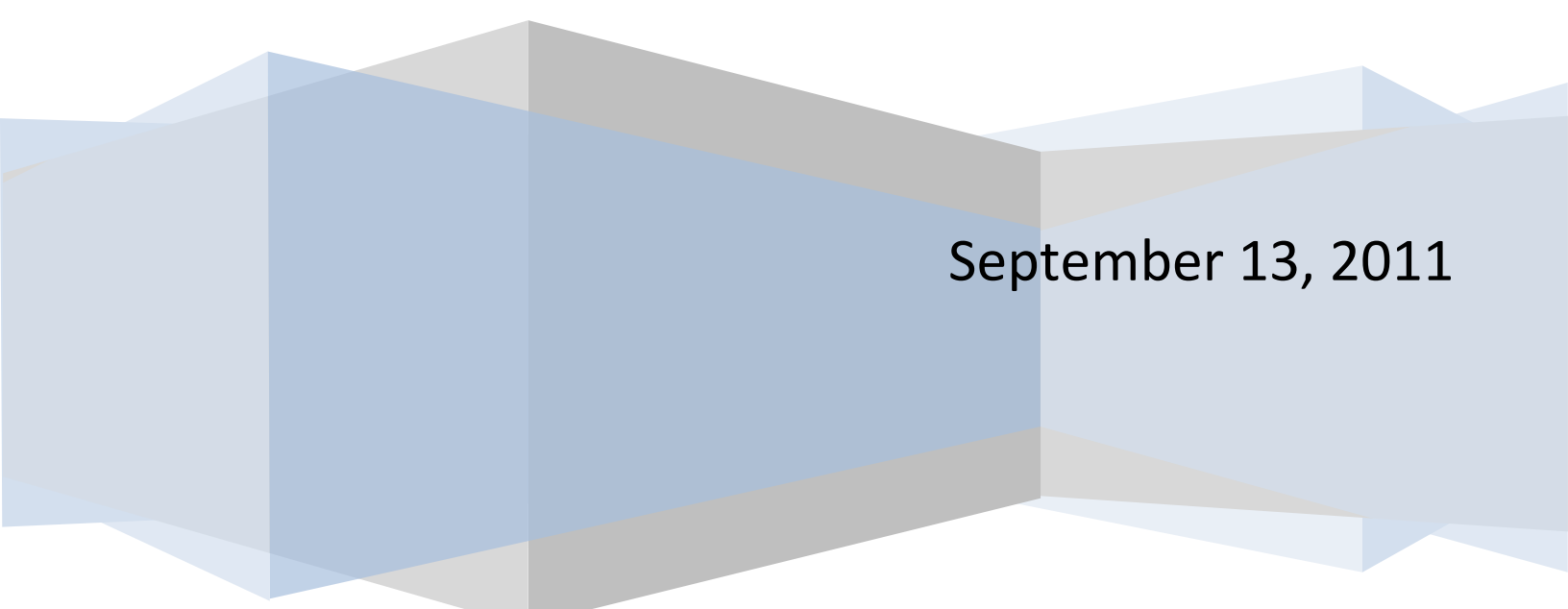


Government of the Northwest Territories

# Prairie Creek Mine Environmental Assessment

Final Argument

An abstract graphic at the bottom of the page consisting of several overlapping, semi-transparent geometric shapes in shades of blue and grey, creating a layered, crystalline effect.

September 13, 2011

## Non-Technical Summary

The Government of the Northwest Territories (GNWT) has reviewed the Canadian Zinc Corporation's Developers Assessment Report, Appendices and additional documents filed during the Environmental Assessment including transcripts of the public hearings held in June 2011.

The GNWT and Canadian Zinc Corporation (CZN) have confirmed the final wording of the company's commitment to conduct an Archaeological Impact Assessment. The GNWT recommends this commitment be included in the Report of Environmental Assessment

The GNWT accepts CZN's approach to managing potential wildlife impacts and its primary mechanisms to implement wildlife follow-up programs. CZN mitigation and monitoring commitments will be addressed in CZN's four key plans: Wildlife Mitigation and Monitoring Plan; Flight Impact Management Plan; and, relevant parts of a Waste Management Plan and Human Health and Safety Plan.

Since the Public Hearing, a proposed '*National Management Plan for Mountain Caribou*' and a proposed '*National Recovery Strategy for Boreal Caribou*' have been released. The GNWT has provided an updated assessment for Mountain caribou based on the proposed management plan.

The GNWT has reviewed the mitigation commitments proposed by other parties during the Public Hearing to ensure they are appropriate in addressing and mitigating impacts. The GNWT recommends CZN file a revised wildlife commitment table, which clarifies the wording of its final mitigation commitments and recommends these revised commitments be included in the Report of Environmental Assessment.

CZN and the GNWT signed the Prairie Creek Mine Project Socio-Economic Agreement (the "SEA") on August 22, 2011. CZN submitted the SEA to the public registry on September 2, 2011. The SEA confirms CZN's socio-economic commitments and provides for ongoing monitoring and adaptive management in socio-economic areas. The SEA was designed as a follow-up program to this environmental assessment.

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## Introduction

The GNWT submitted a Technical Report and a hearing presentation to the Review Board for the Environmental Assessment of the Prairie Creek Mine and related access road and infrastructure. Subsequent to the Public Hearings, a number of agreements were reached with CZN and several relevant documents were posted to the federal Species at Risk website.

This submission represents the final argument of the GNWT. The intent is not to repeat the previous submissions but to provide additional clarity to issues raised at the public hearing and to provide appropriate updated information to the Review Board, CZN and parties to the environmental assessment. The topics covered include:

Archaeology - Commitment Final Wording

Wildlife

Mountain Caribou

Wood Bison

Boreal Caribou

Wildlife “Hazing”

Wildlife Mitigation Commitments

Socio-economic Agreement

## Archaeology - Commitment Final Wording

CZN provided the following commitment to undertake an archaeological impact assessment in its commitments table submitted on May 6, 2011<sup>1</sup>.

“Regarding the proposed road re-alignments between the expanded NNPR boundary and the Liard River, an archaeological impact assessment will be conducted (hopefully in summer 2011). Note that this work will be done

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<sup>1</sup> TABLE 2: COMMITMENTS TABLE (May 6, 2011)

when the road alignment has been confirmed more accurately, and work will focus on the alignment from Nahanni Butte to Grainger Gap.”

During the Fort Simpson public hearing in June 2011, the GNWT and CZN agreed to review and finalize wording for this commitment and to notify the Review Board. After discussion between CZN and territorial archaeologists at the Prince of Wales Northern Heritage Centre, the final wording is:

"CZN will conduct a supplementary Archaeological Impact Assessment for the proposed road re-alignment from Nahanni Butte Winter Road to Grainger Gap. The survey will occur after the road alignment has been confirmed more accurately."

The GNWT recommends the Review Board include this commitment in its Report of Environmental Assessment.

## Wildlife

### Mountain Caribou

Mountain caribou are listed on Schedule 1 of the federal *Species at Risk Act* (SARA) as Special Concern. Nagy, J.A.S. (2011) provides an understanding of the annual life cycle of this ecotype of woodland caribou based on a recent analysis of satellite collared data for mountain caribou in the Mackenzie Mountains from 1993-2009 (Table 1). Critical periods for Mountain caribou are considered to be calving and post-calving and late winter/spring migration. Mountain caribou peak calving occurs on June 3 plus or minus four days.

Table 1. Movement rates by activity period determined by satellite telemetry for mountain woodland caribou in the Mackenzie Mountains, Northwest Territories and Yukon Territory, Canada, 1993-2009 (Nagy, J.A.S. 2011).

Activity periods	Dates	Daily mean movement (km)
Calving	26 May - 11 June	1.87
Post-calving	12 June - 23 June	2.24
Early summer	24 June - 23 July	4.16
Mid/late summer	24 July - 11 Sept	2.88
Fall	12 Sept - 8 Oct	4.32
Breeding	9 Oct - 25 Oct	4.90
Late fall	26 Oct - 25 Nov	3.79
Early/mid winter	26 Nov - 10 Mar	2.42

Late winter	11 Mar - 24 Apr	2.02
Spring migration	25 Apr - 25 May	4.77

A 'National Management Plan for Mountain Caribou' was released for public comment on July 25, 2011 (Environment Canada 2011). The proposed management plan provides an assessment of individual herds, including the two herds (Redstone and South Nahanni) potentially affected by the Prairie Creek Mine, access road and related activities.

Population movements are known to be complex for Mountain caribou with significant variation among groups within, and between, herds. Existing radio-tracking for the South Nahanni herd (part of the Nahanni complex) indicate limited use of the mine site or access road. Limited radio-tracking of the Redstone herd (10 collared females) and outfitter anecdotal evidence indicate the most likely herd overlapping the Prairie Creek mine and vicinity is a portion of the Redstone herd (Environment Canada 2011 p. 64). The Redstone herd population is estimated at 5,000 to 10,000 animals and is currently considered to be a stable.

Aerial surveys conducted by CZN in December 2010 and February 2011 show remarkably consistent numbers of mountain caribou sighted and general locations. The predominant sightings occurred along only a limited portion of the access road north and west of the minesite in the upper Prairie Creek headwaters. The main concentrations were well to the north and only a few animals were located near the first 5 – 10 km of the access road leading from the minesite. Based on the most recent understanding of the Mountain caribou herds (Environment Canada 2011) and the recent aerial surveys conducted by CZN in 2010/11, the GNWT believes the mine, access road and related activities would have limited significant impact at a population level for the Redstone herd. The GNWT accepts the Wildlife Mitigation and Monitoring Plan approach as the preferred follow-up program and agrees it is the appropriate place to define mitigation measures to minimize direct impact on Mountain caribou. This approach, including the establishment of a Technical Advisory Committee, will provide a mechanism to ensure continual improvement to resolve impacts, which may emerge in the future.

### **References**

Environment Canada. 2011. Management Plan for the Northern Mountain Population of Woodland Caribou (*Rangifer tarandus caribou*) in Canada [Proposed]. *Species at Risk Act* Management Plan Series. Environment Canada, Ottawa. vii + 80 pp.

Nagy, J.A.S. 2011. Use of Space by Caribou in Northern Canada. Ph. D. Dissertation. U of Alberta.

## Wood Bison

Wood bison are listed on Schedule 1 of the federal *Species at Risk Act* (SARA) as Threatened. Wood bison in the project area are part of the Nahanni population. The population was estimated at 400 animals in 2004 (Environment and Natural Resources 2010). A recent survey conducted in 2011 indicates the population is stable at 413 animals ( $\pm 213$ , 95% confidence) (Larter, 2011. Pers. Comm.). The GNWT does not believe the access road or related traffic on the access road or public highways [i.e. Nahanni Butte Access Road or Liard Highway] will affect wood bison as long as safe driving practices are followed. Advice to vehicle drivers on wood bison behavior in relation to vehicles and a method to distribute this information should be included in the Wildlife Mitigation and Monitoring Plan.

### References

Environment and Natural Resources. 2010. Wood Bison Management Strategy for the Northwest Territories 2010-2020.

Larter, N. 2011. Personal communication. Dehcho Regional Biologist.

## Boreal Caribou

Boreal caribou are listed on Schedule 1 of the federal *Species at Risk Act* (SARA) as Threatened. Although the current distribution of Boreal caribou near the access route to the Prairie Creek minesite is unknown, anecdotal information suggests minimal overlap of the project activities on Boreal caribou range. The GNWT believes the proposed Wildlife Mitigation and Monitoring Plan is the appropriate follow-up program to develop mitigation measures to minimize direct impact on Boreal caribou and as a means of ensuring continual improvement to resolve impacts, which may emerge in the future.

Since the public hearing, two important documents have been released (Environment Canada 2011a and 2011b) including a proposed '*National Recovery Strategy For Boreal Caribou*'. The GNWT will continue to work with the Dehcho Boreal Caribou Working Group and the Technical Advisory Group for the Prairie Creek Mine to ensure appropriate management actions are undertaken as warranted.

### References

Environment Canada, 2011a. Scientific Assessment to Inform the Identification of Critical Habitat for Woodland Caribou (*Rangifer tarandus caribou*), Boreal Population, in Canada: 2011 update. Ottawa, Ontario, Canada. 102 pp. plus appendices.

Environment Canada. 2011b. Recovery Strategy for the Woodland Caribou, Boreal population (*Rangifer tarandus caribou*) in Canada [Proposed]. *Species at Risk Act* Recovery Strategy Series. Environment Canada, Ottawa. vi + 55 pp.

Environment and Natural Resources. 2010. Action Plan for Boreal Woodland Caribou Conservation in the Northwest Territories 2010-2015.

## Wildlife “Hazing”

Some parties recommended wording in recommendations (e.g. ‘hazing’ in Parks Canada Recommendation #6), which would create confusion with wording in territorial legislation. Wildlife (except for birds listed under the *Migratory Birds Regulations*) is protected under the *Wildlife Act*. The *Wildlife Act* describes a number of situations, which define “harassment of wildlife” and provides direction to individuals and developers including defensive actions.

### *Wildlife Act*

#### *Harassment of wildlife*

**38.** (1) Subject to subsection (3), no person shall without a permit entitling him or her to do so  
(a) persistently or repeatedly chase, weary, harass or molest wildlife without intending to capture or kill it;  
(b) engage in any activity that is likely to result in a significant disturbance to a substantial number of wildlife animals;  
(c) break into, destroy or damage any den, beaver dam or lodge or muskrat push-up outside any municipality or prescribed area, unless authorized to do so by the regulations or any other law; or  
(d) destroy, disturb or take the eggs or nests of any birds mentioned in the prescribed schedule.

...

(3) A person may chase a bear away from a municipality, camp or settlement or its immediate vicinity where that action is necessary to defend life or property and makes it unnecessary to kill the bear, and a vehicle may be used in that chase.

**39.** (1) Notwithstanding anything in this Act, a person may wound or kill wildlife if it is necessary  
(a) to preserve his or her or another person’s life; or  
(b) to protect his or her property.

(2) Every person who wounds or kills wildlife under subsection (1) shall without delay report the wounding or killing to an officer and  
(a) give the wildlife to the officer, or



*(b) advise the officer of where the wildlife is located, and the officer shall dispose of the wildlife in the prescribed manner.*

#### *Wildlife Licences and Permits Regulations*

##### *General Wildlife Permit Licence*

**17. (1)** *The holder of a general wildlife permit is entitled to possess wildlife, allow otherwise unauthorized harassment of wildlife, ... .*

## **Wildlife Commitments**

The GNWT accepts CZN's approach to managing potential wildlife impacts and its primary mechanisms to implement wildlife follow-up programs. CZN mitigation and monitoring commitments will be addressed in CZN's four key plans: Wildlife Mitigation and Monitoring Plan; Flight Impact Management Plan; and, relevant parts of a Waste Management Plan and Human Safety Plan.

During the Public Hearings, some mitigation measures proposed by other parties could create unsafe traffic conditions on the access road [for example, stopping vehicles when wildlife are observed near the access road] would be in conflict with standard "rules of the road" for public roads. The GNWT does not support such broadly worded mitigation measures as the recommended mitigation is not specific to a species of concern nor is the practice necessarily safe for vehicle operators. The GNWT does support the development of site specific measures for specific species or situations where direct impacts may occur. The mitigation measures must also take into account the variation in behavioural responses for that species based on its degree of habituation to a disturbance. These approaches are best dealt with in the Wildlife Mitigation and Monitoring Plan.

The GNWT recommends that CZN provide a final wildlife commitment table with improved wording of commitments and organize the commitments in a manner to ensure compliance tracking. These final wildlife mitigation commitments should be included in the Report of Environmental Assessment.

## **Socio-Economic Agreement**

CZN and the GNWT signed the Prairie Creek Mine Project Socio-Economic Agreement<sup>2</sup> (the "SEA") on August 22, 2011. CZN submitted a copy of the SEA to the public registry on

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<sup>2</sup> The SEA is available to the public at: <http://www.itl.gov.nt.ca/strategiesagreements/>

September 2, 2011. The SEA confirms CZN's socio-economic commitment and provides for ongoing monitoring and adaptive management in socio-economic areas. THE SEA was designed as a follow-up program to this environmental assessment. The *Mackenzie Valley Resource Management Act* (MVRMA) requires a follow-up program be a consideration in any environmental impact review (s. 117(3)(c)) and specifically directs the need for a follow-up program be dealt with in a Panel report (s. 134(2)). A Board report of an environmental assessment is less rigidly defined than a Panel Report, which would indicate the Board may include a range of factors at its discretion (s. 128(2)). The mandatory considerations for an environmental assessment specifically allow the Board to consider other matters (s. 117(2)(e)). The GNWT views these sections of the MVRMA as being consistent with a requirement for a follow-up program, as defined in the Act, when warranted. This is consistent with our interpretation of similar provisions since 1998.

The GNWT recommended there be a socio-economic follow-up program for the Prairie Creek Mine, in the form of an SEA. In its technical submission, the GNWT relied on the Canadian Environmental Assessment Agency *Operational Policy Statement* regarding when a follow-up program is warranted. The Statement lists several conditions that may warrant a follow-up program. These include: a need to verify the accuracy of predictions or the effectiveness of mitigation measures; new or unproven techniques and technology; cumulative effects are an important consideration; there is limited experience in implementing a similar project; and, limited scientific knowledge. The full *Operational Policy Statement* can be found at <http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=499F0D58-1>.

The GNWT *Sustainable Development Policy* recognizes the interdependence between conservation and development. The GNWT, therefore, promotes economic development and resource development projects if they are consistent with the Sustainability Guidelines of the *Policy*. It is felt the design of the socio-economic elements of the Prairie Creek Mine Project, taking into account the SEA, will meet this standard.

The GNWT view is that socio-economic agreements are best implemented as a follow-up program to environmental assessments or environmental impact reviews. We see this as also assisting the Boards in ensuring a mechanism exists for these 'orphan' conditions. The GNWT, therefore, recommends a socio-economic follow-up program, in the form of the executed SEA, be a condition of project approval.

During the technical hearing in Fort Simpson, questions were raised about the relationship between Impact and Benefit Agreements (IBAs) and SEAs. IBAs are private contracts and, as such, are not directly linked to the environmental assessment. SEAs *are* directly linked to the environmental assessment, not as a mitigation measure but rather as a follow-up program provided for in the legislation. The Prairie Creek Mine Project Socio-Economic Agreement between CZN and the GNWT recognizes and protects the provisions in private IBAs between Aboriginal organizations and CZN.