Objective – address community concerns regarding a lack of education on sustainable and respectful use, as well as caribou ecology. Limit wounding loss and improve identification of individual caribou</i>					
A.3.1 Develop events / programs based on results of A.1.3 and A.1.4	Education and Communication Working Group, with assistance	Develop 1-3 workshop curricula / programs			

⁸ Regional partners, which vary significantly by region, may include individual community members, community organizations, such as RRCs/HTCs/HTOs, and regional organizations.

	from ACCWM WG and regional partners				
A.3.2 Engage community organizations regarding type and timing of workshops in each region	Education and Communication Working Group, with assistance from ACCWM WG	Summary of input / guidance from communities and related revisions			
A.3.3 Deliver workshops / events	Education and Communication Working Group, with community organizations and government partners	Minimum target: delivery of one workshop / event per region, per year			
A.3.4 Hold sight in your rifle events	organizations and government partners	Minimum target: delivery of one workshop / event per region, per year		Top	
<p>A – 4. School and youth education events / programs <i>Objective – address community concerns regarding need for education and engagement of youth. Increase knowledge transfer between elders and youth</i></p>					
A.4.1 Adapt education materials (developed in A – 2) for school use (at elementary and high school levels)	Education and Communication Working Group	Education packages for community agency / organization use			WMAC went into the schools and did a sex ID presentation with the kids.
A.4.2 Adapt community education programs / events (developed in A –		Draft youth-focused workshop curricula /			

3) for use in school and youth-focused settings appropriate for each community and region (e.g., back to the land camps)		programs			
A.4.3 Engage community organizations regarding types of materials and program delivery		Summary of input / guidance from communities and related revisions			
A.4.4 Program delivery	Community groups / agencies	Minimum target: delivery of one workshop / event per region, per year			
A.4.5 Encourage and promote hunter mentorship – develop programs	Community groups / agencies, with schools	Minimum target: delivery of one workshop / event per region, per year			

B. Habitat					
B – 1. Identify and recommend protection for key habitat areas					
<i>Objective – address community concerns that key habitat areas are not protected sufficiently</i>					
Task	Partners	Performance Measure	Deliverable date	Priority level	Status
B.1.1 Compile and review ENR Technical Report, SARC BGC Status report, land use	Government partners and ACCWM WG	Compilation of existing materials Next steps:	2017/18 2018/19	Top	Ongoing. Inuvialuit Community Conservation Plans were updated; Section 8 of the IFA affords some protection to Cape

plans, results of monitoring programs, etc. for information		Jody will create a Dropbox for people to add materials			Bathurst.
B.1.2 Engage community organizations for identification of key habitat areas	ACCWM WG	Summary of input / guidance from communities	2017/18 2018/19	Top	Ongoing. WMAC and IGC formed working group re: calving grounds with HTC.
B.1.3 Identify key habitat areas in a sensitive habitat report based on information from B.1.1 and B.1.2	Government partners and ACCWM WG	Provide report to ACCWM, including draft maps of key areas	2018/19	Top	GRRB working with Gwich'in Land Use Planning Board (GLUPB) to identify critical habitat for caribou in the GSA. GLUPB could support measure for habitat management for barren-ground caribou recommended by the ACCWM in the GSA.
B.1.4 ACCWM reviews sensitive habitat report and provides advice to member boards for approval	ACCWM	Advice provided to member boards	2018/19	Top	
B.1.5 Member boards make and communicate recommendations to appropriate authorities	Member boards	Recommendations provided	2018/19	Top	
<p>B – 2. Review results of monitoring, including cumulative effects, to ensure enough habitat is available and caribou are able to move between areas of good habitat</p> <p><i>Objective – ensure research and monitoring programs are relevant and addressing current information needs for habitat management</i></p>					
B.2.1 Map and track landscape disturbances	Government partners	Compilation map			GNWT 'Inventory of Landscape Change' being updated Annual tracking of wildfire footprint

					Mackenzie Valley GIS submission standards
B.2.2 Identify and review recent relevant information (<i>e.g.</i> , including results from research, monitoring; see C – Land Use Activities, also F – Monitoring Actions)	ACCWM WG and government partners, academics	Summary report	Every year before annual status meeting		
B.2.3 Identify and / or review any gaps or previous gaps assessments		List of gaps identified			
B.2.4 Seek collaborators to help refine research questions and knowledge gaps		Advice included / received from collaborators			
B.2.5 ACCWM reviews information and provides advice for research and monitoring based on information from B.2.1-4	ACCWM	Advice provided to member boards			
B.2.6 Member boards make and communicate recommendations	Member boards	Recommendations provided			

to appropriate authorities					
B – 3. Recommend important habitat as a 'value at risk' for forest fire management <i>Objective – ensure sufficient winter habitat for caribou</i>					
B.3.1 Based on results of B – 1 and as results of B – 2 are available, provide advice to member boards on values at risk	ACCWM	Key areas identified for fire management and advice provided to member boards			
B.3.2 Member boards make and communicate recommendations to fire management	Member boards	Recommendations provided			

C. Land use activities

C – 1. Review results of cumulative effects monitoring programs <i>Objective – ensure cumulative effects monitoring programs are operational and relevant</i>					
Task	Partners	Performance Measure	Deliverable date	Priority level	Status
C.1.1 Building on work done in Habitat (B – 2), identify and review recent relevant information (e.g., CIMP, ENR, DOE)	ACCWM WG and government partners	Summary report			
C.1.2 Identify and / or review any gaps		List of gaps identified.			

or previous gaps assessments		Collation of previous gap assessments			
C.1.3 ACCWM reviews information and provides advice for research and monitoring based on information from C.1.1 and C.1.2	ACCWM	Advice provided to member boards			
C.1.4 Member boards make and communicate recommendations to appropriate authorities	Member boards	Recommendations provided			
C – 2. Provide advice on mitigation of industrial impacts to proponents and regulators <i>Objective – minimize industrial impacts to caribou and their habitat</i>					
C.2.1 Identify parties involved in industrial activities on a herd's range (e.g., regulators, proponents and active developers)	ACCWM WG and other relevant agencies / partners (e.g., Land and Water Boards, ILA)	List of regulators, proponents, active developers			
C.2.2 Engage community organizations to identify land use concerns and how they should be addressed. Engage	ACCWM WG	Summary of input / guidance from communities and current regulatory protocols			

with regulators to identify any existing protocols					
C.2.3 Identify and / or develop mitigating advice and / or recommendations, targeted to specific audiences, including standards provided in <i>Taking Care of Caribou</i> (Appendix G)	ACCWM WG, regional and government partners	Recommendations provided			
C.2.4 ACCWM reviews information and advises member boards	ACCWM	Advice provided to member boards			
C.2.5 Member boards make and communicate recommendations to proponents (including air carriers and other subcontractors) and regulators, including updates on herd status and sensitive habitat report	Member boards	Recommendations provided; results of C.2.2 and herd status provided			

C – 3. Provide active and accessible communication and recommend education programs for all, including proponents and airlines

<i>Objective – address concerns regarding land use activities impacting caribou habitat, and a lack of information on best practices / mitigating advice</i>					
C.3.1 Develop and / or adapt existing education packages specific to proponents, regulators, air carriers and any other users not already covered by actions in A – Education, and C – 1 and C – 2 (recreational, traffic)	Education and Communication Working Group	Draft materials Next steps: The working group create fact sheets based on existing materials to educate groups about what the conditions are.		Top	
C.3.2 Communicate educational materials developed in C.3.1		Finalized materials sent out		Top	
C – 4. Recommend increased enforcement of land use regulations, including community monitors⁹ <i>Objective – evaluate and track effectiveness of enforcement, and ensure community monitoring programs have a role in supporting application of land use regulations</i>					
C.4.A.1 Identify relevant agencies involved in inspection, enforcement and	ACCWM WG and other relevant agencies / partners (e.g.,	List of relevant agencies and regulations Next steps:	2017/18 2018/19	Top	Ongoing. GNWT Lands, Regional Land & Water Boards (provide conditions), EISC, EIRB, ILA, ENR, and GN.

⁹ Enforcement is an action whereby delegated officers ensure compliance to an act of parliament or legislative assembly, or a regulation disseminated under an act where there is a sanction for failure to “comply” normally in the form of a fine or imprisonment. Monitoring is an action whereby community monitors (as described in this plan) observe and report on all aspects of land-use activities and wildlife management to the relevant agencies and/or regulators. A community monitor has no delegated legal authority.

monitoring	Land and Water Boards, ILA)	approach GNWT Lands, regional Land & Water Boards re: list of who does what			
C.4.A.2 Compile and review acts / regulations and current inspection and / or enforcement strategies and levels	ACCWM WG and regional partners	Summary report	2017/18 2018/19	Top	Ongoing. Dropbox created for sharing materials
C.4.A.3 Engage community organizations regarding enforcement approaches	ACCWM WG and government partners	Summary of input and guidance	2018/19	Top	
C.4.A.4 Based on information from C.4.A.2 and C.4.A.3, assess enforcement, and provide advice about increased inspection or enforcement and / or regulation changes as required	ACCWM	Advice provided to member boards	2018/19	Top	
C.4.A.5 If and as required, member	Member boards	Recommendations provided	2018/19	Top	

boards provide recommendations to appropriate authorities					
C.4.B.1 Compile and review information on capacity, roles and opportunities for community monitors. Include identification of existing programs	ACCWM WG and regional partners	Summary report	2017/18 2018/19	Top	Ongoing. Recent developments of NWT Guardians of the Land Programs may apply here.
C.4.B.2 Engage community organizations regarding potential opportunities for community monitors	ACCWM WG and regional partners	Summary of input and guidance	2018/19	Top	
C.4.B.3 Provide advice and ensure that mitigating advice provided in (C.2.3) includes roles for community monitors where appropriate	ACCWM	Advice provided to member boards	2018/19	Top	
C.4.B.4 If and as required, member boards provide recommendations to appropriate	Member boards	Recommendations provided	2018/19	Top	

authorities					
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D. Predators

D – 1. Review results of research programs that monitor predator abundance and predation rates
Objective – determine which predators impact caribou and the relative intensity of their impacts

Task	Partners	Performance Measure	Deliverable date	Priority level	Status
D.1.1 Gather, compile, review and present predator research and monitoring results to ACCWM (including community and scientific monitoring results)	ACCWM WG and government partners	Summary report Next steps: Jody to set up Dropbox for materials	2017/18 2018/19	Top	Ongoing Completed wolf feasibility assessment (Nov 2017)¹⁰
D.1.2 Engage community organizations to identify and prioritize research needs by region	ACCWM WG	Summary of input / guidance from communities	2017/18 2018/19	Top	Ongoing Research prioritization (GRRB & WMAC-NWT)
D.1.3 Identify and prioritize research needs based on information resulting from D.1.1 and D.1.2	ACCWM WG and government partners	Advice provided to ACCWM	2018/19	Top	
D.1.4 ACCWM	ACCWM	Advice provided	2018/19	Top	

¹⁰ <https://www.wrrb.ca/sites/default/files/FINAL%20Wolf%20Feasibility%20Assessment%20-%202010nov17.pdf>

reviews and provides advice to member boards		to member boards			
D.1.5 Member boards recommend research priorities to appropriate authorities	Member boards	Recommendations provided	2018/19	Top	
D – 2. Consider recommending options for predator management <i>Objective – review information from all partners to determine whether predator management is a viable option</i>					
D.2.1 Compile results from research regarding predator management / control programs	ACCWM WG and government partners	Literature review		Top	
D.2.2 Engage with other jurisdictions that have predator control experience		Information for summary report		Top	
D.2.3 Identify jurisdictional / regional rules and regulations around predator management		List of existing regulations and rules		Top	
D.2.4 Compile and review information from D.2.1-3		Summary report		Top	
D.2.5 Engage community organizations regarding potential		Summary of input / guidance from communities		Top	

options for predator management					
D.2.6 ACCWM provides advice to member boards regarding options for predator management	ACCWM	Advice provided to member boards		Top	
D.2.7 If justified, member boards recommend predator management tools to appropriate authorities	Member boards	Recommendations provided, if needed		Top	

E. Harvest Management

E – 1. Resident, outfitter or commercial harvest remain closed¹¹
Objective – limit licensed harvest to assist in herd recovery

Task	Partners	Performance Measure	Deliverable date	Priority level	Status
E.1.1 Based on results of discussions concerning a Total Allowable Harvest (TAH) and harvest ratios, member	Member boards	Recommendations provided			Done.

¹¹ The process differs in Nunavut, where the Land Claim Agreement (1993) specifies that an Inuk “shall have the right to dispose freely to any person any wildlife lawfully harvested. This includes the right to sell, barter, exchange and give either inside or outside the Nunavut Settlement Area” (5.7.30).

boards make and communicate recommendations to appropriate authorities					
E – 2. Review of mandatory limit for subsistence harvest for further reduction ¹² <i>Objective – limit subsistence harvest to assist in herd recovery</i>					
E.2.A.1 Compile historical and current harvest information by region	Member boards and government partners	Summary documents			
E.2.A.2 Review information from preceding step with community organizations and advise regarding regional processes (e.g., public hearings)	Member boards and regional partners	Summary of input / guidance from communities			
E.2.A.3 Meetings to discuss and propose regional proportional allocations ¹³	Member boards and other traditional users	Provide percentages for inclusion in Action Plan			
E.2.B.1 Based on information presented at	ACCWM	Proposed TAH and definition of majority bull	Every year, following annual		

¹² As strict conservation measures are needed areas with land claim agreements establish a Total Allowable Harvest (TAH). As circumstances require each ACCWM member (with the exception of the TNNPMB) will set the TAH for their region. When a herd is shared over land claim areas and/or areas without settled land claim agreements proportional allocations are set as to determine how the user groups will share the TAH.

¹³ The processes for determining Total Allowable Harvests and regional allocations are described in Appendix F.

annual status meeting, ACCWM proposes a herd TAH and sex ratio		harvest	status meeting		
E.2.B.2 ACCWM advises member boards regarding the proposed herd TAH, based on E.2.B.1	ACCWM	Proposed TAH provided to member boards			
E.2.B.3 Each member board consults with communities on regional TAH as required by their respective land claim agreements (including public hearings as required by respective land claim agreements)	Member boards	Summary of input / guidance from communities and related revisions			
E.2.B.4 Boards recommend TAH to Minister		Recommendations provided			
E – 3. Prioritize the collection of harvest information (see F – 1. Develop harvest monitoring program) <i>Objective – record accurate harvest information</i>					
E.3.1 Assess status of harvest reporting programs (see F – Monitoring) and identify any	ACCWM WG with government partners and regional partners	Review report of existing programs		Top	

roadblocks / challenges to success					
E.3.2 Based on E.2.B.1-3, work with communities / partners to identify what additional support or cooperation is needed, and how best to provide it		Regional workshops as required		Top	
E.3.3 Adjust educational programming or communication plan if required (see A - Education)		Revised materials, as needed		Top	
E – 4. Recommend harvest of alternate species and meat replacement programs, and encourage increased sharing, trade and barter of traditional foods					
<i>Objective – explore other species to harvest to reduce pressure on caribou</i>					
E.4.1 Based on available information, identify alternate species populations whose status allows increases in harvest	ACCWM WG with government partners	List and rationale of potential alternate species / populations			Ongoing work as part of community-based planning programs
E.4.2 Engage community organizations to determine	ACCWM WG	Summary of input / guidance from communities			

regionally appropriate species / populations and options for meat replacement programs		and related revisions			
E.4.3 Based on information resulting from E.4.1 and E.4.2, develop list of regionally appropriate alternate species for harvest and options for meat replacement programs		List of alternate species and meat replacement options			
E.4.4 ACCWM reviews list and provides advice to member boards	ACCWM	Advice provided to member boards			
E.4.5 Member boards recommend alternate species populations and / or meat replacement programs to users. Collaborate with partners to recommend the	Member boards	Recommendations provided			

development and funding of harvest or sharing programs (may include trade and barter, community hunts or freezers, etc.)					
E.4.6 Adapt existing Communication Plan and educational materials to better promote use of alternate species and meat replacement programs (see A – Education and Appendix C)	Education and Communication Working Group	Draft communication plan and education materials			
E – 5. Recommend increased enforcement including community monitors (see footnote clarifying monitoring and enforcement responsibilities at C – 4). <i>Objective – maximize approaches and tools to ensure compliance of regulations</i>					
E.5.1 Identify relevant agencies involved in inspection, enforcement and monitoring, and prepare summary of regulations and policies they are operating from	ACCWM WG and other relevant agencies / partners	List of relevant agencies, regulations, and policies including summary	2017/18 2018/19	Top	Ongoing.

E.5.2 Engage community organizations and enforcement officers regarding enforcement approaches	ACCWM WG	Summary of input / guidance	2017/18 2018/19	Top	Ongoing.
E.5.3 Assess if current enforcement approaches and levels are adequate. Evaluate capacity, roles and opportunities (e.g., for community monitors)	ACCWM WG and regional partners	Summary report	2018/19	Top	
E.5.4 Based on information from E.5.1 - E.5.3, provide advice to member boards about increased enforcement and/or regulation changes as required	ACCWM	Advice provided to member boards	2018/19	Top	
E.5.5 Member boards provide recommendations to government	Member boards	Recommendations provided	2018/19	Top	
E.5.6 Engage partners to assist	ACCWM WG	Funding plan, training	2018/19	Top	

in training and implementing community monitoring programs		program			
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F. Monitoring					
F – 1. Develop a comprehensive harvest reporting program					
<i>Objective – develop or adapt existing harvest reporting programs to collect and provide standardized harvest data from all regions</i>					
Task	Partners	Performance Measure	Deliverable date	Priority level	Status
F.1.1 Compile and review information on existing harvest reporting programs and develop minimum standards	ACCWM WG	Summary report	2017/18 2018/19	Top	Ongoing.
F.1.2 Engage community organizations regarding appropriate programs for harvest data collection		Summary report	2018/19	Top	Ongoing.
F.1.3. Adapt harvest reporting programs based on information from F.1.1 and F.1.2. to standardize		Finalized harvest reporting program	2018/19	Top	

harvest data					
F.1.4 Implement harvest data collection program	Member boards and government partners	Collections initiated	2018/19	Top	
F.1.5 Establish annual data reporting template		Template	2018/19	Top	
F.1.6 Adapt and / or develop database and protocols		Pilot database program developed	2018/19	Top	
F.1.7 Gather, compile and present total herd harvest data to ACCWM	ACCWM WG	Summary report	2018/19	Top	Ongoing.
F – 2. Develop and initiate community-based monitoring (CBM) programs (including observational and experiential data) <i>Objective – develop or adapt existing community-based monitoring programs to collect data in a format that can be used for decision-making</i>					
F.2.1 Compile and review information on existing community-based monitoring programs	ACCWM WG	Summary report			
F.2.2 Compile existing traditional knowledge documentation and identify any new documentation / work required as basis for a community-based	ACCWM WG with regional partners	Draft 'state of traditional knowledge' report(s)			

monitoring program					
F.2.3 Engage community organizations regarding appropriate programs for community-based monitoring to collect herd status information (see Table 1 in <i>Taking Care of Caribou</i>)	ACCWM WG	Summary of input / guidance from communities			
F.2.4 Adapt and / or develop CBM program(s) based on information from F.2.1-3		Finalized CBM program			
F.2.5 Recommend appropriate CBM programs including traditional knowledge studies	Member boards	Recommendations provided			
F.2.6 Establish data-sharing arrangements and / or information-sharing protocols	Member boards and regional partners	Signed data-sharing agreements			
F.2.7 Adapt and / or develop database	ACCWM WG	Database program developed			
F.2.8 Gather, compile and	Regional partners	Summary report	Annual ACCWM		

present results to ACCWM			meeting		
F – 3. Conduct scientific monitoring to assess herd status					
<i>Objective – develop or adapt existing scientific monitoring programs to collect data in a format that can be used for decision-making</i>					
F.3.1 Compile and review information on existing scientific monitoring programs	Government partners and regional partners	Summary report		Top	
F.3.2 Engage community organizations regarding appropriate programs for scientific monitoring to collect herd status information (see also F.2.3) and appropriate ways to collaborate	ACCWM WG	Summary of input / guidance from communities		Top	
F.3.3 Research and develop mechanism for collaboration between regions, compiling information and reporting on research programs	ACCWM to determine responsible parties	Decide on mechanism for collaboration		Top	
F.3.4 Construct scientific	ACCWM WG	Annual report / work plan	Annual status	Top	

monitoring schedule based on engagement and Table 1 in <i>Taking Care of Caribou</i>			meeting		
F.3.5 Support appropriate scientific monitoring studies	Member boards	Approval by member boards	Annual status meeting		
F.3.6 Establish information sharing protocols	Government partners	Information shared according to protocol		Top	Member boards & ACCWM will ask for clarity on releasing scientific information.
F.3.7 Gather, compile and present results to ACCWM		Status of all monitoring criteria communicated to the ACCWM	Annual status meeting	Top	

Acronyms used in this Plan

ACCWM (WG)	Advisory Committee for Cooperation on Wildlife Management (Working Group)
CI	Confidence Interval
DoE	Department of Environment, Government of Nunavut
ENR	Department of Environment and Natural Resources, GNWT
GN	Government of Nunavut
GNWT	Government of the Northwest Territories
GRRB	Gwich'in Renewable Resources Board
HTC	Hunters and Trappers Committee
HTO	Hunters and Trappers Organization
ISR	Inuvialuit Settlement Region
NWMB	Nunavut Wildlife Management Board
NWT	Northwest Territories
PCA	Parks Canada Agency
RRC	Renewable Resources Council
SE	Standard Error
TAH	Total Allowable Harvest
TG	Tłıchq Government
TNNPMB	Tuktut Nogait National Park Management Board
TOR	Terms of Reference
WEMP	Wildlife Effects Monitoring Plan
WMAC (NWT)	Wildlife Management Advisory Council (Northwest Territories)
WWHPP	Wildlife and Wildlife Habitat Protection Plans

Appendix A: List of ACCWM Working Group members

The ACCWM formed a working group to draft the Action Plans that accompany the *Taking Care of Caribou* Management Plan. The Working Group included representatives of the following organizations:

- ʔehdzo Got'Inę Gots'ę Nákedı (Sahtú Renewable Resources Board)
- Dehcho First Nations¹⁴
- Department of the Environment, Government of Nunavut
- Environment and Natural Resources (ENR), GNWT
- Gwich'in Renewable Resources Board
- Inuvialuit Game Council
- Kitikmeot Regional Wildlife Board
- Kugluktuk Hunters and Trappers Organization (Kugluktuk Angoniatit Association)
- Nunavut Wildlife Management Board
- Parks Canada Agency
- Tłı̄chq̄ Government
- Tukturnogait National Park Management Board
- Wek'èezhìi Renewable Resources Board
- Wildlife Management Advisory Council (NWT).

¹⁴ The Dehcho First Nations organization is part of the Working Group, but has had very limited involvement. There is an outstanding invitation for them to join the ACCWM.

Appendix B: Summary table of management actions presented in *Taking Care of Caribou*

Management Actions Based on Herd Status/Colour Zone				
Management Action	The population level is intermediate and increasing	The population level is high	The population level is intermediate and decreasing	The population level is low
Education	<p>Recommend education programs for all status levels. Ideas for educational themes include:</p> <ul style="list-style-type: none"> • Promoting total use of harvested caribou, and proper butchering and storage methods; • Limiting wounding loss; • Letting the leaders pass; • Promoting community hunts with experienced hunters; • Use of alternate species; and • Increased sharing of traditional foods. 			
Habitat	<ul style="list-style-type: none"> • Identify and recommend protection for key habitat areas; • Review results of monitoring, including cumulative effects, to ensure enough habitat is available and caribou are able to move between areas of good habitat; • Recommend important habitat as a 'value at risk' for forest fire management. 			
Land use activities	<ul style="list-style-type: none"> • Review results of cumulative effects monitoring programs; • Provide advice on mitigation of industrial impacts to proponents and regulators. 	<ul style="list-style-type: none"> • Review results of cumulative effects monitoring programs; • Provide advice on mitigation of the impacts of exploration and development activities to proponents and regulators. 	<ul style="list-style-type: none"> • Review results of cumulative effects monitoring programs; • Provide advice on mitigation of industrial impacts to proponents and regulators; • Provide active and accessible communication and recommend education programs for all including proponents and airlines; • Recommend increased enforcement of land use regulations, including community monitors. 	<ul style="list-style-type: none"> • Work directly with proponents and regulators of exploration and development activities to advise on mitigation measures; • Review results of cumulative effects monitoring programs; • Provide active and accessible communication and recommend education programs for all including proponents and airlines; • Recommend increased enforcement of land use regulations, including community monitors.

Management Actions Based on Herd Status/Colour Zone

Management Action	The population level is intermediate and increasing	The population level is high	The population level is intermediate and decreasing	The population level is low
Predators	<ul style="list-style-type: none"> Continue research programs to monitor predator condition (e.g., carcass collection and community monitoring programs). 	<ul style="list-style-type: none"> Continue research programs to monitor predator condition (e.g., carcass collection and community monitoring programs). 	<ul style="list-style-type: none"> Review results of research programs that monitor predator abundance and predation rates; Consider recommending options for predator management. 	<ul style="list-style-type: none"> Review results of research programs that monitor predator abundance and predation rates; Consider recommending options for predator management.
Harvest	<ul style="list-style-type: none"> Recommend easing limits on subsistence and then resident harvests ; Consider recommending outfitter and commercial harvests at discretion of the ACCWM. 	<ul style="list-style-type: none"> Support harvest by beneficiaries of a Land Claim and members of an Aboriginal people, with rights to harvest wildlife in the Region; Recommend that if subsistence needs are met resident harvest should be permitted (with limits); Potentially recommend resident (non-beneficiary), non-resident, sport hunts, and/or commercial harvests. 	<ul style="list-style-type: none"> Recommend a mandatory limit on subsistence harvest based on a TAH accepted by the ACCWM; Prioritize the collection of harvest information; Recommend no resident, outfitter or commercial harvest; Recommend a majority-bulls harvest, emphasizing younger and smaller bulls and not the large breeders and leaders; Recommend harvest of alternate species and encourage increased sharing, trade and barter of traditional foods, such as the use of community freezers; Recommend increased enforcement including community monitors. 	<ul style="list-style-type: none"> Recommend harvest of alternate species and meat replacement programs, and encourage increased sharing, trade and barter of traditional foods; Prioritize the collection of harvest information; Review of mandatory limit for subsistence harvest for further reduction; Recommend increased enforcement including community monitors; Resident, commercial, or outfitter harvest remain closed.