



Mackenzie Valley Highway Project

Developer's Assessment Report Overview – Dehcho and Sahtu

February 1-8, 2024



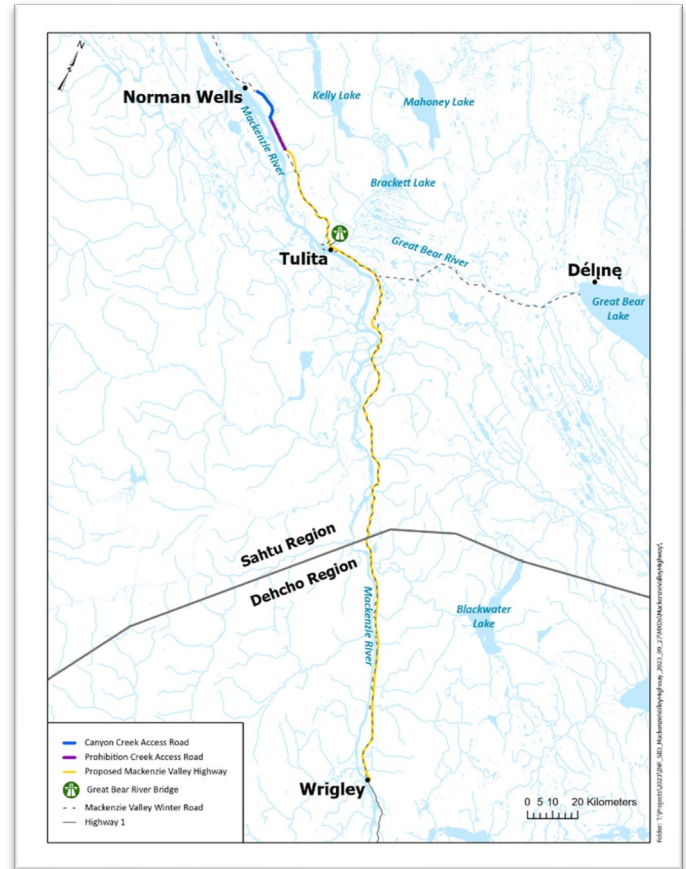
Presentation Outline

- Project Overview
- Overview of the Developer's Assessment Report (DAR)
- Notable Findings of the Assessment
- GNWT's Commitments
- Questions



Project Overview

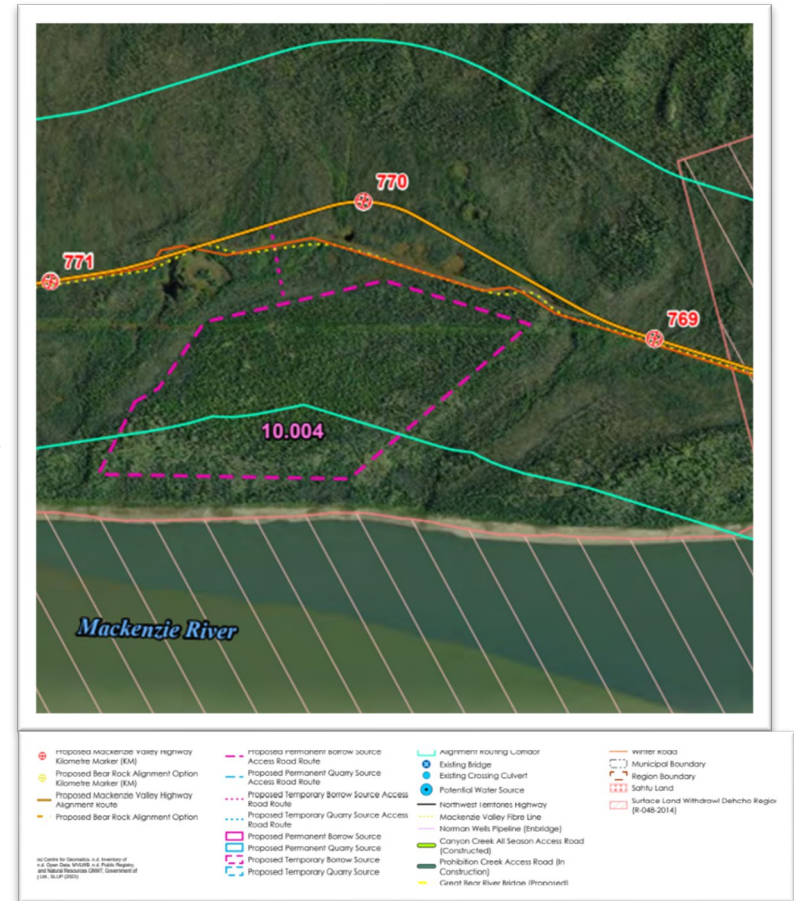
- All-season gravel road from Wrigley, to Tulita and Norman Wells
- Replaces the seasonal Mackenzie Valley Winter Road (MVWR) along this portion
- Connects to 23 existing bridges along the MVWR
- New watercourse crossing structures needed
- Temporary and permanent quarries and borrow sources
- Temporary infrastructure, workspaces and activities to support construction
- Permanent maintenance yards
- Highway operations and maintenance



Project Overview

- Highway route mostly follows the MVWR
- Factors considered:
 - Safety
 - Sensitive terrain and wetlands
 - Engineering and environmental standards and best practices
 - Engagement input
 - Traditional Knowledge
- Currently, the route is within a 1 km wide alignment routing corridor
- Project mapbook 1:20,000 in Appendix 5A

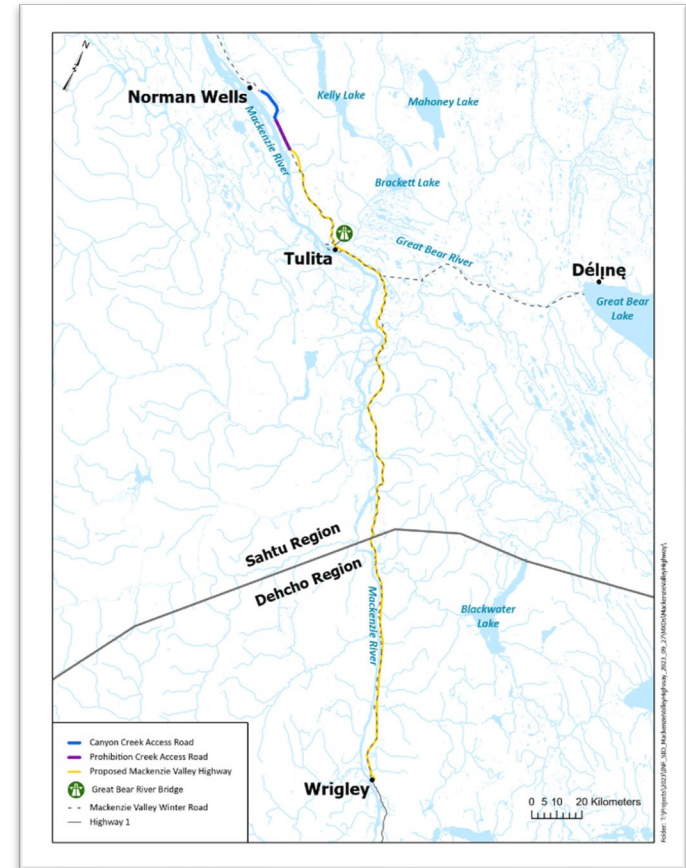
(DAR Ch.5)



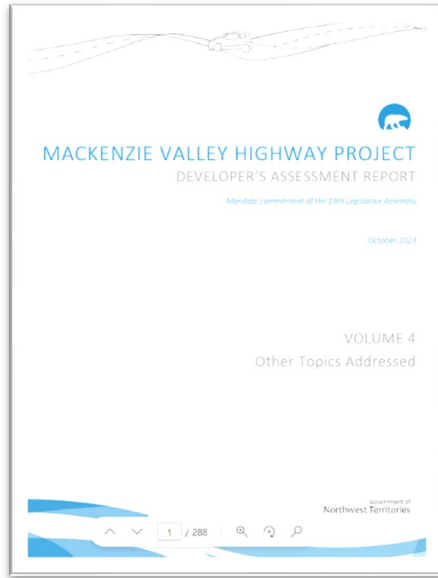
Project Schedule

- 10 years to build over a 20 year period
- 3 construction segments
- Segments will open to public use once each is built
- MVWR will remain open while construction is underway
- Highway to be operated & maintained by GNWT-Infrastructure

(DAR Ch.5)



Developer's Assessment Report (DAR)

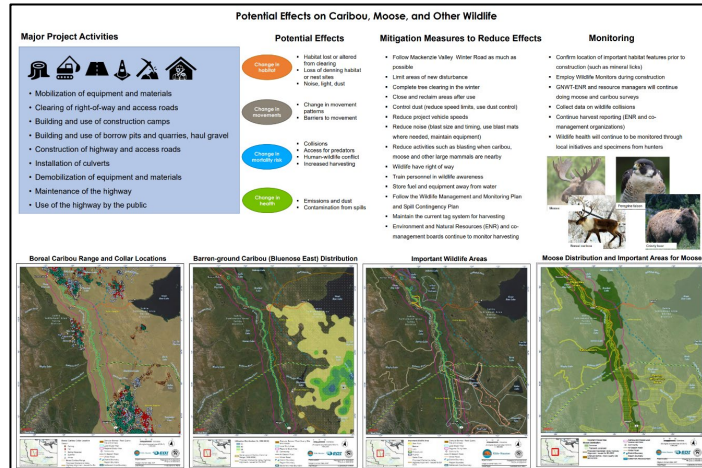


- Presents detailed information required by the Mackenzie Valley Environmental Impact Review Board
- Predicts the residual effects of the Project on the environment by:
 - Identifying potential interactions between the Project and the environment that could lead to changes (potential effects)
 - Applying mitigation measures to reduce potential adverse effects
 - Predicting the effects on the environment after mitigation actions are taken (residual effects)
- Summarized in Non-technical Summary

Developer's Assessment Report (DAR)

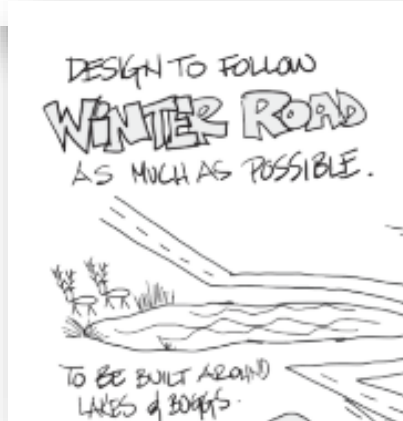
To help with the assessment, GNWT:

- Completed engagements with Indigenous Governments, Indigenous Organizations and other affected parties
- Conducted interviews and focus groups
- Completed field studies (birds, fish and fish habitat, water flow, archaeology)
- Reviewed geotechnical information
- Analyzed caribou and moose survey and collar data



Engagement Poster Example

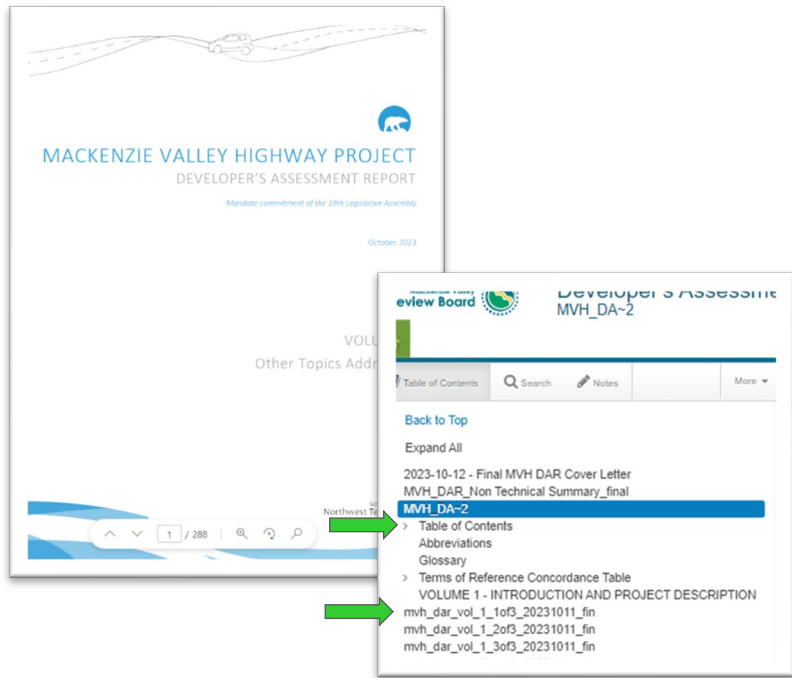
Engagement and Traditional Knowledge



- 2010-2012 - Project Description Reports
- 2018-2020 - Project Updates
- 2021-2023 – Developer’s Assessment Report
 - Project description and construction activities
 - Potential project interactions and effects
 - Mitigation and monitoring
- Traditional Knowledge Studies:
 - Tulita Renewable Resources Council
 - Norman Wells Renewable Resources Council

(DAR Ch. 2, Ch.3)

DAR Organization



- Front Matter
- Volume 1: Introduction and Project Description
- Volume 2: Key Lines of Inquiry
- Volume 3: Subjects of Note
- Volume 4: Other Topics Addressed
- Volume 5: Draft Management Plans
- Technical Data Reports as Appendices in Vols. 2, 3, and 4

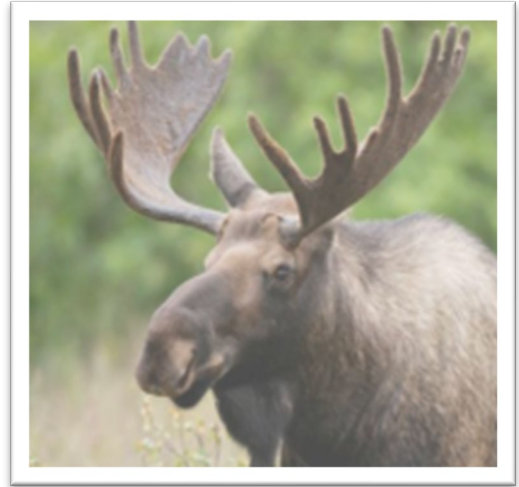
DAR Volume 1: Introduction and Project Description

- Chapter 1: Introduction to the Assessment
- Chapter 2: Consultation and Engagement
- Chapter 3: Traditional Knowledge
- Chapter 4: Assessment Approach and Methods
- Chapter 5: Detailed Project Description
- Chapter 6: Authorizations, Approvals, and Agreements
- Chapter 7: Assessment of Alternatives



DAR Volume 2: Key Lines of Inquiry

- Chapter 8: Summary of KLOI
- Chapter 9: Socio-economic Impact Assessment:
 - Human Health and Community Wellness
 - Education, Training and Skills
 - Employment and Economy
 - Infrastructure, Services and Institutional Capacity
 - Non-traditional Land and Resource Use
- Chapter 10: Caribou and Moose
- Chapter 11: Culture and Traditional Land Use, Including Harvesting



DAR Volume 3: Subjects of Note

- Chapters 12-22: assessment of potential effects on:

12. Air Quality

13. Noise

14. Terrain, Soils and Permafrost

15. Water Quantity

16. Water and Sediment Quality

17. Fish and Fish Habitat

18. Vegetation and Wetlands

19. Wildlife and Wildlife Habitat

20. Birds and Bird Habitat

21. Biodiversity

22. Heritage Resources



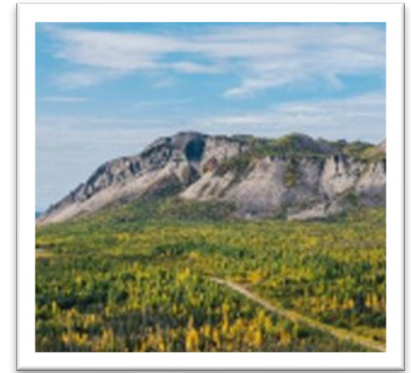
DAR Volume 4: Other Topics

- Chapter 23: Compliance and Effects Monitoring
- Chapter 24: Effects of the Environment on the Project
- Chapter 25: Accidents and Malfunctions
- Chapter 26: Cumulative Effects Assessment Summary
- Chapter 27: Developer's Commitments



DAR Volume 5: Management Plans

- Emergency Response Plan Framework
- Fish and Fish Habitat Protection Plan
- Heritage and Sites Protection Plan
- Spill Contingency Plan
- Waste Management Plan
- Erosion and Sedimentation Control Plan
- Quarry Development Plan Framework
- Wildlife Management and Monitoring Plan
- Permafrost Protection Plan



Notable Findings of the Assessment

- Most residual effects are predicted to be not significant
- Many positive socio-economic effects
- Some residual effects are predicted to be significant.
- New and ongoing collaborative monitoring and management of these effects will be required.



Notable Findings of the Assessment

- People want to be prepared for the Project
- Most socio-economic effects are not significant when mitigation measures are applied
- A Community Readiness Strategy is proposed to mitigate adverse effects and enhance positive effects
- Increased drug and alcohol availability will affect social pressures (significant)
- The Project will affect public safety within communities and will increase potential for injury from traffic accidents (significant)



Notable Findings of the Assessment

- Mitigation measures are expected to be effective at preventing significant effects to air quality, noise, soils and permafrost, vegetation, most wildlife, birds and water.
- The Project will reduce boreal caribou habitat, and the amount of existing disturbance is already significant.
- The Project will improve access to harvesting and traditional land use areas.
- The Project will make it easier to harvest fish and may lead to overfishing (conservatively significant)



GNWT's Commitments

GNWT's commitments are in Chapter 27. These include:

- Project design commitments
- Mitigation measures – biophysical and cultural environment
- Socio-economic mitigation and monitoring measures
- Compliance and effects monitoring
- Engagement and enhancement commitments



Questions?

Email: MVH@gov.nt.ca

Project Website: www.inf.gov.nt.ca/en/MVH