Tłıcho All-season Road (EA1415-01) Summary of measures from Report of Environmental Assessment

April 17, 2018



Purpose of this meeting

- To describe the measures in the EA
- If there is a conflict between this document and the Report of Environmental Assessment and Reasons for Decision, March 29, 2018, the Report of Environmental Assessment and Reasons for Decision, March 29, 2018 prevails



Tlicho All-season Road Report of EA Purpose of this presentation

- 1. To summarize Board finding that significant adverse impacts from the TASR are likely
- 2. To describe why the Review Board made this determination
- 3. To present the measures required to reduce adverse impacts from the TASR so that those impacts are no longer significant



Community well-being (Chapter 5 p50)



Why the Board finds significant adverse impacts to community well-being likely (p50, p92-108)

- 1. Whatì will likely experience an **increase in health** and social problems currently experienced during winter road season.
- 2. Mitigation of socio-economic impacts depends on commitments and mitigations that are **untested**.
- 3. The Project is likely to affect harvest success rates, increasing dependence on wage economy and storebought foods.



Why the Board finds significant adverse impacts to community well-being likely (p50, p92-108)

- 4. Construction will see camps close to communities and a surge in income in communities, with potential related drug and alcohol use and additional burdens on local services.
- 5. Adverse **impacts on health and security of young women** are likely during construction due to proximity of work camps.



Community well-being measures

- 5-1: Developer support of monitoring and adaptive management of adverse health and well-being impacts
- 5-2: Tłıcho monitoring, engagement and reporting of adverse health and well-being impacts
- 5-3: Safety of young women in relation to work camps
- 5-4: Employee awareness training and policies
- 5-5: Community engagement and grievance mechanisms
- 5-6: Include Behchokò in accident response planning
- 5-7: Prioritize Northern hiring



Measure 5-1
Developer's support of monitoring and adaptive management of adverse health and well-being impacts

(p108-110)



Measure 5-1 Monitoring and managing adverse health and well-being impacts (p108-110)

Why:

- to inform mitigation of cumulative and project impacts
- to address:
 - inherent uncertainties in the assumptions in predictions of how the Project will affect Tłıcho citizens
 - concerns about the nature of Project impacts
 - effects on harvest success and traditional diet
- to strengthen adaptive management
- to increase confidence in management/governance actions and that there will be no long-term impacts



Measure 5-1 Monitoring and managing adverse health and well-being impacts (p108-110)

Who: the developer

What: support the Tłicho Government and Community Government of Whatì in the:

- monitoring and evaluation of health and well-being impacts
 - including any spike in harmful behaviours, traffic accidents,
 change in safety and change in harvest success rates
- preparation of annual progress report on mitigation
- adaptive management of health and well-being impacts

When: for construction and minimum 10 years operations



Measure 5-2 Tłıcho monitoring, engagement and reporting of adverse health and well-being impacts (p108-111)



Measure 5-2 Tłicho monitoring, engagement and reporting (p108-111)

Why:

- to address
 - inherent uncertainties in the assumptions in predictions of how the Project will affect T\(\frac{1}{2}\)icho citizens
 - concerns about the nature of Project impacts
 - effects on harvest success and traditional diet
- to strengthen adaptive management
- to increase confidence in management/governance actions, and that there will be no long-term impacts



Measure 5-2 Tłıcho monitoring, engagement and reporting (p108-111)

Who: Tłicho Government and Community Government of Whati, with support from the developer and in collaboration with the Tłicho Community Services Agency

When: for each year of construction and a minimum of 10 years of operations (to be re-evaluated after that time)



Measure 5-2 Tłicho monitoring, engagement and reporting (p108-111)

What the Tłıcho will do as part of this measure:

- establish and implement a framework to monitor and evaluate health and well-being impacts, including adaptive management
- meet with residents of Whati to discuss Project impacts,
 effectiveness of mitigation and need for new mitigations
- prepare and make publicly available an annual report on efforts to mitigate impacts to health and well-being



Measure 5-3 Safety of young women in relation to work camps (p113)



Measure 5-3 Safety of young women in relation to work camps (p113)

Why: to mitigate impacts on physical and mental health and safety of women by creating a safer workplace and culture

Who: the developer, in consultation with the Tłıcho Government and Community Government of Whatì

What: require the P3 operator to have gender appropriate and gender-specific policies in place



Measure 5-4 Employee awareness training and policies (p114)



Measure 5-4 Employee awareness training and policies (p114)

Why:

- to promote a positive, safe and inclusive work environment
- to reduce impacts from workcamps
- to reduce impacts to the safety of young women

Who: the developer

What: ensure P3 operator has appropriate policies and training (and fund the training course)



Measure 5-4 Employee awareness training and policies (p114)

How will the developer accomplish this:

- ensure the P3 operator:
 - establishes a workplace environment that prevents assault, harassment and racism
 - has a zero-tolerance harassment policy for racial or sexual discrimination
 - requires employees to take a training course designed to promote cultural and gender awareness
- work with the Tłıcho Government and the Tłıcho Community Services Agency to develop the training materials and coordinate course delivery



Measure 5-5 Community engagement and grievance mechanisms (p114-115)



Measure 5-5 Community engagement and grievance mechanisms (p114-115)

Why:

- to improve the P3 operator's awareness and relationships with affected communities
- to ensure the P3 operator is held accountable for grievances
- to confront, solve and learn from problems

Who: the developer



Measure 5-5 Community engagement and grievance mechanisms (p114-115)

What the developer will do:

- have camp and community grievance mechanisms that allow individuals and communities to raise concerns in timely manner
- hold public engagement sessions with communities of Whatì and Behchoko to discuss project-related concerns (timing and frequency to be determined in consultation with communities)

When:

mechanisms will be in place prior to the start of construction



Measure 5-6 Include Behchokò in accident response planning (p117)



Measure 5-6 Include Behchokò in accident response planning (p117)

Why: to reduce response time of emergency vehicles to accidents and to improve public safety along the road

Who: Government of the Northwest Territories, in collaboration with Tłįchǫ Government and Community Governments of Whatì and Behchokǫ̀

What: develop and implement an effective ground ambulance and highway rescue action plan



Measure 5-7 Prioritize northern hiring (p118)



Measure 5-7 Prioritize northern hiring (p118)

Why: to mitigate the potential loss of employment opportunities for northerners and T\(\text{licho}\) citizens due to the use of P3 operator

Who: the developer

What: prioritize northern hiring, particularly T₁cho citizens, in the contract with the P3 operator



Boreal Caribou

Section 6, pages 119-185







Collective measures

The measures collectively, and in combination with the GNWT's other actions and commitments to reduce or prevent impacts, will mitigate the significant adverse project-specific and cumulative impacts that are otherwise likely.



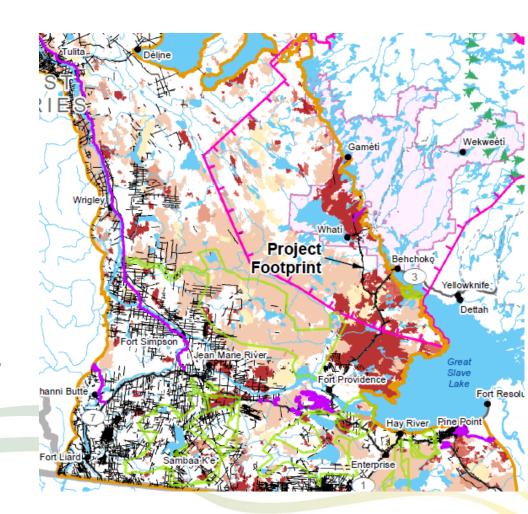
Why the Board finds significant adverse impacts to boreal caribou from Project likely

- 1. The Project will adversely effect boreal caribou:
 - increased hunting and harvesting pressures
 - habitat effects (direct disturbance, sensory disturbance, habitat fragmentation)
 - uncertainty in changes to predation rates
- 2. Current management:
 - listed as threatened
 - recovery strategy and range plans not implemented
 - uncertainty when it will be implemented

Why the Board finds significant adverse impacts to boreal caribou from Project likely

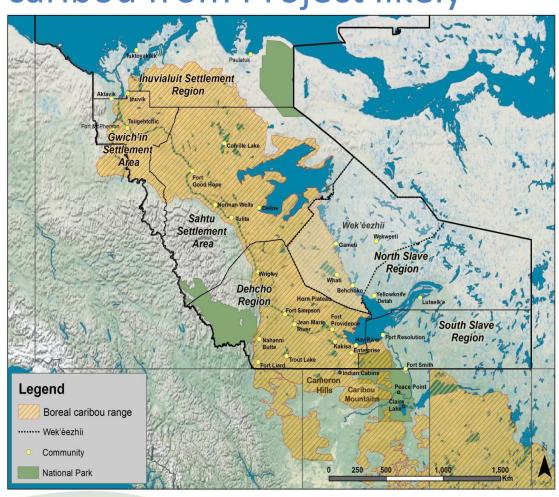
Current conditions:

- lack of baseline data in the area of the road (unknown densities, population trends, harvesting and hunting rates, predation rates)
- declining population in the south of the NWT
- habitat conditions in the area of the Project suggests they are not self-sustaining



Why the Board finds significant adverse impacts to boreal caribou from Project likely

- 4. lack of meaningful assessment in the project area:
 - use of the very large NT1 range
 - dilution of effects
 - assessment of impacts to Aboriginal harvest success not done
- lack of a detailed adaptive management strategy including thresholds, mitigative actions and monitoring





Measures required to ensure adverse impacts to caribou are no longer significant

- 6-1, part 1: implement range plans required by the Recovery Strategy for the area of boreal caribou affected by the project
- 6-1, part 2: monitoring and information requirements to inform adaptive management
- 6-2: temporary no-hunting corridor for boreal caribou
- 6-3: habitat offset plan



Measure 6-1, Part 1 Implement the Range Plans required by the Recovery Strategy for Boreal Caribou

in the NWT

Section 6.11.1 p181-183





Recovery Strategy for the Boreal Caribou (Rangifer tarandus caribou) in the Northwest Territories



Species at Risk (NWT) Act
Management Plan and Recovery Strategy Series
2017



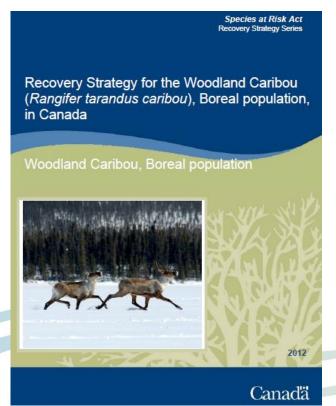












6-1, Part 1 and 2

Who: GNWT - ENR

What: implement Range Plan(s)

Where: for the area that contains boreal caribou that may be affected by the road

When: before the project is opened to public use.



6-1, Part 1

Why is this measure necessary:

- to mitigate project specific and cumulative impacts
- to put in place a comprehensive management structure for boreal caribou and their habitat

How will this measure mitigate effects:

- implementation will demonstrate there is a concerted effort to reverse the project specific and cumulative factors leading to the decline
- to help ensure the harvest of boreal caribou by Aboriginal groups who traditionally use the area of the road



6-1, Part 2 Information requirements

What does the measure include:

 include the listed information requirements in the development and implementation of the recovery strategy

Why is this measure necessary:

 this information is required to effectively manage project and cumulative effects to boreal caribou and ensure they are maintained and are selfsustaining in the area of the road



Measure 6-2 Temporary No Hunting Corridor for boreal caribou

Section 6.11.3, page 184



6-2

Temporary No Hunting Corridor

Who: GNWT and Tłıcho Government

What: submit a wildlife management plan to the WRRB to establish a temporary no hunting corridor for boreal caribou

Where: along the road. The width to be determined by the GNWT-ENR, Tłįchǫ Government and WRRB

When: established prior to operations and in place until sustainable harvest levels in the North Slave region are determined



6-2

Temporary Non Hunting Corridor

Why is this measure necessary:

 to mitigate effects of increased non-Aboriginal hunting that will result from access due to the road

How will this measure mitigate effects:

 by limiting hunting, effects to boreal caribou will be reduced and effects to Aboriginal harvesting will be reduced



6-3 Caribou offset and restoration plan

(p185-186)

Who: developer and GNWT-ENR

What: habitat offset plan

When: prior to commencement of operations of the highway

Why is this measure necessary: to mitigate the effects to boreal caribou habitat caused by the road



6-3 Caribou offset and restoration plan

(p185-187)

How:

- prepare the plan in collaboration with the TG and WRRB and in consultation with ECCC, YKDFN, and NSMA
- offset the boreal caribou habitat disturbed by the highway
- consider restoring habitat, habitat offsets, forest fire fighting policies, habitat management approaches...
- make funding available to support consultation and collaboration

 Mackenzie Valley

Review Boa

Barren-ground caribou Chapter 7 (p188-207)



Why the Board finds significant adverse impacts to barren-ground caribou from Project likely p200-205

- 1. Designated as **threatened** by COSEWIC and SARC
- 2. TK tells us caribou occupy project area in winter
- Project extends time of year that harvesters can access winter range resulting in increased harvest
- 4. Range **planning incomplete** and does not mitigate project impacts
- Harvest monitoring and reporting required for herd recovery and sustainable harvest
- 6. Impacts are permanent and irreversible



Measures required to mitigate adverse impacts to barren-ground caribou p206

- primary measure is harvest monitoring and reporting in cultural well-being chapter (measure 9-1)
- 7-1 Incorporate Traditional Knowledge into monitoring
- 7-2 Complete Bathurst caribou range plan

These measures along with commitments described in the WMMP will mitigate project specific and cumulative impacts to barren-ground caribou so they are no longer significant

Review Boa

Measure 7-1 Incorporate TK into monitoring (p206)

Who: developer

Why measure is necessary:

- to improve and inform mitigation of impacts to barrenground caribou from increased access
- to ensure that funding is available

How mitigation addresses impacts:

- measure builds on commitment from developer andTłicho Government
- requires use of TK to monitor the state of winter habitat

When: prior to operations



7-1 Incorporate TK into caribou monitoring

What:

The developer will:

- a) support the Tłıcho Government in the design and implementation of a **program** that uses Tłıcho harvesters' traditional knowledge and methods to **monitor the state of barren-ground caribou (>ekwò) winter habitat**, during and after the construction of the Project
- b) fund implementation
- c) incorporate into WMMP or other relevant plans.

7-2 Barren-ground caribou mitigation and policy changes

Who: GNWT-ENR and Tłıcho Government

Why the measure is required:

- barren-ground caribou range plans are incomplete and do not mitigate project impacts.
- to manage significant impacts to barren-ground caribou resulting from the Project

What is required:

- complete barren-ground caribou range plan as soon as possible prior to expiry of WMMP
- consider protecting historic winter habitat when determining when and where fires are fought to protect effective habitat

 Mackenzie Valley Review Board

Fish and Water (Chapter 8 p208)



Why the Board finds significant adverse impacts to fisheries and harvesting from the Project likely (p208, pp228-234)

- 1. The highway will **increase access** to Lac La Martre and rivers and small lakes along the road.
- 2. Increased access is likely to result in **increased fishing**.
- 3. There is a **lack of data** on fish populations and harvesting in the area.



Why the Board finds significant adverse impacts to fisheries and harvesting from the Project likely (p208, pp228-234)

- 4. There is **uncertainty** related to the effectiveness and implementation of the developer's mitigations.
- 5. The developer has **no plans to monitor fisheries or harvesting**, and there are insufficient commitments from parties for monitoring and management.
- 6. Fishing is important to the T₁cho way of life and the people of Whatì.



Measure 8-1 Integrated Fisheries Management Plan

(p234-235)

Mackenzie Valley
Review Board

Measure 8-1 Integrated Fisheries Management Plan (p234-235)

What: develop and implement a plan for fisheries in the project area

Why: to prevent significant adverse impacts to fisheries and harvesting from additional fishing pressure as a result of increased access to the area

Who: Fisheries and Oceans Canada and T\(\)icho Government, with support of the developer



Measure 8-1 Integrated Fisheries Management Plan (p234-235)

What the plan will include:

- completing work to understand baseline fishery and harvest conditions (yield, harvest, management issues, fisheries objectives)
- designing and implementing:
 - mitigation for project impacts
 - monitoring plans
 - an adaptive management plan



Measure 8-1 Integrated Fisheries Management Plan (p234-235)

How the plan will be developed:

- engage with WRRB, community of Whatì and other affected Aboriginal groups
- provide opportunities for review and comment by the project working group and other interested parties

Review and approval of plan: plan will be for review by WRRB under section 12.5.1 of the Tlicho Agreement



Cultural well-being Chapter 9 (p237-274)



Why the Board finds significant adverse impacts to cultural well-being from Project likely (p261)

- Increased human use and increased disturbance of wildlife results in reduced harvester success
- Sustainable harvest levels unknown due to lack of baseline
- Uncertainty in predictions and mitigations because not all available TK was used
- Tłįcho language likely to further decrease
- Uncertain how P3 operator will implement commitments
- Road is permanent, impacts to cultural well-being ongoing for generations



Measures required to mitigate adverse impacts to cultural well-being p271

- 9-1 Harvest monitoring and reporting
- 9-2 Cultural sensitivity in work camps and communities
- 9-3 Include Traditional Knowledge from all relevant Aboriginal groups



9-1 Harvest monitoring and reporting (p)

Who: GNWT-ENR together with Tłıcho Government and Wek'èezhiı Renewable Resources Board

Why measure required:

- to mitigate project specific impacts and protect the sustainable harvest of wildlife by Aboriginal people
- to inform management of wildlife populations
- to reduce the impacts of direct mortality of wildlife from the project



9-1 Harvest monitoring and reporting (p272)

What is required: Development and implementation of a harvest monitoring and reporting program

The program will:

- focus on caribou and moose harvesting trends
- be a **community-based** collaboration
- use Traditional Knowledge
- report on harvesting numbers and trends

Use monitoring to inform wildlife management



9-2 Cultural sensitivity in work camps (p273)

Who: developer with assistance from the Tłıcho Government

Why mitigation is required:

- to mitigate impacts to T\(\frac{1}{2}\)cho culture and wellbeing of T\(\frac{1}{2}\)cho residents
- to address concerns that the independent P3
 contractor may not be familiar with communities
 and people in the Mackenzie Valley



9-2 Cultural sensitivity in work camps

What is required:

- the P3 operator will have a culturally sensitive place of employment with strict anti-harassment policies in camps and communities
- the P3 operator will have policies and programs in place for employee cultural orientation, developed by the T\(\text{lcho}\) Government



9-3 Include TK from all relevant Aboriginal groups

Who: the developer

Why: To mitigate impacts to culture and the developer will incorporate Traditional Knowledge into the project design and management from all Aboriginal groups that traditionally use the area.



9-3 Include TK from all relevant Aboriginal groups

What: The developer will:

- support the collection of Traditional Knowledge related to traditional use
- consider all TK made available, and, where applicable, incorporate into project design, mitigation, monitoring and adaptive management
- use TK in a culturally appropriate way that respects TK policies and protocols

GNWT and WRRB will the consider findings in the **WMMP** and in **permitting**



Species at risk and other wildlife

Chapter 10 (p275-296)



Why the Board finds significant adverse impacts to species at risk and migratory birds likely (p288)

- bird species at risk, migratory birds and their habitat predicted in project area
- adverse impacts to bird species at risk, including abandonment of nests, eggs and young from noise and disturbance, are predicted
- impacts ongoing because the road is permanent
- any adverse impact to a federally or territorially listed wildlife species at risk or its critical habitat is a significant impact

10-1 Bird species at risk and migratory birds (p293)

Who: developer

Why measure is required:

 pre-construction survey needed to determine presence of species at risk, mitigate effectively and monitor

How measure reduces significant impacts:

- addresses knowledge gaps
- increases confidence in mitigation
- verifies effectiveness of mitigation



10-1 Bird species at risk and migratory birds

What the measure requires:

- pre-construction survey for bird species at risk
- use survey information to inform and adjust mitigation
- monitoring and reporting
- adaptive management as described in WMMP and Appendix B of this Report



10-2 Wildlife Management and Monitoring Plan

Why measure is required:

- formalizes mitigation and commitments for wildlife in the WMMP
- ensures commitments and mitigations in the WMMP are implemented
- reduces uncertainty of the actions of P3 operator who may not have experience in Mackenzie Valley



10-2 Wildlife Management and Monitoring Plan

What the developer will do:

- update WMMP prior to permitting
- include Traditional Knowledge in ways to mitigate, monitor and adaptively manage wildlife

What GNWT-ENR will do:

- require annual review and reporting during construction and operations
- make publicly viewable



Permafrost (Chapter 11 p297)



Why the Board finds significant adverse impacts to permafrost from the Project likely (p297, pp300-302)

- 1. Permafrost considerations are **critical to safely and effectively constructing roads** in the north.
- 2. Climate change is expected to exacerbate permafrost thaw in the future.
- 3. The Project is in an area of discontinuous permafrost and yet the developer has not provided any site-specific permafrost data for the road corridor.



Measure 11-1 Permafrost Management Plan (p302)



Measure 11-1 Permafrost management plan (p302)

Why: to minimize permafrost degradation and prevent significant adverse impacts on the environment

Who: the developer

What: develop and implement a plan for permafrost management

When: prior to construction and ending prior to operations



Measure 11-1 Permafrost management plan (p302)

What the plan will include:

- monitoring and adaptive management
- incorporating recommendations from NRCan and the project working group

Review and approval of plan: it will be submitted to the WLWB for review and approval

After construction: any relevant information that arises will be incorporated into ongoing monitoring and adaptive management during operations



Adaptive management, follow-up and monitoring (Chapter 14 p313)



Summary of Review Board findings on adaptive management, follow-up and monitoring (pp313-318)

- All measures are necessary to prevent significant impacts.
- Monitoring and reporting are necessary to:
 - test EA predictions, assess effectiveness of mitigation and inform adaptive management; and,
 - to ensure the measures in the REA are effectively implemented and significant effects are avoided.
- Continued monitoring and participation by parties is essential, particularly because of the use of P3 operator.



Measure 14-1 Annual reporting from the developer (p320)



Measure 14-1 Annual reporting from the developer (p320)

Why: to demonstrate how measures are being implemented and evaluate the effectiveness of efforts to prevent or minimize impacts on the environment

Who: the developer

What: prepare an annual report on the implementation of measures (for measures the developer is responsible for)



Measure 14-1 Annual reporting from the developer (p320)

When: during all phases of the development (starting one year from the date of final approval of the REA)

What the report will include:

- describing actions (including adaptive management) being undertaken to implement measures
- evaluating effectiveness of implementation actions in reducing or avoiding the impact



Measure 14-2 Annual reporting from government and regulatory authorities (pp321-322)



Measure 14-2 Annual reporting from government and regulatory authorities (pp321-322)

Why: to help evaluate the effectiveness of mitigation for the protection of the environment

Who: each regulatory authority or government that is wholly or partly responsible for implementation of any measure

What: prepare an annual report on the implementation of measures (only for implementation actions taken by the government or regulatory authority, not the developer)



Measure 14-2 Annual reporting from government and regulatory authorities (pp321-322)

When: during all phases of the development (starting one year from the date of final approval of the REA)

What the report will include:

- describing actions undertaken to implement the measures or part of the measure the government of regulatory authority is responsible for
- explaining how the actions, including adaptive management actions, fulfill the intent of the measures



Measure 14-3 Project working group (pp322-323)



Measure 14-3 Project working group (p322-323)

Why: to help the developer improve the monitoring, mitigation and adaptive management of project impacts

Who: the developer

What: establish the Tłıcho All-Season Road Corridor Working Group

When: throughout construction and five years of operations (unless an extended term is agreed to by parties)



Measure 14-3 Project working group (p322-323)

What the developer will do:

- fund the TG, WRRB, YKDFN and NSMA to participate in twice annual meetings (one of which will be in Whati)
- require participation of the P3 operator
- invite Tłıcho Elders to participate
- make meeting minutes public



Measure 14-4 P3 operator agreement (pp323-324)



Measure 14-4 P3 operator agreement (p323)

Why: to ensure all commitments and measures are carried out

Who: the developer

What: include all relevant commitments/measures (for construction and operations) in the final contract with the P3 operator

