

# Tłıchǫ and Caribou

Technical Presentation for MVEIRB:  
Jay Projects Public Hearing  
MVEIRB EA1314-01  
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Yellowknife



Tłıchǫ Ndek'awoo



Tłıchǫ Government





# Ekwò winĩ itè zq lanĩ

## The Wisdom of the Caribou



# Outline

1. Context : Ekwò winì itè zq lanì  
Existing impacts to Caribou
2. Issues: Cumulative Impacts  
Zone of Influence  
Tataà  
Jay Road  
Waste Rock Piles  
Dust  
Tłıchq Access to Caribou
3. Recommended Measures

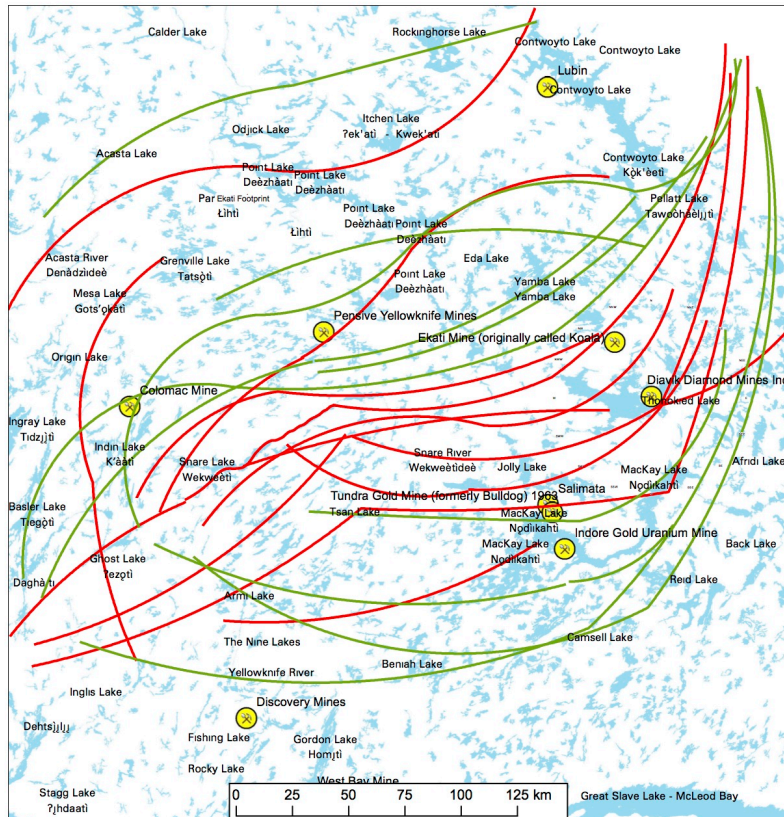
# Context

Existing impacts to caribou:

- Present state of and future protection of the **Bathurst caribou herd** a priority for the Tłıchǫ Government.
- Proposed location of the Jay Project is within an important migration and habitat area for caribou.
- Any new stressors for caribou must be avoided.



# Cumulative Impacts



Bathurst Caribou Migration Trails

Tłı̨chǫ Traditional Knowledge



Issue: Are there cumulative impacts on caribou in the region? and will the Jay Project add to these impacts?

# Cumulative Impacts

## Tłıchǫ Conclusion:

- TK studies have already identified existing impacts to caribou.
  - Dè Ɂò goèhshì
  - Ekwò yeka at'j-le adzà
- Tłıchǫ communities are also already impacted.
- Many potential impacts from the Jay Project (e. g., new road, waste rock piles, dust generation etc.).
- Further research required to better understand how the Jay Project will add to existing impacts.

# Zone of Influence (ZOI)

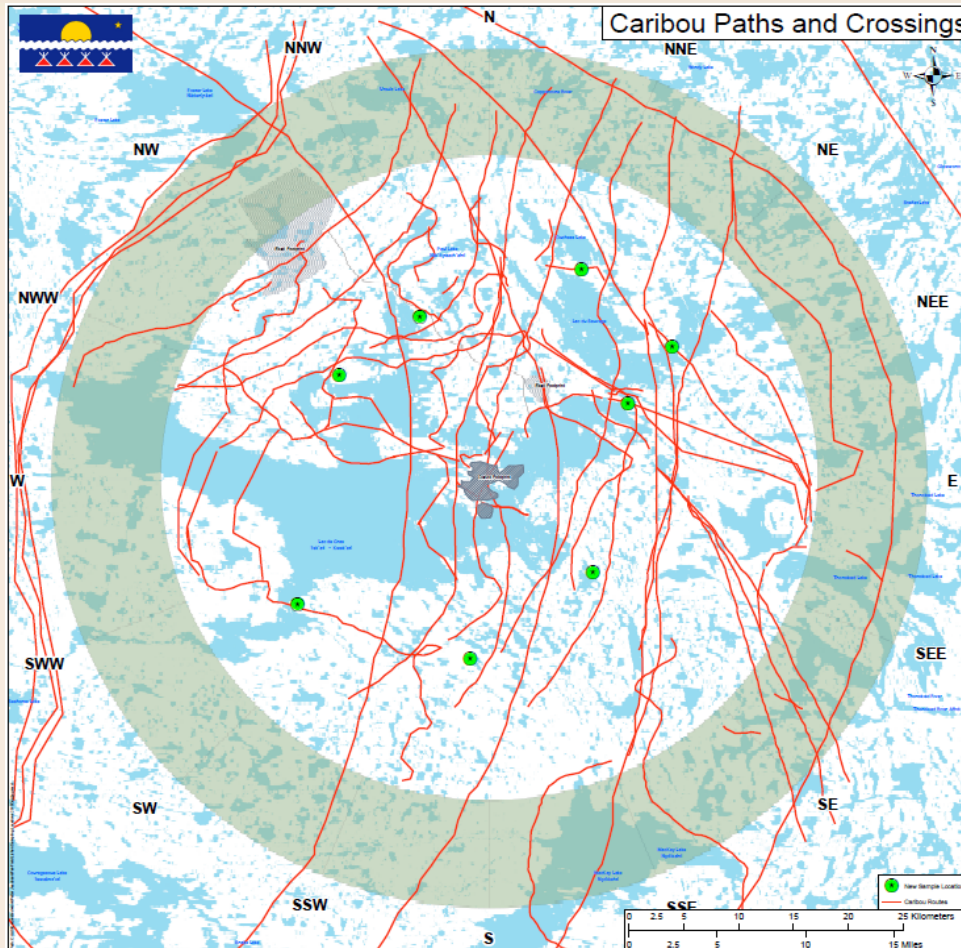


Issue: Are the methods used for determining and understanding the ZOI adequate?

Tłıchǫ Conclusion:

- ZOI research has not involved Tłıchǫ TK.
- Magnitude of change within the ZOI has not been assessed by the developer.
- Area around Lac de Sauvage is known by Tłıchǫ to be critical habitat for caribou.

# Tataà



Issue: Are there significant Tataà within the ZOI? Will they be impacted?



# Tataà

## Tłıchǫ Conclusion:

- Where the Jay Project is proposed is a significant route/ Tataà for caribou during fall migration.
- Changes to forage from dust are already starting to keep caribou from using this Tataà.
- Physical structures associated with the Jay Project will create barriers on this important migration route.

# Jay Road

Issue: The Proponent has not worked with the Tłıchǫ to plan the cut-through for the esker or location of the Jay road.

## Tłıchǫ Conclusion:

- Tłıchǫ Elders, with their intimate knowledge of caribou trails and their use of eskers, must be included in any road planning.
- The Tłıchǫ need to be included in road planning prior to the final design stages.

# Waste Rock Piles

Issue: Location of Waste Rock Piles/Waste Rock Storage Areas and how they are built impact caribou migration decisions.

## Tłıchǫ Conclusion:

- TK shows how caribou will avoid rocky areas.
- The location of the WRSA and its Caribou Emergency Egress ramps will, if planned without input from the Tłıchǫ, prevent caribou from seeking shelter both in the Esker and along the shoreline of Lac de Sauvage.



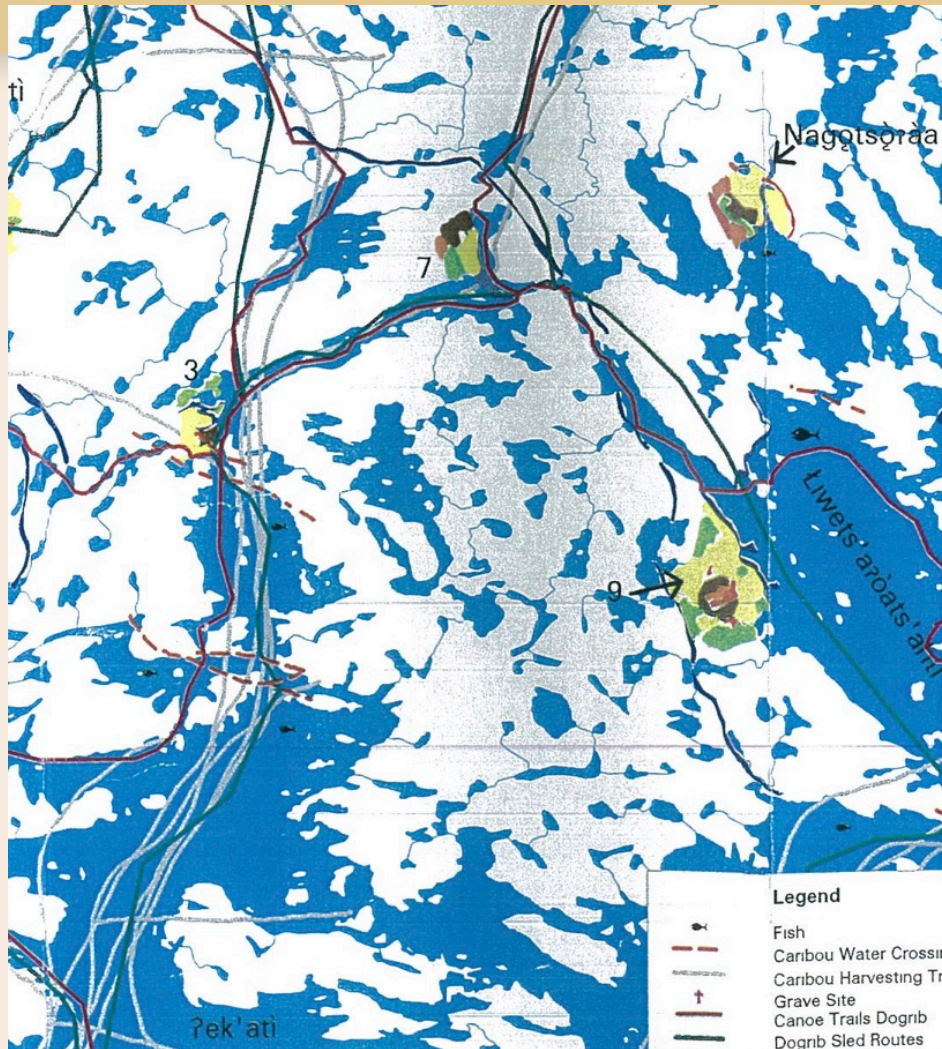
# Dust

Issue: Are the potential effects from the generation of dust from the Jay Project site significant?

Tłıchǫ Conclusion:

- Tłıchǫ have witnessed the impacts from dust already occurring in caribou habitat.
- Tłıchǫ Elders have identified healthy forage/food sources as a critical component for caribou habitat selection.
- Tłıchǫ Elders have identified a relationship between the impacts from dust to caribou forage and changes in caribou migration.

# Tłıchq Access to Caribou



Issue: Access to healthy caribou is vital to the Tłıchq and needs to be recognized.

Access not only means the availability of **healthy caribou** in known hunting locations but also the ability of the Tłıchq to hunt them **safely**.

# Tłıchq Access to Caribou



## Tłıchq Conclusion:

- Dust on the land limits Tłıchq access to clean berries and other plants when spending time on the land.
- Location of the project is within a preferred hunting and camping area.
- Due to the nature of Tataà, changes to caribou migration within the ZOI will affect migration patterns outside of the ZOI.



# Recommended Measures

Impact	Measures
Cumulative Impacts	<ul style="list-style-type: none"><li>• Minimize the project footprint's ecological disturbance (IEMA (2015) Section 3.0 Measure 1).</li><li>• Further research (including Traditional Knowledge) by the developer on caribou reviewing the pre-development baseline to study the changes that have occurred as a result of development.</li></ul>
Zone of Influence	<ul style="list-style-type: none"><li>• Regional research program to better understand the Zone of Influence (with Aboriginal involvement)(IEMA (2015) Section 3.0 Measure 2).</li><li>• Use of aerial survey data to estimate ZOI distance and Magnitude (IEMA (2015) Section 3.0 Measure 3).</li></ul>
Tataà	<ul style="list-style-type: none"><li>• Developer to conduct a project specific study concerning factors contributing to the distance and magnitude of the ZOI and the subsequent impacts on caribou migration patterns.</li></ul>

# Recommended Measures

Impact	Measures
Jay Road	<ul style="list-style-type: none"><li>• Developer to work with the Tłıchq Government and Tłıchq Elders on siting the location of the Jay road prior to finalization of the design plans.</li><li>• Developer to include the Tłıchq in determining caribou road crossing areas.</li><li>• Developer to work with Tłıchq Elders to determine the location of the cut- through of the esker.</li></ul>
Waste Rock Piles	<ul style="list-style-type: none"><li>• Developer to include Tłıchq Elders in the location and design of all caribou emergency egress ramps, and application of the findings from the Tłıchq Study on eskers.</li><li>• Develop a revised Waste Rock and Ore Storage Management Plan and submission to the Wek'eezhii Land and Water Board for approval (IEMA (2015) Section 5.0 Measure 13).</li></ul>

# Recommended Measures

Impact	Measures
Dust	<ul style="list-style-type: none"><li>• Develop a revised Air Quality and Emission Monitoring and Management Plan (AQEMMP) - IEMA (2015) Section 6.0 Measure 14.</li><li>• In addition to the details provided by IEMA to include in the AQEMMP:<ul style="list-style-type: none"><li>○ The Developer to work with Tłıchq Elders to identify sampling sites and plant species to sample.</li><li>○ Include the Tłıchq Government and Tłıchq Elders in development of the plan as a whole and monitoring of critical caribou habitat.</li></ul></li></ul>
Tłıchq Access to Caribou	<ul style="list-style-type: none"><li>• Compensatory Mitigation Plan for caribou (with the Tłıchq Government collaboratively developing the plan) (IEMA (2015) Section 3.0 Measure 5).</li></ul>



# Overall Conclusions

Given these significant impacts, the Tłıchǫ Government supports IEMA's (2015) recommendations to the Review Board pursuant to s. 128(1)(b) of the Mackenzie Valley Resource Management Act (MVRMA):

- A determination of a significant adverse cumulative impact of the Jay Project on the Bathurst caribou herd be made.
- That compensatory mitigation be required as part of the developer's Wildlife Management Plan.

# Summary

- Tłıchq Government has made recommendations for 13 measures related to caribou to be included in the report of EA.
- We require these measures to be addressed.
- The Tłıchq Government has also requested that a determination of a significant adverse cumulative impact of the Jay Project on the Bathurst caribou herd be made by MVEIRB.