



# Mackenzie Valley Highway Project

## Mitigating Effects of the Project on the Environment

November 2022



Government of  
Northwest Territories

# Agenda

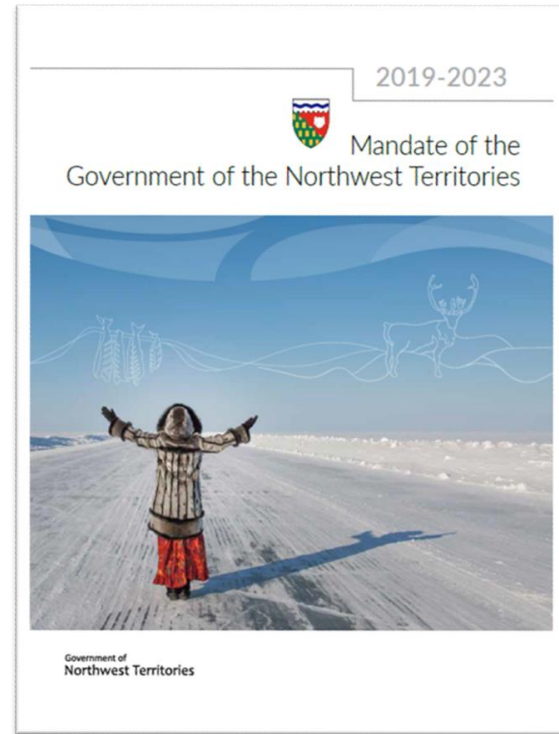
- Mackenzie Valley Highway Project Update
- What We Heard So Far
- Mitigating the Effects of the Project on the Environment
- Capacity Building Projects Update
- Next Steps



# GNWT Strategic Initiatives

*“These projects will provide the foundational infrastructure to support an improved quality of life and lower cost of living for NWT residents, as well as support the expansion and diversification of the economy.”*

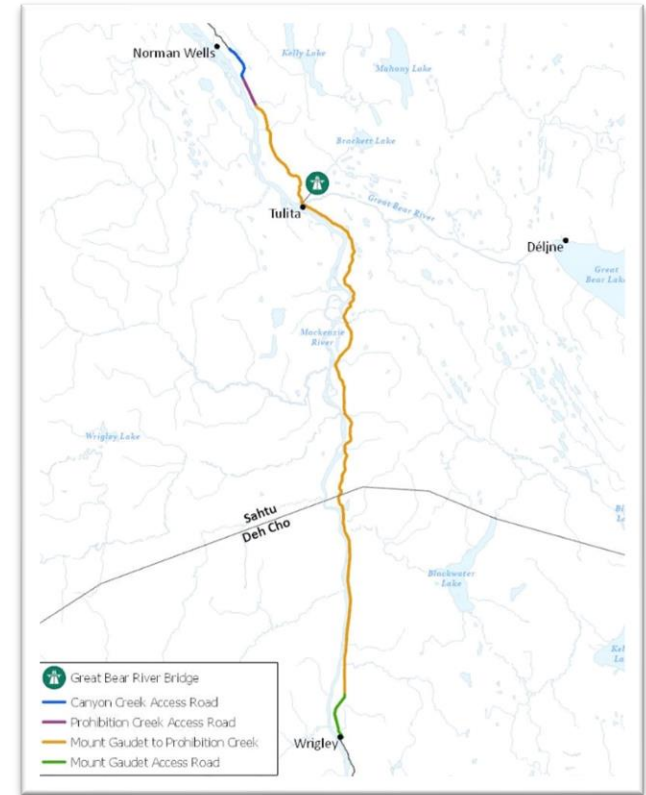
- **Mackenzie Valley Highway**
- Slave Geological Province Corridor
- Taltson Hydro Expansion





# Mackenzie Valley Highway at a Glance

- All-season road between Wrigley and Norman Wells (~321 km)
- Mackenzie Valley Highway Environmental Assessment
  - Developer's Assessment Report
  - Environmental and Engineering Studies
  - Archaeological Studies
  - Wildlife Related Studies
  - Traditional Knowledge Studies
  - Socio-Economic Impact Assessment



# November Engagement – What We Heard

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There is general support to construct an all-season road.

Feedback during our most recent engagement activities included discussion around the following themes:

- Fish & Wildlife
- Cultural Protection
- Quarries & Borrow Sources
- Socio-economic Considerations



# November Engagement – What We Heard

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## Theme 1: Fish & Wildlife

- We heard more about habitat and species of importance

## Theme 2: Cultural Protection

- We heard about the importance of cultural areas



# Engagement – What We Heard

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## Theme 3: Quarries & Borrow Sources

- We heard about potential borrow sources and quarry sites for Project construction

## Theme 4: Socio-economic Considerations

- We heard a lot about community readiness and opportunities that the Project will bring



# Mitigations and Monitoring

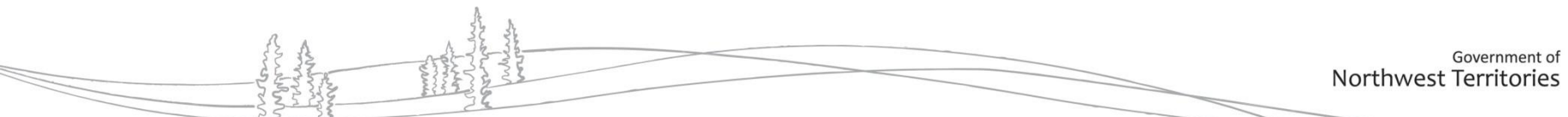
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**Mitigations:** Actions GNWT will take to reduce the effects of the Project on the environment

**Monitoring:** Data and observations collected to improve or verify effects predictions and to make sure mitigations are working

**Today we will discuss these for:**

- Land and special places
- Caribou and Moose
- Fish and water resources





# Mitigations – Reducing Effects of the Project on the Environment

Mitigations, monitoring and responsibilities are detailed in the following key Environmental Management Plans

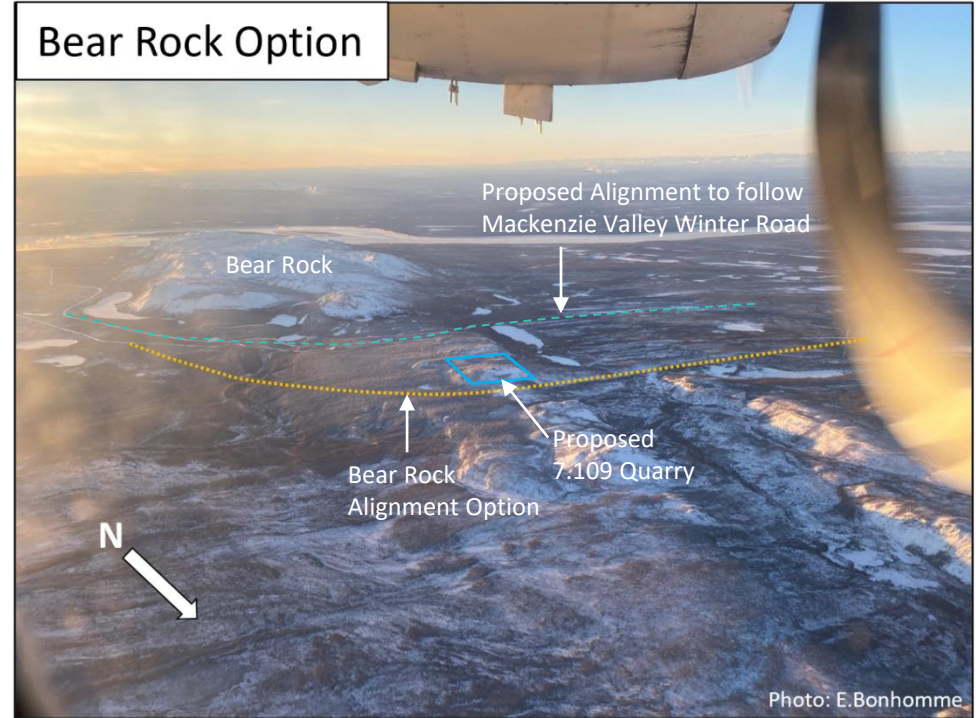
- Wildlife Management and Monitoring Plan (Tier 2)
- Erosion and Sedimentation Control Plan
- Permafrost Protection Plan
- Quarry Operations Plans (for each site)
- Waste Management Plan
- Spill Contingency Plan
- Heritage and Sites Protection Plan
- Follow-up and Compliance Monitoring Plan



# Mitigating Effects to Special Places – Bear Rock

## Project Options North of Bear Rock

- Goal: to reduce disturbance near Bear Rock
- Highway alignment option approximately 2 km to the north
- Material source options:
  - Road cut
  - New quarry close to alignment



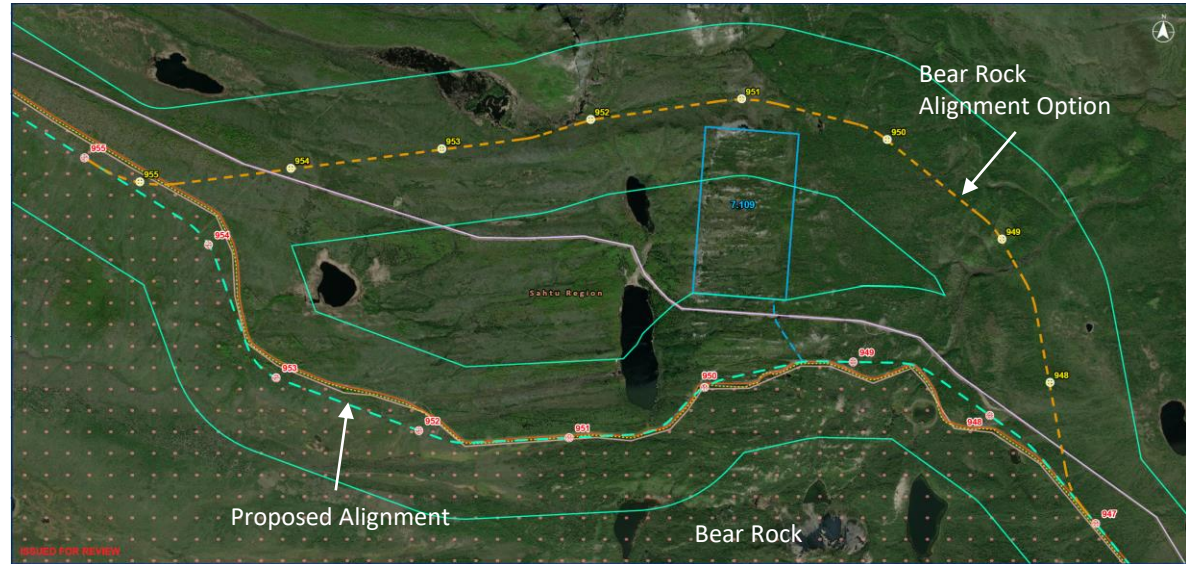
# Mitigating Effects to Special Places - Bear Rock

## Proposed Highway Alignment

- Reduces new disturbance
- Road cut provides material for 13 km of highway\*
- Requires development of new 7.109 quarry

## Alternate Highway Alignment

- 2 km further from Bear Rock
- Road cut provides material for 23 km of highway\*
- New quarry may not be needed



\* At 6% design grade; quantities approximate

# Mitigating the Effects on Caribou and Moose

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## **Changes to Habitat, Movements, Mortality Risk and Health**

- Follow the Mackenzie Valley winter road and limit areas of new clearing as much as possible
- Close and reclaim areas after use
- Apply dust control
- Reduce project vehicle and equipment speeds
- Reduce noise
- Reduce activities when caribou or moose are nearby
- Store fuel and equipment away from water
- Follow measures in the Wildlife Management and Monitoring Plan and Spill Contingency Plan
- Maintain current tag system for harvesting
- Stop blasting when calving caribou or moose are nearby



# Monitoring the Effects on Caribou and Moose

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- Confirm location of important habitat features prior to construction (such as mineral licks)
- Employ Wildlife Monitors during construction
- GNWT-ENR and resource managers will continue doing moose and caribou surveys
- Collect data on wildlife collisions
- Continue harvest reporting (ENR and co-management organizations)
- Wildlife health will continue to be monitored through local initiatives and specimens from hunters



# Mitigating the Effects on Land Use and Harvesting

## Changes to availability of traditional resources, access to resources, changes to sites and harvesting

- Follow the Mackenzie Valley winter road and limit areas of new clearing as much as possible
- No hunting by Project employees
- Restrict access on Project roads during construction
- Maintain access to cultural use sites
- Avoid existing cabins
- Notify Indigenous governments of project activities and schedule
- Avoid areas of important plants if possible
- Protect archaeological and cultural sites



# Monitoring Effects to Land Use and Harvesting

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- Feedback from Indigenous Governments and Indigenous organizations during ongoing engagement throughout the Project
- Continue harvest reporting (ENR and co-management organizations)



# Mitigating the Effects on Fish and Water Resources

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## Changes to water quality and quantity and fish

- Use erosion and dust control measures
- Preserve riparian vegetation where possible
- Design culverts to maintain flow and fish habitat
- Adhere to Fisheries and Oceans Canada's codes of practice for water withdrawal and beaver dam removal
- Store fuel and equipment away from water
- Avoid excavating in areas with high water table
- Locate pullouts away from creeks with sport fish
- No fishing by Project employees



# Monitoring the Effects on Fish and Water Resources

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- Water quality monitoring during culvert installation
- Regular culvert inspections
- Erosion and sedimentation monitoring
- Observe runoff and drainage patterns
- Bathymetry surveys and streamflow monitoring at water sources
- Need for fish harvest monitoring will be reviewed with regulators and co-management boards

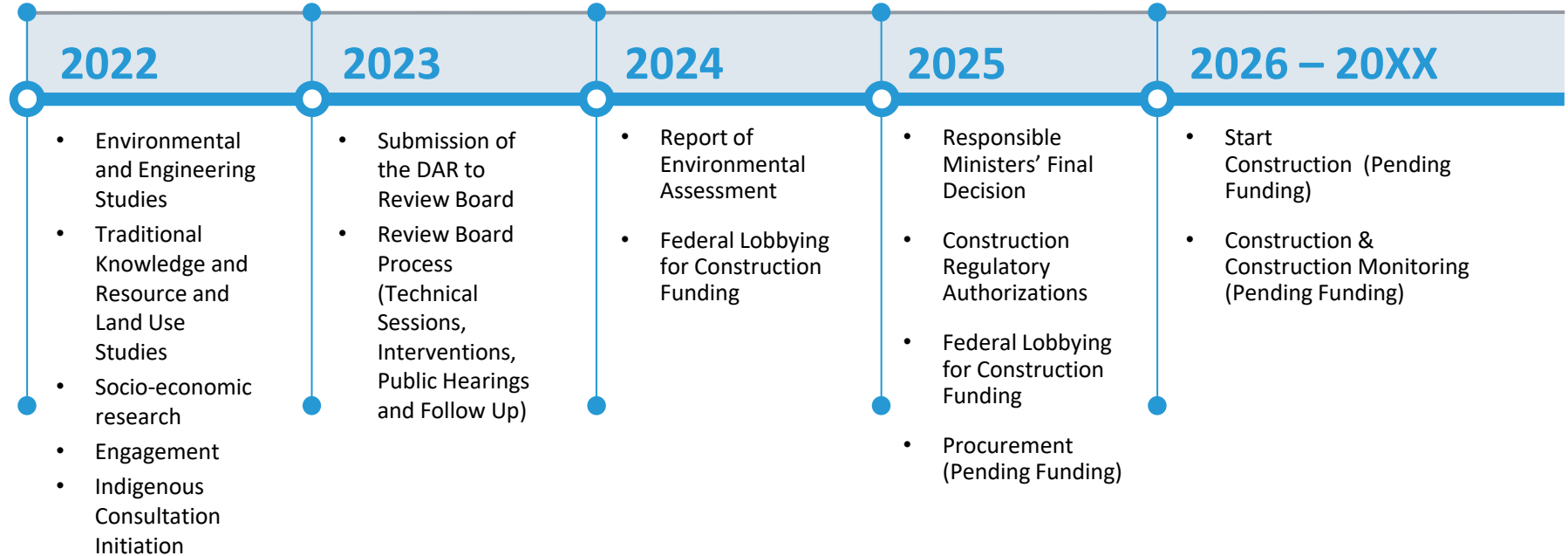
# Update on capacity-building Projects related to the Project

Four projects to provide training, contracting, and employment opportunities to the local communities.

- Canyon Creek All Season Access Road
- Prohibition Creek Access Road
- Great Bear River Bridge
- Mount Gaudet Access Road



# Mackenzie Valley Highway Timelines



# Questions?

Email: [MVH@gov.nt.ca](mailto:MVH@gov.nt.ca)

Project Website: [www.inf.gov.nt.ca/en/MVH](http://www.inf.gov.nt.ca/en/MVH)

Have Your Say: <https://haveyoursay/nwt-tno-ca/Mackenzie-valley-highway-project>

