Northwest Territories
Territoires du Nord-Ouest

What We Heard Report Rapport sur ce que nous avons entendu

Mackenzie Valley Highway Engagement Summary
Sommaire des échanges sur la route de la vallée du Mackenzie

Project Description and Construction Activities | Description du projet et travaux de construction

SEPTEMBER 2023 | SEPTEMBRE 2023

Le présent document contient la traduction française du sommaire.



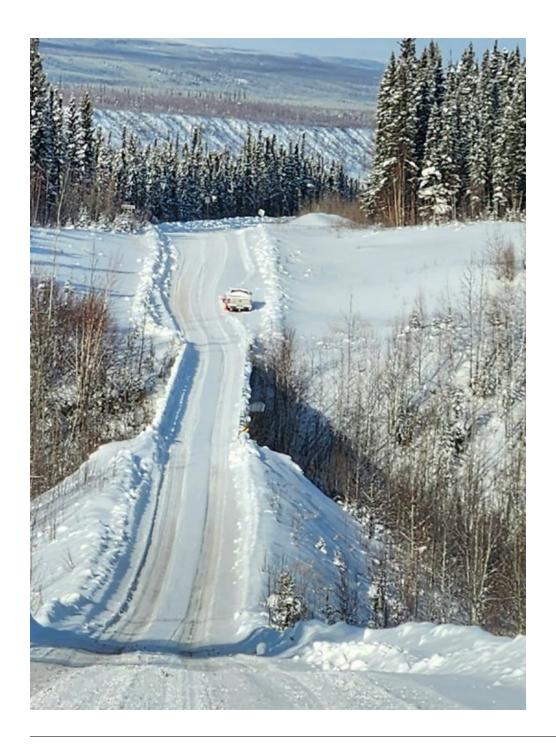


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Tłįcho yatı k'èè. Dı wegodı newo dè, gots'o gonede. Tłįcho
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ABBREVIATIONS

Abbreviation	Description
DAR	Developer's Assessment Report
GNWT	Government of the Northwest Territories
km	kilometers
NT	Northwest Territories
the Project	Mackenzie Valley Highway Project
the Review Board	Mackenzie Valley Environmental Impact
	Review Board

Executive Summary

The Government of the Northwest Territories (GNWT) Department of Infrastructure conducted engagement on the Mackenzie Valley Highway Project description and construction activities between March and July 2022. This was done in support of the Environmental Assessment and Planning of Mackenzie Valley Highway Project (the Project), which seeks to construct a two-lane all-season gravel highway from Wrigley to Norman Wells, Northwest Territories (NT).

To gather input, the GNWT invited Indigenous Governments, Indigenous Organizations, and other affected parties, including community members in the Dehcho and Sahtu regions, and residents of the Northwest Territories, to engage on the Project Description and construction activities, and share their interests and concerns on the Project. Engagement occurred through one-on-one meetings with the Project team, six virtual public workshops, an interactive map, the GNWT *Have Your Say* engagement webpage, and by email. In total, 563 participants contributed feedback through in-person or online engagement activities.



Engagement findings included the following:

- There is general support to construct an all-season road.
- The existing Mackenzie Valley Winter Road alignment has a number of safety concerns. For safety purposes, road design and bridge approaches on the all-season Mackenzie Valley Highway should be cut straight, wide, and not steep.
- Permafrost thawing, erosion, and landslides are a concern in some areas along the existing Mackenzie Valley Winter Road and the proposed highway location. In areas of concern, participants recommend re-routing the proposed highway and working with community Elders to determine where the highway should go.
- Similar concerns on permafrost thawing were raised regarding quarries, borrow sources, and access roads. Participants recommended that quarries and borrow sources should not be constructed on the west side of the highway alignment due to slumping concerns along the banks of the Mackenzie River.
- Ice and overflow are a concern at specific locations. Participants
 recommend avoiding areas with frequent ice and water overflow
 and road washouts such as Hodgson's Creek, Blackwater River
 north bank, Steep Creek, and Strawberry Creek. Placing culverts at
 regular intervals to facilitate water and fish movement is strongly
 supported.
- Protection of caribou, fish, moose, other fur-bearing animals, and their respective habitats are a priority for community members.
 Participants recommend re-routing at a number of locations to protect habitat from environmental disturbance and create larger distances from the highway to deter poaching.

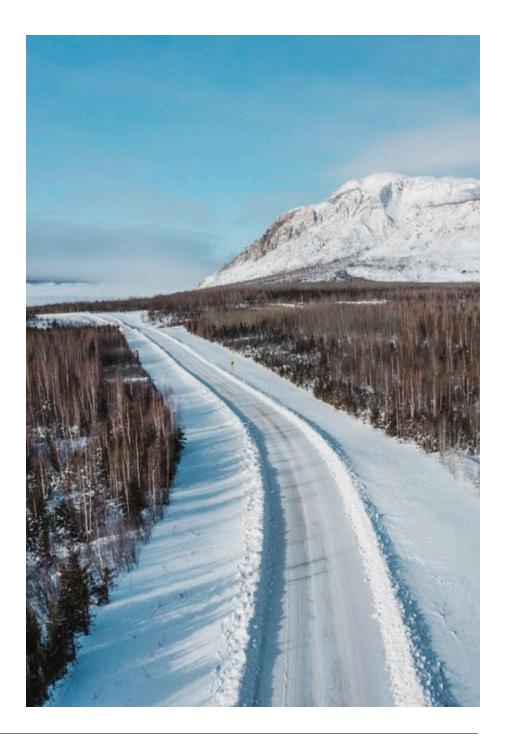
- It is a priority to protect culturally important areas such as Bear Rock, known burial sites, and cabins, and to keep access to the Mackenzie Valley Winter Road available for traditional hunters and harvesters.
- It is important to the affected communities that they have input on the selection of work camp locations. Concerns were shared about the capacity of municipal facilities and potential environmental impacts from the use of lagoons and burying waste.
- There are socio-economic concerns regarding construction of the highway and camps. The main concerns included safety, substance abuse, competition for country food, competition at the grocery stores, and economic and employment benefits for local community members. Concern was expressed whether there are adequate emergency response services for construction and also once the allseason highway is open.
- Lessons learned from other northern road projects such as the Tłıcho All-Season Road and the Inuvik to Tuktoyaktuk Highway should be incorporated into the Mackenzie Valley Highway.

Feedback received during engagement on the Project Description and construction activities will be considered alongside Traditional Knowledge and technical studies during project planning and design. Feedback will be integrated, where appropriate, in the Project Description and assessment of impacts to the environment in the Developer's Assessment Report (DAR).

Sommaire

De mars à juillet 2022, le ministère de l'Infrastructure du gouvernement des Territoires du Nord-Ouest (GTNO) a mené des échanges à propos de la description et des travaux de construction du Projet de route de la vallée du Mackenzie, qui vise à construire une route toutes saisons de gravier à deux voies entre Wrigley et Norman Wells, aux Territoires du Nord-Ouest (TNO). Ces échanges ont été organisés pour appuyer l'évaluation et la planification environnementales du projet.

Pour recueillir des commentaires, le GTNO a invité les gouvernements et les organisations autochtones, les parties concernées, notamment les résidents des régions du Dehcho et du Sahtú, ainsi que les résidents de l'ensemble des TNO à s'exprimer sur la description et les travaux de construction du projet, et à faire part de leurs attentes et de leurs préoccupations. Voici les moyens utilisés par l'équipe du projet pour recueillir les observations des participants : des réunions individuelles, six ateliers publics virtuels, une carte interactive, le portail « Exprimezvous! » du GTNO et des courriels. Au total, 563 participants ont livré leurs commentaires lors d'échanges en personne ou en ligne.



Voici certains commentaires recueillis :

- La construction d'une route toutes saisons bénéficie d'un soutien général.
- Le tracé actuel de la route d'hiver de la vallée du Mackenzie pose un certain nombre de problèmes de sécurité. Par mesure de sécurité, la route toutes saisons de la vallée du Mackenzie et les voies d'accès à ses ponts doivent être linéaires, larges et peu escarpées.
- Le dégel du pergélisol, l'érosion et les glissements de terrain sont une source de préoccupation dans certaines zones le long de l'actuelle route d'hiver de la vallée du Mackenzie et près de l'emplacement de la route proposée. Dans les zones concernées, les participants recommandent de modifier le tracé de la route proposée en collaboration avec les aînés de la collectivité.
- Des préoccupations similaires concernant le dégel du pergélisol ont été exprimées au sujet des carrières, des sites d'emprunt et des routes d'accès. Certains participants recommandent de ne pas construire de carrières ni de sites d'emprunt à l'ouest du tracé de la route en raison d'inquiétudes quant à des glissements de terrain le long des berges du fleuve Mackenzie.
- La formation de glace et les débordements sont préoccupants à certains endroits. Les participants recommandent d'éviter les zones où la formation de glace et les débordements sont fréquents et où les routes pourraient être emportées, comme le long des ruisseaux Hodgson, Steep et Strawberry ainsi que de la rive nord de la rivière Blackwater. La mise en place de ponceaux à intervalles réguliers pour faciliter la circulation de l'eau et des poissons est fortement encouragée.

- La protection du caribou, du poisson, de l'orignal, d'autres animaux à fourrure et de leurs habitats respectifs est une priorité pour les résidents de la région. Les participants recommandent de modifier le tracé à plusieurs endroits et d'éloigner la route de certaines zones pour protéger les habitats des perturbations environnementales et pour décourager le braconnage.
- Il est primordial de protéger les zones importantes sur le plan culturel (comme Bear Rock et les lieux de sépulture connus) et les cabanes, et de s'assurer que les chasseurs et les exploitants traditionnels continuent à avoir accès à la route d'hiver de la vallée du Mackenzie.
- Il est important que les résidents des collectivités concernées aient leur mot à dire sur le choix des emplacements des campements de travailleurs. Des inquiétudes ont été exprimées concernant la capacité des installations municipales et les répercussions sur l'environnement que pourraient avoir l'utilisation de bassins de lagunage et l'enfouissement des déchets.
- La construction de la route et des campements suscite des préoccupations socio-économiques. Les principales inquiétudes concernent la sécurité, la consommation de substances psychoactives, la concurrence aux dépens des aliments traditionnels, la concurrence dans les épiceries et les retombées liées à l'économie et à l'emploi pour les résidents de la région. Des inquiétudes ont été exprimées quant à la prestation adéquate de services d'intervention d'urgence pendant la construction de la route et une fois que celle-ci sera ouverte.

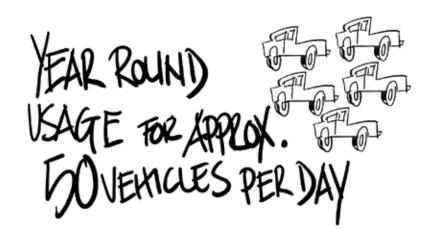
• Les connaissances acquises lors de la réalisation d'autres projets routiers dans le Nord, comme ceux de la route toutes saisons de la région des Tłլchǫ et de la route Inuvik-Tuktoyaktuk, devraient être intégrées au Projet de route de la vallée du Mackenzie.

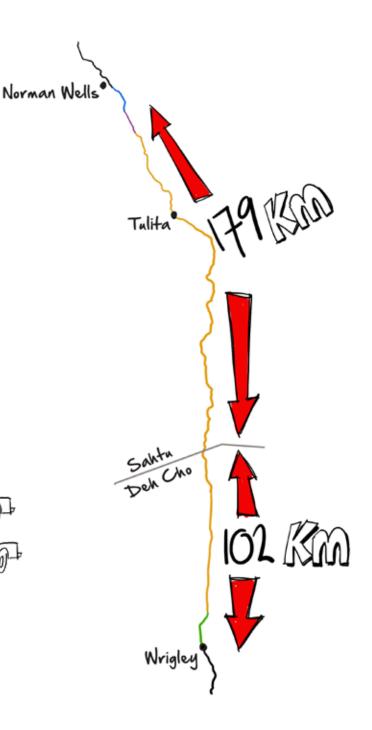
Les commentaires reçus au cours de ces échanges concernant la description du projet et les travaux de construction seront pris en compte au même titre que les connaissances traditionnelles et les études techniques durant la planification et la conception du projet. Les commentaires seront intégrés, le cas échéant, dans la description du projet, et l'évaluation des répercussions du projet sur l'environnement figureront dans le rapport d'évaluation du promoteur.



Project Overview

The Government of the Northwest Territories (GNWT) Department of Infrastructure is advancing the Environmental Assessment and Planning of the Mackenzie Valley Highway Project (the Project). The proposed Mackenzie Valley Highway will be a two-lane all-season gravel highway from Wrigley to Norman Wells, Northwest Territories (NT), with approximately 102 km located in the Dehcho Region and 179 km in the Sahtu Region. The Project is intended to replace the existing Mackenzie Valley Winter Road and will mostly follow the current route, with some realignment. The highway will connect with existing bridges on the Mackenzie Valley Winter Road and new culverts will be required at some watercourse crossings.

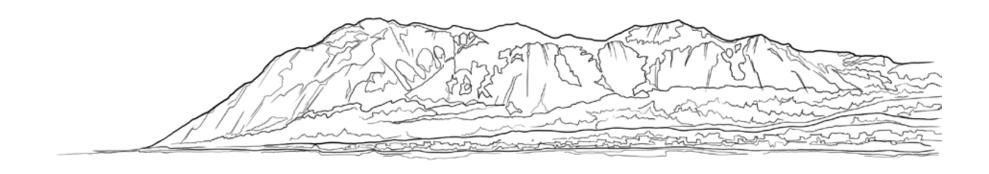




Currently, the Project is undergoing an Environmental Assessment by the Mackenzie Valley Environmental Impact Review Board (the Review Board). The GNWT is preparing a Developer's Assessment Report (DAR) which presents the assessment of the Project's effects on the biophysical and socio-economic environment. The DAR is developed according to the Review Board's Terms of Reference and will be submitted to the Review Board as part of the Environmental Assessment process.

Between 2018 and 2020 the GNWT visited the Sahtu and Dehcho communities to share early project information and provide updates on the environmental planning work. Engagement activities for the DAR were initiated in the summer of 2021. The GNWT team visited the Sahtu communities in August 2021, provided an update on the project planning, and heard initial concerns and interests about the Project.

Engagement activities were paused during the fall of 2021 due to an upsurge of COVID-19 cases in the territory. In March of 2022, engagement activities on the DAR were re-initiated in the Sahtu and the Dehcho. At the request of Pehdzéh Kį First Nation leadership, the GNWT did not engage with community organizations or community members in Wrigley at that time. Since then, the GNWT has continued dialogue with Pehdzéh Kį First Nation leadership on approaches to facilitate a meaningful and agreeable path forward for Pehdzéh Kį First Nation's participation, and remains committed to engaging with Pehdzéh Kį First Nation and Wrigley about the Project.





Engagement Overview

The Mackenzie Valley Highway Environmental Assessment will assess how people, communities, and the environment may be impacted by constructing an all-season highway. To collect input for the assessment, the GNWT engaged communities on the Project Description including the proposed road location, locations of quarries and borrow sources, construction activities (clearing, construction camps, laydown areas, water use and waste management), and any other public concerns or interests.

During engagement activities the Project team received feedback from 563 participants. For details on engagement activities, advertising and communications, please reference the Engagement Approach section on page 28.

Feedback shared through engagement activities will be considered alongside Traditional Knowledge studies, biophysical studies, and socio-economic research to inform the design of the Mackenzie Valley Highway, as well as the DAR. The DAR will summarize the proposed development, examine potential effects to the environment, and propose ways to reduce these effects.

Further engagement activities will be conducted prior to the submission of the DAR to the Review Board to share and explain assessment findings in the DAR and seek further input on mitigation measures to reduce or avoid potential Project effects.

What We Heard

Engagement on the Project description and construction activities focused on sharing the Project Description and explaining the proposed locations and construction activities required for the Project. A copy of the presentation is included in Appendix A.

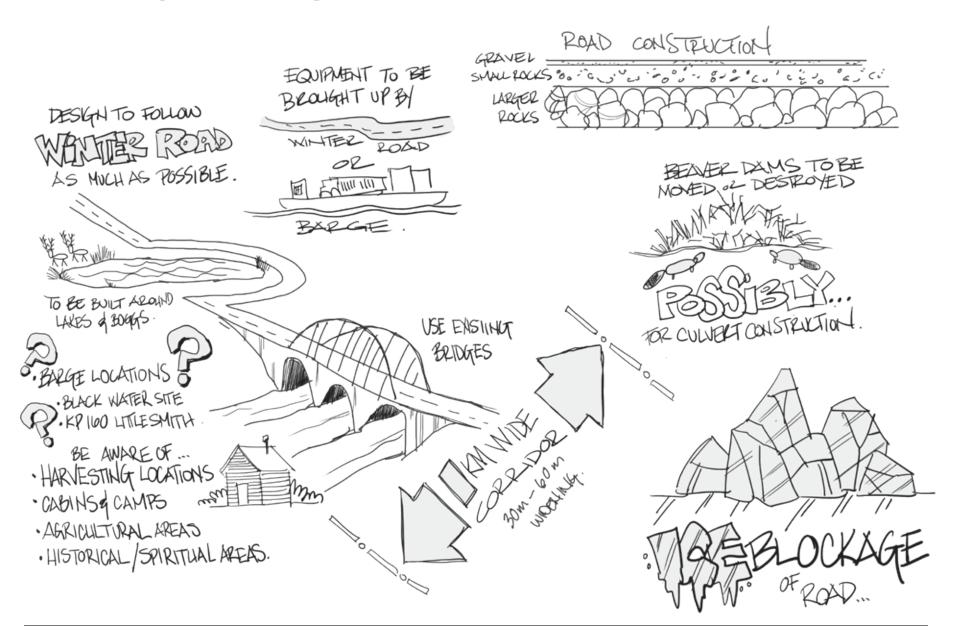
The following sections provide a summary of what the Project team heard throughout the engagement period. Feedback received has been organized by the following topics:

- Proposed Project right-of-way, alignment, road location and design, and culverts and drainage
- Quarries, borrow sources, and access roads
- Camps, laydown areas, water use, waste management, maintenance yards, and reclamation after construction
- Public concerns and interests

Details on the approach to engagement and descriptions of the activities are contained in the Engagement Approach section.



Proposed Project Right-of-Way, Alignment, Road Location and Design, Drainage and Culverts



PROPOSED PROJECT RIGHT-OF-WAY, ALIGNMENT, ROAD LOCATION AND DESIGN, DRAINAGE AND CULVERTS

Discussion on the proposed right-of-way brought up many stories and experiences regarding the existing Mackenzie Valley Winter Road. Participants shared that the current Mackenzie Valley Winter Road is narrow, winding, and has steep inclines with minimal signage and limited visibility of oncoming traffic. Participants reported preference for driving at night when they could see headlights to help improve safety where there is poor visibility due to snowbanks and s-turns. Participants stated the existing Mackenzie Valley Winter Road alignment is not ideal, siting the following safety concerns, maintenance issues, drainage and geotechnical observations:

- The area around Gibson's Gap¹ has rough driving conditions
 - o There are deep ruts from Gibson's Gap to Bear Rock
 - There are three overflow areas between Gibson's Gap to Norman Wells
- Bob's Canyon is dangerous as it is a steep escarpment, very narrow, and hard to identify vehicles coming in the other direction
- The area north of Old Fort Point has uneven terrain
- There are issues with run off south of Jungle Ridge Creek Bridge

- There is a dangerous section of steep road with a blind corner on Bear Rock
- Old Jackfish Lake Road has continuous overflow problems
- The area near Blackwater River currently experiences landslides and erosion up to 1 km from the riverbank

Areas identified as having significant and dangerous ice buildup on the Mackenzie Valley Winter Road:

- Big Smith Creek
- Little Smith Creek
- · Hilly sections south of Tulita
- North of the Blackwater River area
- Steep Creek
- Hodgson Creek

¹ Gibson's Gap is located outside the Project area.

RIGHT-OF-WAY, ALIGNMENT, ROAD LOCATION AND DESIGN

Participants generally support road cuts to straighten bridge approaches, minimize unsafe slopes and turns, and to widen the existing Mackenzie Valley Winter Road alignment. There is reluctance for any cutting or grading of Bear Rock for the proposed Mackenzie Valley Highway alignment. Participants shared strong support for re-routing further away from Bear Rock as it is a place of cultural and spiritual significance.

Concern was expressed about the stability of slopes and the potential for erosion, rockslides, and landslides in areas along the proposed alignment. Participants encourage planning for permafrost thaw in the Project design because thawing is anticipated to continue in the future. Participants recommend following the existing Mackenzie Valley Winter Road alignment, but to move off the existing road where possible to avoid areas with known permafrost thaw issues. On areas where the alignment deviates from the Winter Road, it was recommended to talk with Elders to determine safe locations for the road to be placed.

Many people spoke about the current Mackenzie Valley Winter Road

being used to access harvesting locations. Participants recommend that the alignment be moved farther away from Mackenzie River and areas where other rivers join the Mackenzie River. Participants shared that these are often important areas for moose, fish, and traditional hunters, and the road setback from the river would help prevent non-local residents using these areas by making it more difficult for them to access. After the new highway is built, participants recommend that access to the Mackenzie Valley Winter Road be allowed for traditional hunters and harvesters only.

Family cabins, campsites, and historical homesteads were reported within or near the proposed road location and participants advised the Project team that those families should be consulted. Of particular mention were the campsites and culturally important areas near Keele River. There was an overall desire expressed to protect archeological features in the region.



DRAINAGE

Participants request that the proposed highway is re-aligned away from areas with erosion and annual overflow and washouts. They report that ice and water overflow and runoff or washouts annually occur at the following locations:

- Strawberry Creek (the existing route is about 15 m from the bank in some areas now and is expected to continue to wash away)
- Blackwater River
- · an area approximately 48 km south of Tulita
- north of Quarry 8.039
- Steep Creek
- Little / Big Smith Creek
- Hodgson's Creek
- Bear Rock between Bear Rock and Bear River

Participants caution that road washouts also occur generally on the west side of the Mackenzie Valley Winter Road near Mackenzie River, which currently experiences embankment slumping.

SMALL & LARGE CULVERTS TO BE CONSTRUCTED

CULVERTS

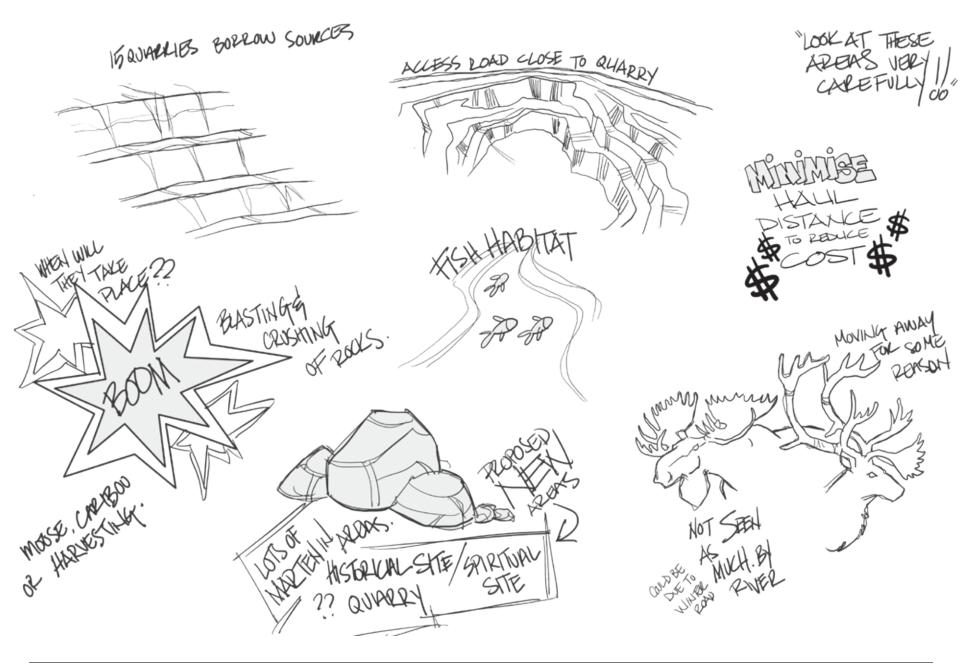
To allow for safe water and fish flow, participants support culverts at regular intervals along the Mackenzie Valley Highway. Participants suggest using many smaller culverts instead of fewer larger culverts. Concerns were raised about using 'super culverts' due to historical collapses and the resulting impacts on the community such as delayed grocery deliveries.

OTHER THOUGHTS ON HIGHWAYS AND ROADS

Throughout discussions participants often shared their thoughts on other roads that would be useful either locally or in the Northwest Territories. Such feedback included:

- Interest in an all-season access road from the proposed Mackenzie
 Valley Highway to Little Smith Creek Bridge to allow for easier access
 to Keele and Redstone rivers for paddling and boating.
- Interest in an access road to the Saline River mouth for paddling and boating.
- A suggestion that a highway should be built north from Fort Good Hope and connect to Tuktoyaktuk Highway instead of the proposed route south of Norman Wells.
- A suggestion to build Mackenzie Valley Highway from N'Dulee
 Crossing towards Fort Providence to link up with the Dehcho Bridge.

Quarries, Borrow Sources, and Access Roads



QUARRIES, BORROW SOURCES, AND ACCESS ROADS

Participants requested that quarries and borrow sources should not be located on the west side of the highway alignment (i.e., not immediately adjacent to Mackenzie River), due to potential for slumping. Participants support the minimization of long-haul distances from quarries and borrow sources and using hill cuts as borrow sources to reduce construction costs. Participants note that the sources in the Tulita area are silty, sandy, and quite far from the road, and it was acknowledged that hauls may need to be longer for those sections of highway.

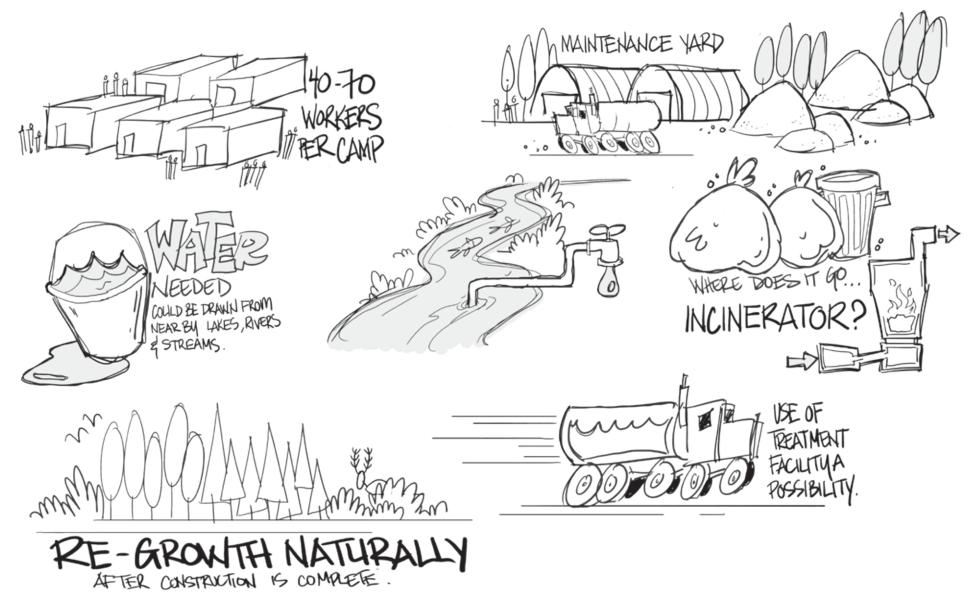
Participants are concerned about the development of quarries because they create large, open pits and are perceived to create more potential for landslides. Participants recommend that the Project team consider using existing quarry sources if possible. There is interest in reopening some sources for community use as well. Potential gravel sources and locations for quarries were identified for the Project team to consider.

Some participants shared their thoughts that the gravel sources should be developed on Sahtu Dene and Métis owned land as opposed to a GNWT source in order to benefit Sahtu Region residents.

Participants are concerned about burial sites being disturbed through quarry development, as well as disturbing the continued use of burial and sacred sites. Participants expressed the need for due diligence and traditional knowledge studies to protect uses of cultural areas. Bear Rock and Mount Gaudet were noted for their cultural significance and there is a general sentiment that these areas should not be used as a quarry.

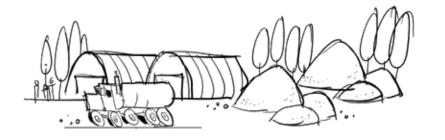


Camps, Laydown Areas, Water Use, Waste Management, Maintenance Yards, and Reclamation after Construction



CAMPS, LAYDOWN AREAS, WATER USE, WASTE MANAGEMENT, MAINTENANCE YARDS, AND RECLAMATION AFTER CONSTRUCTION

Participants recommended siting camps, laydown areas, and maintenance yards in previously disturbed areas. More information was requested by participants on locations and quantities of water for potable and non-potable uses, as well as how much waste and wastewater would be produced by the camps. Discussions on waste management indicated that there is limited capacity or willingness for municipalities to absorb the burden of camp waste. Many ideas for reclamation after construction were discussed.





CAMPS, LAYDOWN AREAS, AND MAINTENANCE YARDS

Participants reported that there are existing camp spots that could be utilized for temporary construction camps or permanent maintenance yards. Participants suggested that maintenance yards should not be located on the west side of the highway alignment right beside the Mackenzie River due to the potential for erosion.

Participants recommended placing camps where trees are already cleared and utilizing old sites along the Mackenzie Valley Winter Road instead of developing new sites.

Participants shared that camps are always a concern due to an increased number of people creating competition at the grocery store, substance use, and Missing and Murdered Indigenous Women and Girls. Participants stated their preference would be to have large camps located away from their community. It was recommended that camp locations be selected during a community meeting as was recently done for Four Mile Creek.



Participants recommended the following camp locations:

- Existing camps in Norman Wells (as camps are well established in the community)
- Enbridge's proposed site²
- Little Smith Creek (as it is a potential barge landing, borrow source, and camp site)

Participants requested more information on the number of people expected at camps and what the stipulations from the land use regulation for camps are. Community members shared their experience and perception that camps used to support oil and gas exploration disposed of sewage and incinerated garbage in ways that do not align with the community's expectations or values. Another concern raised was regarding fuel storage with a question on whether the use of liners and berms will be required in sensitive areas such as fish habitat.

² The specific location was not provided.

WATER USE

Protection of water was identified as a priority by participants.

Mackenzie River and Big Smith Creek were identified as suitable for highway use. Great Bear River was also suggested; however, participants noted there is radium in Great Bear River, but shared that the community still uses the water. Participants suggested that road maintenance could use the water sources with more silt, so that sources that are used for drinking water are not overburdened.

The Project team was asked not use water from Trout Lake at the foot of Bear Rock.

Participants request that locations for potable and non-potable water use are identified. A concern was raised that taking water from lakes may impact fish and fish habitat.





WASTE MANAGEMENT

Waste reduction was also identified as a priority by participants. Many participants are concerned about waste and greywater disposal into municipal facilities. Participants stated that each community should be consulted regarding the disposal of waste and wastewater into municipal facilities with each respective community.

Regarding waste reduction, participants support incineration and the expansion or establishment of new waste disposal facilities that do not rely on a lagoon system. Due to permafrost thaw and leachate, participants do not support burying waste as a management practice.

Participants suggest that a new waste disposal system be established with camp operations at Four Mile Creek as the municipality does not have capacity to take on camp waste.

Some participants do not support waste treatment in Norman Wells; specific mention was made of the proposed Imperial Oil waste treatment facility, which is not supported due to the large size, its visibility, and concerns about the downstream effects from Imperial Oil operations. There was a common view expressed that waste should not be stored in Norman Wells and that it should be hauled south.

Other participants indicated there would be no issue hauling waste and wastewater to municipal facilities. The Project team received questions about how much waste would be produced, to help communities understand if strain would be placed on municipal facilities. Participants are interested in receiving additional information about other options that could be considered for waste treatment. Additionally, participants expressed interest in what was done to manage waste on other recent road projects such as Tłįchǫ All Season Road and the Inuvik Road, and what lessons were learned from these projects.

RECLAMATION

Participants recommend that monitoring during reclamation be done by the Guardians Program, as the Guardians are the 'eyes and ears of the land' for any identified protected areas.

Discussions regarding what to do with the sections of the Mackenzie Valley Winter Road that would not become part of the highway were brief and feedback contained divergent ideas. Some participants recommend retaining access to the Mackenzie Valley Winter Road for traditional hunters and harvesters. Participants explained that this could help keep resources accessible to those who need them most and could limit access for those not from the region. Others recommend that the Mackenzie Valley Winter Road be maintained as a pathway and a way to acknowledge its history. Some suggest planting trees in the areas where the Mackenzie Valley Winter Road is no longer used.



Public Concerns and Interests



PUBLIC CONCERNS AND INTERESTS

Participants shared a number of concerns and interests with respect to the Project Description and construction activities presented by the Project team. Protecting wildlife, fish, and their habitat is a priority for participants. Through the workshops and interactive mapping, many areas were identified as important habitat locations. Participants recommend that these areas be avoided and that management plans be created. There is also concern about poaching and culvert collapses, and about how climate change is impacting the permafrost. Many socioeconomic considerations and concerns were raised, including grocery store competition, protecting country food from poaching, protecting communities from violence and substance abuse, and providing economic and business opportunities for community members. On many of these topics participants asked what has been learned from other recent road projects? Finally, participants provided the Project team with requests for in-person engagement and suggestions for engagement activities.

"

Beavers are keystone species and have a big impact on the environment.

Just because you remove a dam does not stop the beavers from damming elsewhere that might be problematic for the road.

WILDLIFE

Many comments expressed the importance of respecting the environment and wildlife species, and giving them due consideration during Project planning. Participants shared that the health and wellness of communities are tied to the health and wellness of the land and vice versa.

When working with wildlife, participants want to ensure proper protocols are used and followed. Participants expressed concern regarding the removal of beaver dams as they are keystone species that provide ecosystem services and mitigate slumping.

Participants are concerned about poaching and overharvesting of moose, caribou, fish, and other fur-bearing animals as highways makes accessing areas easier.

Participants shared that caribou populations have fluctuated or dwindled; as a result, communities are relying increasingly on moose for subsistence harvesting. Participants shared the importance of integrating the protection of moose and moose habitat into management plans, alongside caribou management plans.

On the Interactive Map many comments were received identifying areas that are wetlands, swampy, or moose habitat. Participants continually voiced that protecting moose habitat is critically important. Participants suggest rerouting sections of the proposed road to avoid moose pasture and areas along tributaries flowing into Mackenzie River. Climate change was raised a number of times as participants shared their observations on changes in wildlife population and habitat.

FISH

Participants shared knowledge and advice on fish and fish habitats when asked about culverts, drainage. Culverts were a concern for safe fish passage as participants shared that often the culverts are too shallow, and there are bolts inside that restrict passage and cause injuries to the fish. Participants note that there are many spawning areas along the highway, particularly for suckers, which have not been able to make it through the shallow culverts to spawn.

Known areas of importance for fish habitat that were named include Keele River, Redstone River, and Tulita River

Participants recommend that the Project team speak to experienced hunters to identify harvesting areas and where quarries and borrow sources might be located. If done properly it was stated it could be a benefit to the community, such as in the example of Bandy Lake (Edie Lake) quarry, which made fishing spots easier to access. Participants are concerned about the proposed highway making it easier to access areas along the river and enable further overfishing on fish habitat that is already stressed.

Participants raised the TłĮcho All-season Road and Tuktoyaktuk Highway monitoring plans for fisheries and harvesting and suggest the Project team review those plans for effectiveness and apply the learnings to the Mackenzie Valley Highway Project.

CLIMATE CHANGE

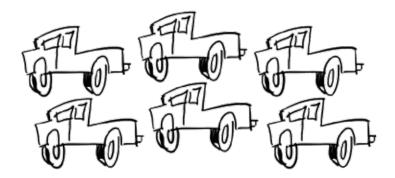
Climate change was raised a number of times as participants shared their observations on changes in wildlife habitat, and on permafrost and erosion along Mackenzie River. Participants shared that the sandy riverbanks are being eroded and there are parts of the Mackenzie Valley Winter Road that are now perceived to be too close to the river. Participants said that changes to permafrost and erosion are causing landslides and rockslides in areas along the Mackenzie Valley Winter Road, and suggest that these are areas the Project team should consider rerouting the proposed highway in order to avoid costly maintenance and repairs.



SOCIO-ECONOMIC CONSIDERATIONS

Participants expressed the potential benefits and opportunities the highway could bring such as lowered food costs, ease of travel, employment, and the potential for increased tourism and natural resource development. However, many socio-economic concerns were also raised by participants during engagement. Concerns included increased competition in grocery stores, Missing and Murdered Indigenous Women and Girls, alcohol abuse, lack of emergency response, crime increases, and a lack of municipal capacity to handle waste, wastewater, and population influxes.

Participants recommend that the traffic (number of individuals arriving in communities), camp security, and grocery stores' capacity in providing services be considered in construction planning. Participants are also concerned about increased competition for country food sources and harvesting due to the highway opening up the Sahtu Region to people from the south. Concerns about sustainable access to country foods were raised, and participants recommend that the Mackenzie Valley Winter Road remain open for traditional hunters and harvesters only.



Participants note the benefit of increased tourism; however, participants caution that consideration for culturally sensitive and important areas such as wildlife habitat and archaeological features need to be discussed with the Renewable Resource Councils. Participants note that there needs to be an understanding of traditional use sites and spiritual sites in order to protect important areas such as sacred sites, burial sites, named places, and cabins.

Participants are concerned about the lack of emergency (medical) response planning and capacity for municipalities to manage emergencies.

Camps being located near communities (such as Tulita) were identified as a concern for multiple reasons, including Missing and Murdered Indigenous Women and Girls and potential for substance abuse. There is strong support for distancing camps from communities. Participants recommend that camp locations be determined in discussion with communities. Participants are interested in hearing how other communities have changed and adjusted once being connected by road.

Participants also recommend that there be economic opportunities provided to local workforces, including training initiatives. Participants shared that business contracts should be considered for local vendors, and not just large, established companies. The Project team received many questions regarding how the highway will be constructed, and how the GNWT is working with local businesses in preparation for the tender documents.



ENGAGEMENT AND TRADITIONAL KNOWLEDGE

Throughout this engagement period the Project team received many comments regarding engagement methods and traditional knowledge. Virtual workshops were held due to COVID-19, but participants stated that they prefer in-person meetings and requested additional virtual meetings if in-person meetings were not possible. They also advised that in-person community meetings should be held regardless to discuss potential disturbances.

While having the Interactive Map available for people to access and provide comments was appreciated, participants stated that a formal engagement schedule with advertising and in-person conversations was expected. Participants explained that online events are challenging due to streaming speeds, but recordings of presentations can be downloaded and viewed and work for sharing project information.

Many participants who provided their thoughts and advice included a disclaimer that feedback received for the Project should be verified by Elders, through Traditional Knowledge studies, or through the Renewable Resource Councils. Further recommendations were received to fly the proposed alignment with Elders who may have difficulty working only with maps, to host a regional Elder's meeting, to have material translated into Indigenous languages, and to provide honoraria for Elders to participate.

The public expressed interest in reviewing the Traditional Knowledge studies that are being completed with respect to the Mackenzie Valley Highway Project.

Engagement Approach



The GNWT is committed to engaging with Indigenous Governments, Indigenous Organizations, and other affected parties, providing relevant and meaningful opportunities for feedback, and considering and integrating the information shared into the Project planning and design.

The GNWT sought input from people who currently use the Mackenzie Valley Winter Road, who would have access to using the proposed Mackenzie Valley Highway, and those who might be affected by the Mackenzie Valley Highway Project.

The Project team chose a hybrid of in-person, virtual, and online engagement activities to collect input. This approach to engagement was shaped by both the ongoing COVID-19 pandemic and the needs of participants that live in rural and remote locations and may not have reliable access to the technology required for virtual participation. The COVID-19 pandemic has influenced how people gather for meetings, whether they are comfortable meeting in-person or virtually, and whether communities are 'open' to visitors. COVID-19 required flexibility and options to optimize the number of people who were able to participate. Project information was made available in print and electronic versions and was distributed by email, in-person, or mail, and through the GNWT's online engagement portal.

WHO WAS ENGAGED

Outreach and engagement efforts were focused on having conversations to inform the proposed highway location and associated construction activities. All engagement activities were open to those who may be users of the new Mackenzie Valley Highway and those who may be affected by the road construction or future operations. The Project is located in the Sahtu and Dehcho Regions, as such engagement involved:

- Indigenous Governments, Indigenous Organizations, and other affected parties representing:
 - Settlement beneficiaries
 - Municipal and community governance
 - Health, education, and cultural organizations
- Community members in Tulita, Déline, Fort Good Hope, Colville Lake, Norman Wells, and Fort Simpson
- Residents of the Northwest Territories

ENGAGEMENT ACTIVITIES

The following table summarizes engagement activities between March and July 2022. Additional details about each activity are included in Appendix B. In total 75 participants shared their thoughts through meetings and workshops, while another 488 provided feedback online or by email. Overall, there were 1,740 engagement interactions, representing how people accessed project information or participated in activities. Following the table is an explanation of each activity.

Activity	Number of Participants
Email correspondence	403 emails exchanged
Project Website and Online <i>Have Your Say</i> Engagement Platform	1,400 website visits; 502 people visited the platform for information; 15 participants provided feedback and asked questions
Online Interactive Map	70 comments
Project Map Mailouts	32 deliveries
Virtual Community Workshops	43 participants during six workshops
Coffee House One-on- One Meetings	32 participants during 15 meetings

VIRTUAL COMMUNITY WORKSHOPS

The GNWT hosted workshops via Zoom in a format that included a mix of presentation and small group discussions. Workshops had South Slavey and North Slavey interpretation, were facilitated, and were documented by notetakers and graphic illustrators. Subject Matter Experts presented, answered questions, and listened to the interests and concerns raised by community members. Presentation and breakout discussions focused on the Project Description including the proposed road location, locations of quarries and borrow sources, construction activities (clearing, construction camps, laydown areas, water use and waste management), and any other public concerns or interests.

Workshops were advertised publicly by radio, social media, posters in communities, and on the *Have Your Say* webpage. Indigenous Governments, Indigenous Organizations, and other affected parties received invitations to attend the workshops by email approximately two weeks in advance.

Workshops were scheduled on different days of the week and at different times of day - morning, lunch, afternoon, and evening – to accommodate diverse schedules.

To promote engagement and feedback opportunities, upon the completion of the virtual engagement workshops, the Project team shared the presentation and link to the interactive map with registered participants.



INTERACTIVE MAP

An innovative interactive map was developed to allow for site-specific feedback along the proposed route, in or near proposed locations of quarries and borrow sources, or proposed locations for construction activities. Participants were invited to put a pin on the map, and share their thoughts and identify locations or landscape features that were important to them including, but not limited to:

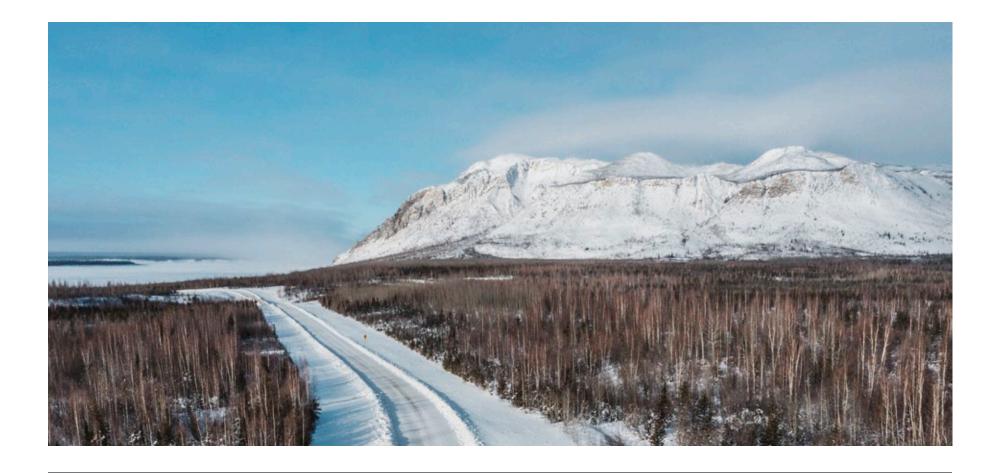
- Places important for wildlife and plants
- Places used for recreation such as camping and boating
- Active traplines, hunting and harvesting sites
- Locations of cabins, graves, birthplaces, trails/ travel routes, camps, and other significant areas
- Locations that might be suitable for temporary construction camps
- Areas known for extreme environmental conditions such as flooding or wind gusts

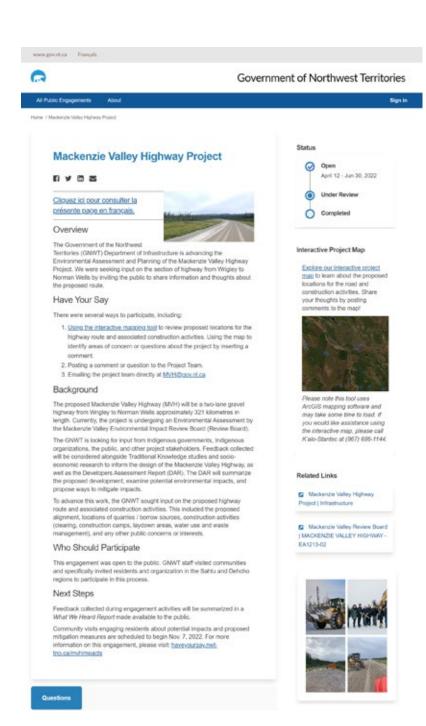
Participants could choose whether their feedback could be made public or limited to the Project team. The map was open for comment from April 12 through July 2022, and was accessible in English and French. The GNWT received positive feedback on the interactive map from participants in the Sahtu and Dehcho regions.

COFFEE HOUSE ONE-ON-ONE MEETINGS

At the virtual workshops in April 2022 the Project team was requested by community members to complete in-person engagement. As a result, in May and June, the GNWT staff visited communities in the Sahtu and Dehcho regions primarily to help people use the interactive map, explain project information, and offer an in-person opportunity to discuss questions and concerns with the Project team. The GNWT advertised

the coffee house dates by posting notices in public locations, advertising on radio and social media, and distributing emails to affected parties and stakeholders. These sessions were informal and participants could choose to participate as a group or one-on-one. Participants could drop-in or schedule a dedicated meeting time. During these sessions project staff demonstrated use of the interactive map, and if requested, entered data points and comments for participants.





HAVE YOUR SAY ENGAGEMENT WEBPAGE

To assist with sharing project information to the public and provide an online option for engagement, the GNWT used their *Have Your Say* engagement webpage from April until June 2022. The *Have Your Say* webpage hosted project information, advertised upcoming engagement opportunities, and had two interactive features: a question/comment box and a link to the interactive map. The *Have Your Say* webpage included contact information for the Project team, links to the Project's website on the GNWT's webpage and the Review Board's Mackenzie Valley Highway environmental assessment process. The webpage was accessible in English and French.

haveyoursay.nwt-tno.ca/mackenzie-valley-highway-project



EMAIL CORRESPONDENCE

A dedicated email address for receiving Project feedback has been in use since 2019. This email address is publicly available and listed on all engagement materials and advertisements. The email address was used as a channel to receive requests for registration in the workshops, and for the public to communicate feedback or questions to the Project team. The Project email will remain open for the life of the Project.

POSTERS, WALL MAPS, AND MAPBOOKS

Affected parties and stakeholder organizations received project maps and posters to help advertise engagement activities. Hard copy wall maps were provided to reduce barriers associated with relying on the technology of the interactive map. This allowed Indigenous Governments, Indigenous Organizations, and other affected parties to share project information and engage their own membership, clients, and staff on the project. The Renewable Resource Councils and Land Corporations located in Tulita and Norman Wells also received printed mapbooks of the road location study area showing detail to facilitate sharing of site-specific feedback.

What Comes Next



Feedback shared by participants during the engagement on the Project Description and construction activities has been reviewed and considered in the context of Project planning and design and integrated into the Project Description and assessment of impacts to the environment in the DAR.

The GNWT will continue to advance the environmental and engineering studies for the Project in 2023 and complete engagement on the Project effects, mitigations, and monitoring approaches. The GNWT anticipates the DAR will be ready for submission to the Review Board prior to the end of the 19th Legislative Assembly.

Once the DAR is submitted, the Review Board begins a public review process of the DAR. During this time, Indigenous governments and Indigenous organizations will conduct a final review of the documents and have an opportunity to provide comments. The Review Board will conduct technical sessions and public engagement to provide affected parties and Project stakeholders with the opportunity to participate in the Project review and inform the Review Board's recommendations on the Project. Following the Review Board's Report of Environmental Assessment recommendations, the Responsible Minister will make their decision. The timelines for Review Board processes are legislated, as is the timeline for the Responsible Ministers Final Decision, upon receipt of the Review Board's Report of Environmental Assessment.

ENGAGEMENT TIMELINE

2022 Apr to Jul \Rightarrow

2022

Nov to Dec

-> 20

2022-2023

Nov to Feb

2023

Sep (projected)

Project Description and Construction Activities

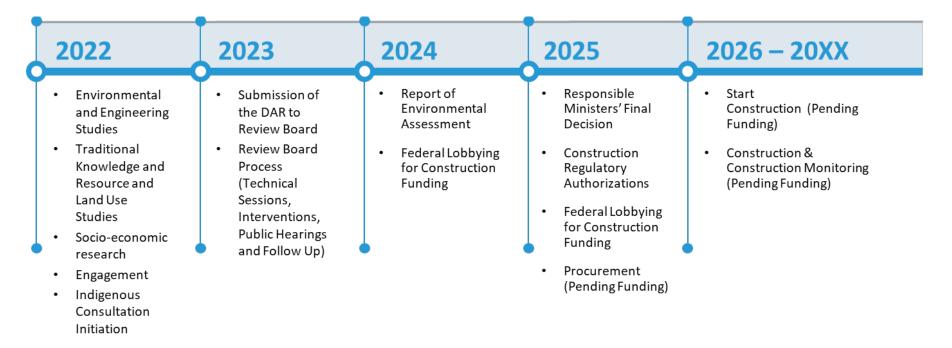
Assessment Findings and Project Effects

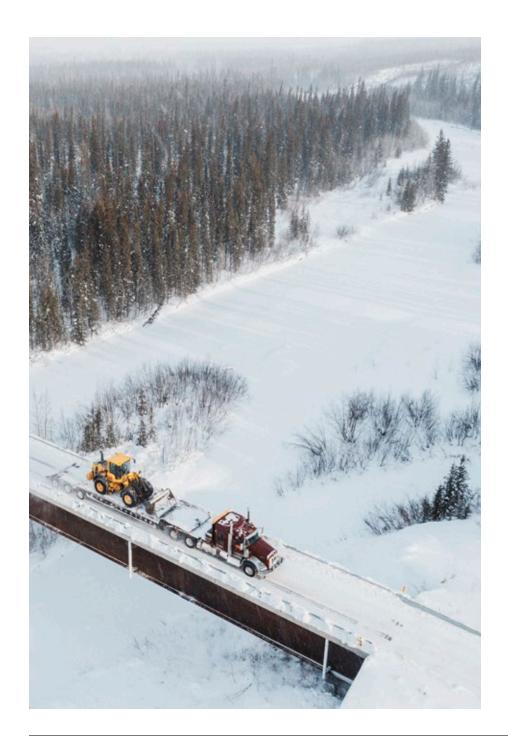
Project Mitigation and Monitoring

Developer's Assessment Report

It is anticipated that the Review Boards' recommendation will be issued in 2024, followed by the Minister's decision in 2025. If the Project is approved, the timeline for construction of the road will be dependent on securing Federal funding and obtaining regulatory authorizations. Construction could start by 2026.

ANTICIPATED DEVELOPER'S ASSESSMENT REPORT TIMELINE





Closure

The GNWT would like to thank all the community members of the Sahtu and Dehcho regions for their participation, organizations who provided meeting spaces and services, and the interpreters and translators who together helped us successfully begin engagement in support of the Developer's Assessment Report.

Please check our website for up-to-date project information: www.inf.gov.nt.ca/en/MVH

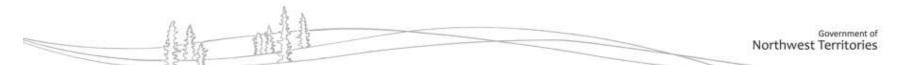
Appendix A–Mackenzie Valley Highway Project Description Presentation



Mackenzie Valley Highway Project

Environmental Assessment

April 2022



Agenda

- GNWT Strategic Initiatives
- Mackenzie Valley Highway at a Glance
- Engagement Opportunities
- Project Overview
- Breakout Groups
- Next Steps
- Closure and Wrap Up

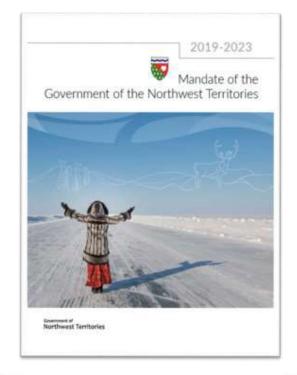




GNWT Strategic Initiatives

"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
- Mackenzie Valley Highway Environmental Assessment
 - Developer's Assessment Report
 - Environmental and Engineering Studies
 - Wildlife Related Studies
 - Traditional Knowledge Studies
 - Socio-Economic Impact Assessment

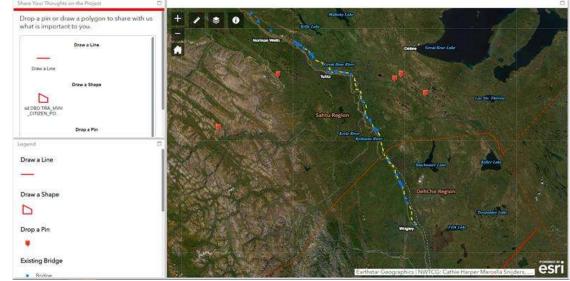




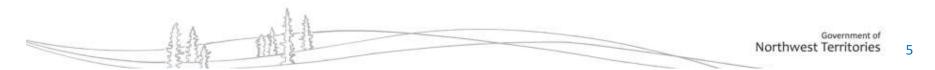
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Engagement Opportunities

- Community Workshops
- One-on-One Meetings
- Virtual Engagement Website
- Interactive Map



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



New two-lane public gravel road from Wrigley to Tulita and Norman Wells

To replace the Mackenzie Valley Winter Road

102 km in Dehcho Region179 km in Sahtu Region

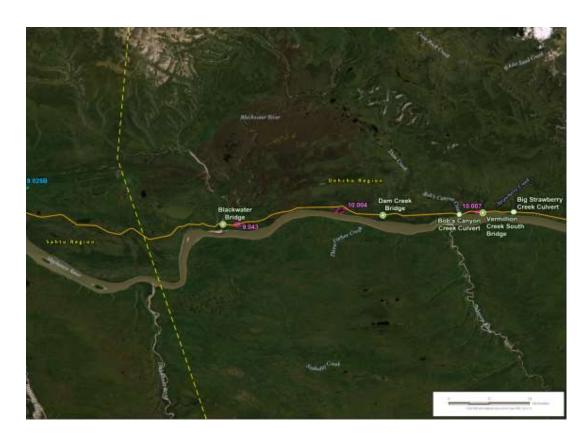




The highway will mostly follow the Mackenzie Valley Winter Road

The highway will connect to existing bridges on the Mackenzie Valley Winter Road

New culverts will be built to cross other watercourses





Northwest Territories

7

Approximately 15 material sources will be needed: quarries (rock) and borrow sources (gravel and sand material)

Some will require new all-season access roads

Some will become permanent sources for highway maintenance

Some sources have been partly developed previously



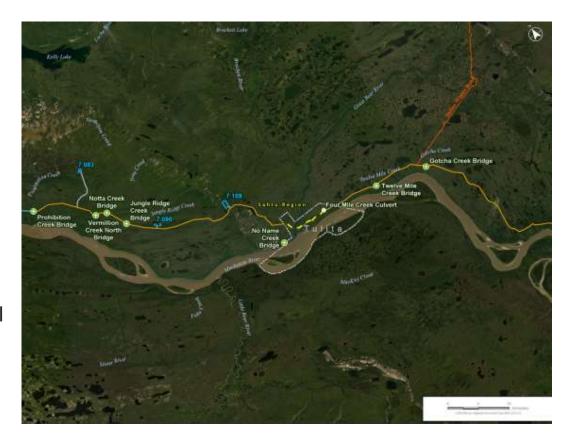


The Project will:

Build and use temporary construction camps and workspaces

Use water for camp use, construction and dust control

Construct permanent maintenance yards



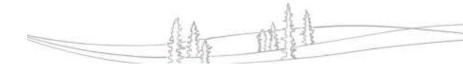


Once open, GNWT anticipates traffic of 50 vehicles per day

Highway maintenance will require ongoing quarry operations (9 sources)

Highway maintenance will require water use for dust control (sources to be determined)





Proposed Mackenzie Valley Highway Route

Design Principles

- Follow winter road as much as possible
- Avoid certain terrain such as wet areas
- Connect to existing bridges
- Meet design criteria for safety and use

Proposed Routing Corridor

- Design is at early stage
- 1 kilometre wide corridor
- The final highway route will be in this corridor





Mobilization and Staging of equipment, fuel and materials

- winter road
- barge

Clearing of Right-of-Way

- Widening from 30 m to 60 m
- Or, new right-of-way
- All clearing in winter

Road Cuts into the tops of hills may be needed at steep valley approaches





Building the roadway

- Place rock material "embankment" on ground surface (winter)
- Place "road base" and compacting (summer and winter)

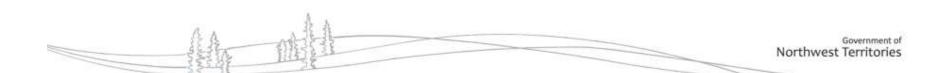
Culvert installation

- Approximately 85 culverts
- Designed to maintain flows and fish passage
- Will be installed in summer
- May need to clear beaver dams





Breakout Session #1



Quarries

- Blasting
- Crushing
- Material stockpiles

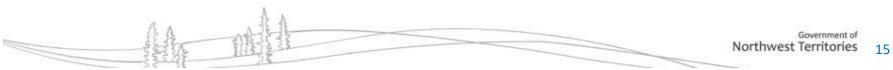
Borrow Sources

- Excavation
- Material stockpiles

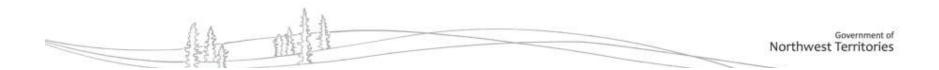
Access Roads

- 30 m wide right-of-way
- Built to be used year-round





Breakout Session #2



Camps

- Estimated 40-70 persons
- Potential locations:
 - Existing camp facilities (e.g., Norman Wells)
 - New locations within municipal boundaries
 - At or near one or more borrow sources or quarries

Waste Management

- Domestic waste and sewage disposed to municipal facilities
- Greywater to municipal facilities





Water Use

- Camp operations (year-round)
- Road compaction (summer)
- Dust control (summer)
- Build a winter travel lane where needed (winter)

Water Sources

- Mackenzie River
- Many of the same sources used to build the winter road





Maintenance Yards

- Support operations and maintenance of the highway once built
- May be located at borrow sources close to the highway
- Garage, equipment, fuel, material stockpile





Reclamation after construction

- Remove equipment and materials
- Promote drainage and reduce erosion potential
- No active revegetation





Breakout Session #3



Next Steps

2023 2024 2022 **Environmental** and Responsible **Environmental** and **Engineering Studies** Minister's Final **Engineering Studies** Decision • Developer's Technical Sessions **Assessment Report** Interventions Submission Public Hearings and **Engagement and** Follow Up Consultation Report of **Review Board Process Environmental Information Requests** Assessment

Upcoming Engagement Opportunities 2022

- Have Your Say <u>Website</u>
 - Interactive Map, Comments and Question Box, Links to Project Information
- April 2022
 - Engagement: MVH Project Design (Four Workshops)
- Summer 2022
 - Engagement: MVH Potential Effects and Mitigations
- Fall 2022
 - What We Heard Report
 - Developer's Assessment Report





Questions?

Email: MVH@gov.nt.ca

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

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



Appendix B-Engagement Activity Summary

Activity	Number of Participants	Date	Location
Email correspondence Project email: mvh@gov.nt.ca	403 emails exchanged	March – July 2022	online
Infrastructure Project Website	1,400 website visits	March – July 2022	www.inf.gov.nt.ca/en/MVH
Have Your Say Online Engagement Platform: Information	502 page visits	April 12, 2022 – June 30, 2022	haveyoursay.nwt-tno.ca/mackenzie- valley-highway-project
Have Your Say Online Engagement Platform: Submit a Question	15 participants	April 12, 2022 – June 30, 2022	haveyoursay.nwt-tno.ca/mackenzie- valley-highway-project
Interactive Map	70 comments	April 12, 2022 – June 30, 2022	Online through ArcGIS
Cargo Deliveries of Project Maps	32 deliveries	April 19, 2022	Sahtu and Dehcho Regions

Activity	Number of Participants	Date	Location
Virtual Community Workshops	5 participants	April 12, 2022 @ 7:00 – 8:30pm	Zoom
	5 participants	April 13, 2022 @ 12:00 – 1:30pm	Zoom
	14 participants	April 14, 2022 @ 10:00 – 11:30am	Zoom
	11 participants	April 14, 2022 @ 2:30 – 4:00pm	Zoom
	4 participants	June 7, 2022 @ 9:00 – 11:00am	Zoom
	4 participants	June 9, 2022 @ 2:30 – 4:30pm	Zoom
Coffee House One-on-One Meetings*	8 participants 7 meetings	May 25-26, 2022	Fort Simpson
	15 participants 2 meetings	May 30-31, 2022	Fort Good Hope
	cancelled	May 31 – June 1, 2022	Colville Lake
	2 participants 2 meetings	June 2, 2022	Délįnę
	7 participants 4 meetings	June 6-7, 2022	Norman Wells
	cancelled	June 8-9, 2022	Tulita

^{*} These sessions were informal and participants could choose to participate as a group or one-on-one. Participants could drop-in or schedule a dedicated meeting time.

