# Caribou: Cumulative Effects

YELLOWKNIVES DENE FIRST NATION

PUBLIC HEARING FOR THE ENVIRONMENTAL ASSESSMENT OF THE JAY PROJECT (EA1314-01)

## Introduction

- •Caribou are integral to the cultural and physical well-being of the Yellowknives Dene
- •The expansion of mine development has paralleled the decline in caribou numbers
- •Barren-Ground caribou numbers continue to decline

## Cumulative Impact

- •Barren-Ground caribou population continues to decline (>95% to decline)
- •Many unknowns with regard to caribou populations dynamics, particularly with respect to small populations
- Proposed Jay road cuts directly through esker; previously established to be an important migratory route
- Proposed Jay pit lies directly adjacent known migratory route
- •YKDFN is concerned about non-linear dynamical effects cumulative impacts on the caribou population

## Compensatory Mitigation

- •Bathurst herd has seen a greater than 95% drop in population
- Most recent survey states that the population is still decreasing
- Precedent for compensatory mitigation as a caribou management strategy already exists

## Zone of Influence

- •It has been previously established that mining activities create a ZOI that is avoided by caribou
- •Caribou are know to avoid roads and power-lines, perhaps to do UV light emissions
- •How can a new mining pit, serviced by a road with a power-line not increase the zone of influence?

## Recommendations: Cumulative Impact

#### **Recommendations:**

- 1. DDEC shall be subject to measures aimed at minimizing adverse effects on caribou, not limited to:
  - 1. Select of alternate Jay haul road route
  - 2. Additional mitigation to reduce effects of haul truck and other traffic on caribou
- 2. Conduct collaborative research with other mine operators to deepen understanding of the true ZOI. These results will be reported annually to all interested parties as part of DDEC's annual report under the Wildlife Effects Monitoring Program. Implementation of research results should take place within 5 years of the acceptance date of the measures by the Responsible Ministers.
- 3. Consultant and incorporate traditional knowledge based recommendations as part of research into caribou behaviour

## Recommendations: Compensatory Mitigation

#### Recommendations:

1. DDEC should be required to prepare a Compensatory Mitigation plan for caribou, so as to facilitate caribou herd recovery. This plan should target quantifiable objectives; such as, energy loss, calving rates and calf survival rates. This plan should be developed with input from

### Recommendations: Zone of Influence

1. Obtain information needed to prevent significant adverse impact to caribou, DDEC shall analyze estimate to ZOI distances and magnitude from the 2009, 2012 aerial survey data from the combined Ekati-Diavik study using an updated analysis. These estimates should be reported in the 2015 Wildlife Monitoring Program Report.

## YKDFN's Compromises

YKDFN has sacrificed the traditional cultural activities and their aboriginal rights; in spite of having a comparatively trivial effect on caribou.

Why should YKDFN and other aboriginal groups face the burden of accommodation?