



April 25, 2012

VIA EMAIL

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Dear Mr. Hubert,

Re: EA 0809-004, NICO Project, Fortune Minerals Limited – Round 2 Information Requests

Please find attached the Government of the Northwest Territories (GNWT) Round 2 Information Requests for the NICO Project.

Please contact me at Loretta_ransom@gov.nt.ca or (867) 873-7905 with any questions regarding the attached submission.

Sincerely,



Environmental Assessment Analyst
Environmental Assessment and Monitoring
Environment and Natural Resources, GNWT
Phone #: 867-873-7905

IR Number: GNWT 2 - 1
Source: Government of the Northwest Territories
To: Fortune Minerals Limited
Subject: Caribou, Roads, Access and Cumulative Effects

Preamble:

1. Roads, Hunter Access and Yukon caribou herds

In the experience of ENR staff, roads that make a caribou herd easily accessible consistently lead to harvest management issues. As a result, the herd needs to be monitored closely and harvest needs to be monitored and managed. A few Yukon examples are provided below, followed by a summary relevant to NWT.

- a. The Campbell Highway was built to the Faro mine in southeast Yukon in the 1960s, which inadvertently increased access to some of the Finlayson herd's main summer range and much of its winter range. By the 1980s, the caribou herd had declined to a point that management actions such as wolf control, limiting harvest for resident and outfitters, and management of aboriginal harvest were introduced. The herd's accessibility meant that close monitoring of harvest and herd size and trend were needed, and these have continued to the present day.
- b. The South Nahanni herd winters in Nahanni National Park, but a large portion of its summer range is in the Yukon. Hunter access increased when the Nahanni Range Road (aka Cantung Road) was improved in the 2000s due to the re-opening of the Cantung mine. Within a few years, the hunter harvest increased to the point where harvest restrictions were needed on the Yukon side.
- c. In the Whitehorse area, 3 herds known locally as the Southern Lakes herds, numbering less than 3000 animals became accessible and by the 1990s their numbers were in decline. As a result six Yukon First Nations agreed to a collaborative program with the Yukon government to cease hunting on these caribou until they recovered and could sustain a managed harvest. Close monitoring and careful harvest management of these herds continues in the present day.

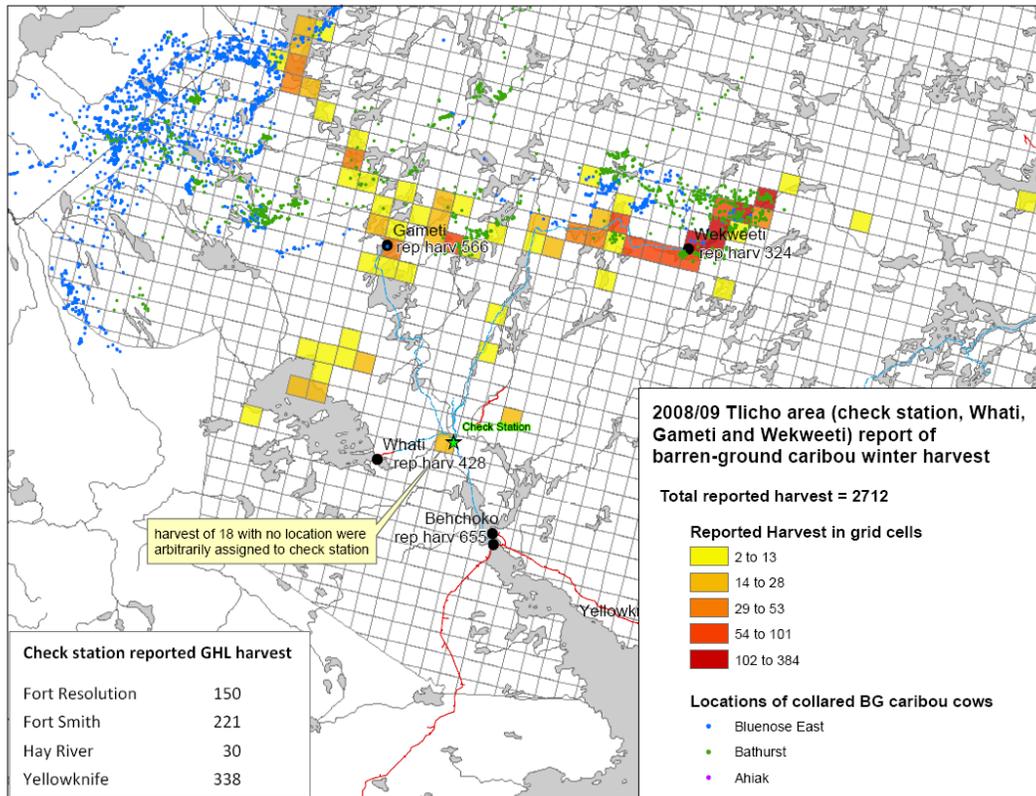
In all of these cases, the caribou ranges that became accessible because of access remain accessible. With caribou, due to their clumped distribution on the landscape (unlike moose), the experience was that a single road that provided good access to a caribou herd was all that was needed to bring on a harvest management problem. The consequences of increased access included the need to monitor the caribou herds more closely and manage the harvest, on an indefinite basis.

2. Roads, Hunter Access and NWT barren-ground caribou herds

Although barren-ground caribou herds in the NWT are larger than Yukon mountain woodland caribou herds and range over much greater areas, recent experience suggests that roads providing easy access to NWT barren-ground caribou herds have the potential to increase hunter access greatly and enable over-harvest of caribou, similar to experience in the Yukon. Barren-ground caribou populations fluctuate over time and are currently at the low point in their cycle. Increased access via roads has the potential to accelerate natural declines and prevent quick recovery unless harvest is closely monitored and managed. Barren-ground caribou herds have reached low numbers before in the NWT, and at those times, caribou pulled back to relatively remote core areas, where they had an opportunity to recover under limited harvest pressure. While many herds in the NWT are now stable or increasing, there are concerns that these trends can be easily reversed, particularly if new roads lead to increased harvest pressure. This can lead to a number of difficult decisions between ENR and its co-management partners:

- Wekweeti was built in part because it was within an area that always had Bathurst caribou, even when low caribou numbers were low. When the winter roads were built to Gameti and Wekweeti, it made hunter access to caribou easy, even as the herd declined to low numbers.
- Since about 2005, rapid and extensive declines in several NWT barren-ground caribou herds (Cape Bathurst, Bluenose-West, and Bathurst) have meant that co-management boards, governments and communities have had to make difficult decisions about major reductions in caribou harvest. These reductions have created serious hardships in some communities that depended on caribou as primary country food, and have meant economic losses for barren-ground caribou outfitters and the NWT tourism industry.
 - All harvest of the Cape Bathurst herd is closed.
 - Bluenose-West harvest is limited to 4% of the herd and 80% bulls.
 - Bathurst harvest was reduced to a harvest limit of 300 caribou and 80% bulls.
 - Resident harvest and outfitter harvest of barren-ground caribou is closed across the NWT.
- The Bluenose-East herd, based on the harvest monitoring of the past 2 years, is probably harvested to a level close to 4% of its population estimate of 100,000 animals (2010). A larger harvest, particularly if it is primarily cows, could reverse the currently increasing trend of the Bluenose-East herd.

Because these herds have become readily accessible, the consequences to ENR and co-management partners have led to close monitoring of these herds and managing the harvest. Every additional road, such as the one that would be needed for the proposed NICO mine, makes one or more caribou herds more accessible. To date access has become the single biggest contributor to the cumulative impact of development on caribou in the NWT.



Map (B. Croft, ENR) showing harvest of caribou in winter 2008/2009 near Tlicho communities north of Yellowknife. The squares are 10x10km blocks and the colour scheme shows where greater and lesser numbers of caribou were taken. Blue dots are winter satellite collar locations of Bluenose-East caribou and green dots are Bathurst satellite collar locations. Hunting was concentrated that winter on roads between Gameti and Weweeti and the trail to Hottah Lake.

(from J. Adamczewski, J. Boulanger, B. Croft, D. Cluff, B. Elkin, J. Nishi, A. Kelly, A. D'Hont, and C. Nicolson: 2009. Decline in the Bathurst Caribou herd 2006-2009: a technical evaluation of field data and modeling. Draft Technical Report).

3. Project-Specific & Cumulative Effects Assessments

Concern over cumulative effects on caribou has been expressed clearly not only by ENR but also by other co-management partners. It is not the potential effects of one mine that are the greatest concern; it is the accumulated effects of all development on a caribou range that matter most. Assessing only the NICO mine without fully considering all other existing and proposed developments is no longer a sufficient approach.

Roads have the potential to be the largest single contributor to the cumulative effect of development on caribou in the NWT. The recent proposals for new mines and roads, such as the Denison Road, Fortune Minerals, Gahcho Kue, Izok Lake, and Bathurst Inlet Port and Road, will make the Bathurst herd more accessible and will likely increase access to other herds.

4. Environment and Natural Resources Summary of Concerns

- Roads bring many economic benefits, but their effect on key game species like caribou is a progressive one-way shift, where hunter access increases with each new road. There is a need to monitor these caribou closely and then manage the harvest carefully which could be indefinite.
- Harvest, if left unmonitored and unmanaged, can have serious impacts on the population trend of barren-ground caribou herds, especially when herds are declining or are at low numbers. A critical element found on the effects of harvest on declining caribou has been access. Roads that can be driven by pickup trucks are a more serious concern than trails driven by skidoo.
- Both during the first round of IRs and during Fortune's presentation at the recent Technical Session it was made very clear by Fortune that the presence of an all-weather road was essential to the viability of the project. Regardless of how an all-weather road ends up being built, ENR's position is that the potential of an all-weather road will have a much larger potential impact on barren-ground caribou than the footprint of the NICO mine alone, and in particular, the potential for increased access and harvest. This effect may persist long after the mine is closed.
- This all-weather road would increase access to the known winter distribution of both the Bathurst and Bluenose-East herds. Hunter access would be facilitated by trucks and/or snow machines within easy reach of caribou. A truck can carry a much greater number of caribou than can be hauled behind a skidoo, trucks on a road can cover large distances quickly, and hunters will have a much longer harvest season than they have been accustomed to with a seasonal winter road only.
- The time has come to break out of the existing model of dealing with harvest and other cumulative effects on a project footprint by footprint basis alone. There is a need to become more pro-active by bringing all developers, mining and exploration groups together to tackle larger impacts on the larger landscape together with the communities, ENR and other agencies.

Request:

Recently some developers have expressed interest in contributing to existing or planned GNWT caribou monitoring programs in place of, for example, flying expensive aerial surveys in the immediate area of their property. In recognition of the potential impacts of increased road access on caribou harvest beyond the local footprint of mines, would Fortune Minerals willing to discuss with GNWT this type of contribution? Cost-sharing could be used toward monitoring of the Bathurst and Bluenose-East caribou herds, monitoring and management of harvest, and cumulative effects assessment at larger spatial scales, all of which are on-going or planned by GNWT with co-management partners such as the Tlicho government and the YKDFN.

IR Number: GNWT 2 - 2
Source: Government of the Northwest Territories
To: Fortune Minerals Limited
Subject: **Conceptual Wildlife Effects Monitoring Program**
DAR Section: Appendix 18.II

Preamble:

Fortune Minerals included in the Developer's Assessment Report a Conceptual Wildlife Effects Monitoring Program (WEMP) and it is stated in the document that "...detailed study designs, methods, procedures, and data sheets will be developed during the NICO Project permitting phase".

The GNWT believes that it is appropriate that Fortune Minerals identified 2 main audiences for this document, "The communities and government who have concerns about effects to wildlife; and the environment staff who carry out the monitoring".

The GNWT also agrees with the overall goals and objectives of the Conceptual Wildlife Effects Monitoring Program (in particular that design studies and data collection protocols will be developed that are consistent with other programs in the region and that it will consider existing regional and collaborative programs) at the same time recognizing that it is difficult to combine the monitoring required to assess the impacts of a mine with regional monitoring programs.

The GNWT would like to continue working with Fortune Minerals towards developing satisfactory mine monitoring activities and management practices and incorporating it into regional monitoring and management activities.

Request:

How will Fortune Minerals continue to work with the GNWT as the Wildlife Effects Monitoring Program (WEMP) is developed during the permitting phase, to a level that is satisfactory to the GNWT?