

Appendix

GN Response to WWF IR #7	
Department	Environment
Organization	Government of Nunavut
Subject/Topic	Qualitative and statistical determination of trends in caribou abundance
References	<ul style="list-style-type: none"> • Technical Supporting Document (TSD) 10, Terrestrial Wildlife Baseline and Impact Assessment, Section 2.5 • Government of Nunavut. (2015). Aerial Abundance Estimates, Seasonal Range Use, and Spatial Affiliations of the Barren-Ground Caribou (<i>Rangifer tarandus groenlandicus</i>) on Baffin Island – March 2014. Retrieved from: https://www.gov.nu.ca/sites/default/files/aerial_abundance_estimates_barren-ground_caribou_baffin_island_2014.pdf • 2018 Mary River Project Terrestrial Environment Annual Monitoring Report – DRAFT • Government of Nunavut. (2018). Baffin Island Caribou Composition Summary Report 2015-2018.
WWF INFORMATION REQUEST	
<p>Does the GN have the monitoring data necessary to statistically determine trends in abundance for the Baffin Island caribou herd, and more specifically, for animals in the RSA? If so, please share that information. At what level of caribou abundance would GN suggest BIMC could undertake additional monitoring as part of its ongoing programs to gain an improved understanding of the caribou population and mitigate unintended impacts of the Mary River project?</p>	
GN RESPONSE	
<p>The GN conducted an abundance survey for Baffin Island caribou in 2014. The RSA was included within one of the survey strata in North Baffin. Details of the 2014 abundance survey can be found within Government of Nunavut, 2015. The scale of the 2014 abundance survey was not specific to the RSA but abundance estimates for North Baffin can be used as a baseline from which to monitor changes at the population level. In the comments submitted to the NIRB on the Production Increase Proposal and the 2014, 2015, and 2017 Terrestrial Environmental Annual Monitoring Reports, the GN has recommended that additional monitoring effort is needed and that the only two methods, Height of Land and Snow track surveys, currently being used for monitoring caribou may not be able to detect project effects. Despite GN concerns, BIMC has continued to reduce sample effort of Height-of-land surveys, to date (2018 Mary River Project Terrestrial Environment Annual Monitoring Report – DRAFT). Composition surveys in North Baffin have indicated good calf overwinter survival in 2017 and 2018 (Government of Nunavut, 2018).</p>	

ADDITIONAL COMMENTS

BIMC has stated repeatedly during the ongoing monitoring of the Mary River project that it will increase its monitoring efforts once the caribou population increases to some point (conversations during Terrestrial Working Group meetings). Both BIMC and GN have been unable to confirm at what point changes in population numbers would trigger increased monitoring efforts.

GN Response to WWF IR #8	
Department	Environment
Organization	Government of Nunavut
Subject/Topic	Wolf population abundance
References	<ul style="list-style-type: none"> • Technical Supporting Document (TSD) 10, Terrestrial Wildlife Baseline and Impact Assessment • Baffinland Iron Mines Corporation. (2016). Terrestrial Environment Mitigation and Monitoring Plan, Section 4.6
WWF INFORMATION REQUEST	
<p>Without having conducted recent surveys of either the wolf or caribou populations, WWF is concerned that the FEIS Addendum may have neglected the inclusion of important information about wolves in particular, through its assessment of the Phase 2 proposal. It is important to know what the trigger for reinitiating carnivore surveys is, and whether BIMC should be required to undertake carnivore surveys in support of its current Phase 2 proposal.</p> <p>Does the GN have updated information regarding the abundance of wolves within the project RSA, or, if not available at that level, for the whole of Baffin Island? If so, please provide this to reviewers. Can the GN confirm at what point in time (related to caribou abundance or other indicators, if applicable), the GN would recommend BIMC instigate carnivore den (or other) surveys in support of the Phase 2 proposal? Does the GN plan to initiate carnivore surveys covering parts or all of the Project RSA in the future?</p>	
GN RESPONSE	
<p>The last caribou abundance estimate for Baffin Island was calculated in 2014 (see Campbell et. al, 2015). There is no current estimate and no ongoing inventory program to determine an estimate of wolf abundance for Baffin Island. The size and health of wolf populations are primarily related to the size and health of their prey populations. Very few wolves were observed during intensive caribou aerial surveys on Baffin Island in 2014. Composition surveys in North, Central, and South Baffin Island in March and April of 2018 observed only a single set of wolf tracks. Even though full coverage of Baffin Island did not occur, it is likely that the limited number of wolves observed indicates a low wolf population on Baffin Island.</p> <p>During Baffin Island HTO Consultations in January, 2019 there was no indication that the HTO believe there has been an increase in the wolf population or densities on Baffin Island.</p> <p>The baseline assessment in the Proponent's Terrestrial Environment Mitigation and Monitoring Plan; Section 4.6 located one wolf den within the RSA.</p> <p>The GN believes any increase fixed-wing or rotary overflights, including aerial surveys to</p>	

monitor wolf den sites, will further increase the disturbance effects on caribou. With continued North Baffin monitoring, it is possible that a change in wolf density and population will be detected through GN caribou monitoring efforts. The GN may suggest BIMC initiate den surveys if either (a) an increase in wolf observations occurs during surveys and/or (b) the HTO reports more wolves on the land.

At this time the GN does not plan to initiate carnivore surveys covering part or all of the RSA.

ADDITIONAL COMMENTS
N/A