

# Mount Gaudet Access Road

Traditional Knowledge and Land Use Information

Government of the Northwest Territories – Department of Infrastructure

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# **Document Revision History**

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1		Draft	GNWT-INF	December 20 <sup>th</sup> , 2019
2	Wildlife Harvesting > Moose.	Update based on PKFN comments in January 2020	GNWT-INF	February 11 <sup>th</sup> , 2020
3	Wildlife Harvesting > Moose	Update of section following moose pasture survey in June 2020	GNWT-INF	June 11 <sup>th</sup> , 2020

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# **Abbreviations**

DFN **Dehcho First Nations** Draft Dehcho Land Use Plan **DDLUP** Dehcho Land Use Planning Committee **DLUPC** Government of the Northwest Territories **GNWT GNWT** Department of Infrastructure INF **GNWT** Department of Transportation DOT Kilometer km Land Use Permit LUP **Mount Gaudet Access Road** MGAR Mackenzie Valley Highway MVH Mackenzie Valley Winter Road MVWR **Project Description Report** PDR Pehdzéh Kí First Nation **PKFN** Sahtu Settlement Area SSA Traditional Knowledge TK Traditional Land Use TLU

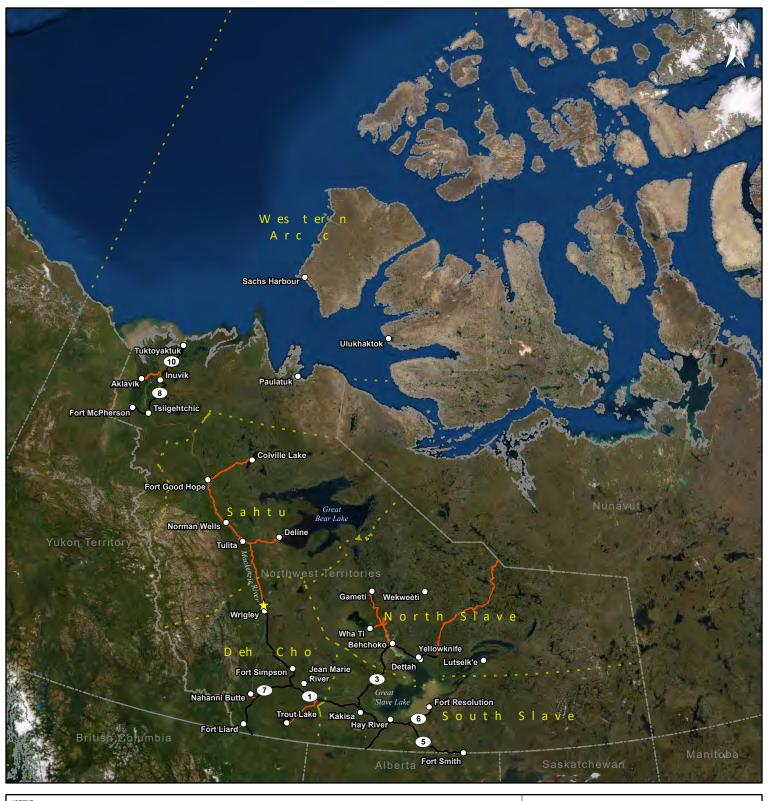
# 1 Traditional Knowledge and Land Use in the Dehcho: Wrigley to Mount Gaudet Area

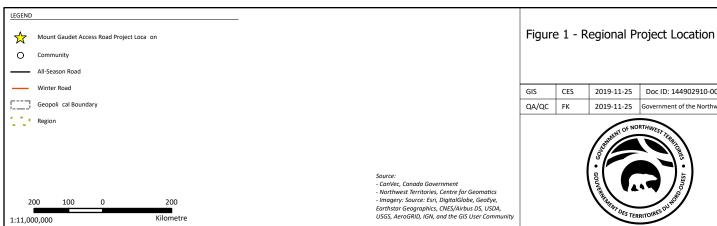
The Government of the Northwest Territories Department of Infrastructure (INF) is preparing a Land Use Permit (LUP) application for the construction of an approximately 21 km all-season road (Mount Gaudet Access Road - MGAR) from the end of the current all-season Mackenzie Valley Highway (MVH), at the community of Wrigley, to the current location of the existing Mount Gaudet quarry along the current Mackenzie Valley Winter Road (MVWR) alignment. To supply material for the construction of the MGAR, INF will need to conduct expanded operations at the existing Mount Gaudet quarry. Upgrading the MVWR to all-season status may require the relocation of the existing Hodgson Creek Bridge upstream of its current location. The potential new Hodgson Creek bridge location is being investigated due to address problems of excess water and ice backup. The construction of the access road, expansion of the Mount Gaudet Quarry, and the potential relocation of the Hodgson Creek Bridge are the three components which make up the MGAR project. Geotechnical assessment of the proposed new road alignment, quarry, and new bridge location will also be required before these main activities can proceed. The final alignment is dependent upon the review of the final report on the geotechnical work, further consultations with PKFN and applications for additional funding (in progress). As such, the alignment of the road is described as segments:

- Segment 1 Starts approximately 1 km north of the existing Hodgson Creek Bridge and follows the existing MVWR alignment north to the Mount Gaudet Quarry for approximately 14.62 km.
- Segment 2 Starts at Hodgson Creek Bridge either from the current bridge location (Segment 2a) for 1.13 km or the potential new Hodgson Creek bridge location (Segment 2b) for 1.65 km and continues north to the south end of Segment 1.
- Segment 3 The Hodgson Creek Bridge would be raised at its current location (Segment 3a) or a new bridge will be installed further upstream (Segment 3b).
- Segment 4 Starts at the final location of the Hodgson Creek Bridge and continues south to the end of Highway #1 either from the current Hodgson Creek Bridge location following the current MVWR alignment (Segment 4a) for 5.07 km or on a new alignment from the potential new Hodgson Creek Bridge location (4b) for 1 km, from which point it will continue along the existing MVWR alignment for 3.92 km to the end of Highway #1.

INF currently has construction funding secured for Segments 1, 2 and 3. Funding is being sought for Segment 4, and construction of this segment will not proceed until this funding has been confirmed.

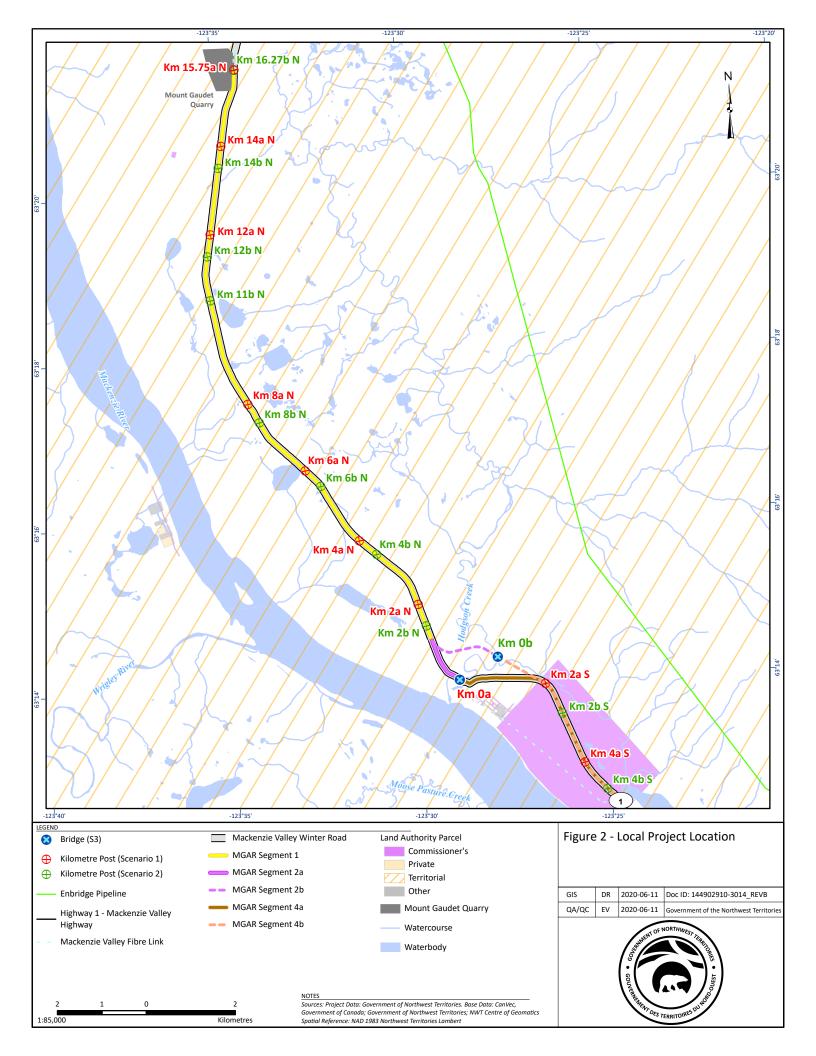
This report summarizes information on traditional knowledge and land use in the area of the MGAR project as reported in the Mackenzie Valley Highway Extension Pehdzéh Kı¸Ndeh – Dehcho Region Project Description Report (Dehcho PDR) (Dessau 2012), as requested by the Pehdzéh Kı¸First Nation (PKFN) in the summer of 2019. The Project Location is shown regionally on Figure 1 and locally on Figure 2.





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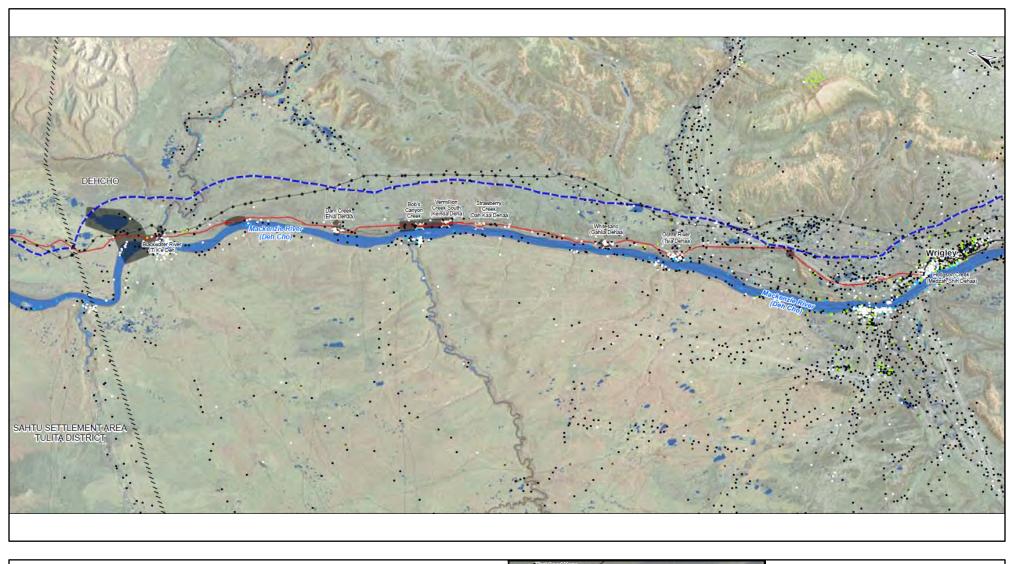
The MGAR project area occurs within the proposed Pehdzéh Ki, Ndeh Conservation zone, which was defined in the Draft Dehcho Land Use Plan (DDLUP) in 2006 (DLUPC 2006). This conservation zone was designated to protect important natural resources which are harvested by PKFN. The Pehdzéh Ki, Ndeh area is noted in the DDLUP as an area of high ecological and cultural value. The area includes the old location of the Community of Wrigley as well as a large number of burial sites and traditional trails as described in this document. It is important to consider any potential impacts that the MGAR project may have on culturally valuable lands and resources within the Pehdzéh Ki, Ndeh that have been reported through local Traditional Knowledge.

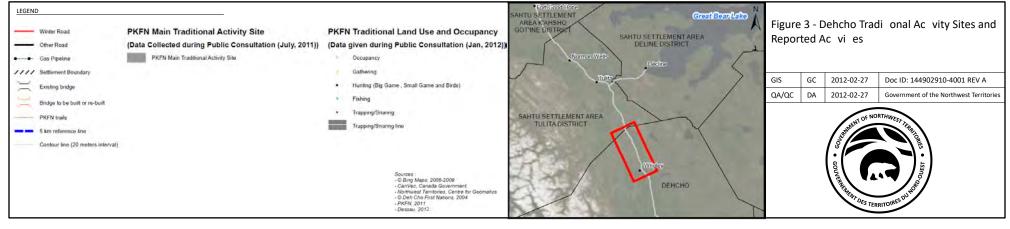
## 1.1 Traditional Knowledge and Traditional Land Use

Traditional Knowledge (TK) refers to social, natural and spiritual information that is accumulated and passed down through generations by oral means or through experiences and teachings. TK possessed by Indigenous people inhabiting a proposed development area provides important context for understanding the role which land and natural resources play for Indigenous communities and how a proposed project might affect culturally valuable components in the surrounding area. TK forms the foundation of the stories and ecological knowledge which play a central role in the lives of Indigenous peoples of the Northwest Territories. Traditional culture is developed over many generations through the transfer of spiritual, ecological and social knowledge. Traditional culture is not a static concept associated with a single period in time, but is instead a dynamic phenomenon that is continuously shaped by the knowledge acquired by an Indigenous community.

The following review of traditional land use (TLU) in the MGAR project area is primarily based on data retrieved from the Dehcho PDR (Dessau 2012), for which a number of TK studies were conducted.

Because TK information is both sensitive and private in nature, and is generally kept confidential to protect local communities, the TK information provided in the Dehcho PDR (Dessau 2012) was largely compiled from public sources produced by the Dehcho First Nation government, Government of the Northwest Territories, academic and consultant research around the proposed MVH corridor, as well as a documentary video produced by PKFN. The Dehcho PDR (Dessau 2012) also incorporated information from various past TLU studies in and around the Pehdzéh Ki,Ndeh – Dehcho Region, information from historical documents and land use planning reports, and information gathered from three public engagement sessions held in Wrigley, in which participants provided information about important physical locations (such as preferred hunting areas, wildlife habitats and important monuments), traditional activities, and cultural practices. A map illustrating the location of various traditional land use activities, as described in the Dehcho PDR (Dessau 2012), is presented in Figure 3.





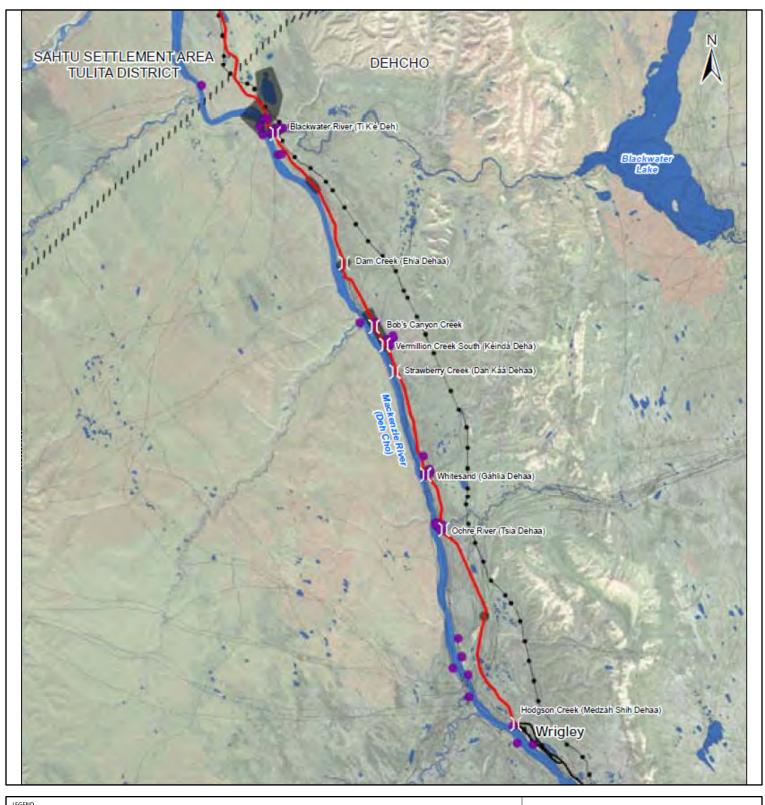
# 2 Traditional Lifestyle in the Dehcho and the Project Area

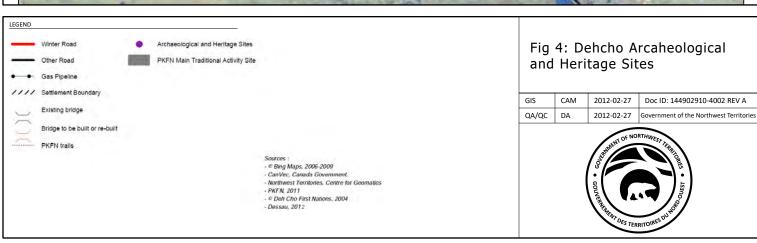
Information from regional archaeological studies and information reported by the Dehcho Land Use Planning Committee (DLUPC) indicates that the Dehcho section of the Mackenzie Valley, including the area from Wrigley to Mount Gaudet, has supported traditional activities during historical and pre- historical periods.

As the proposed route for the MGAR mainly follows the existing MVWR, road construction and technical investigation activities would occur almost entirely on previously disturbed land. The road nevertheless has some potential to impact traditional land use of the Pehdzéh Kı¸First Nation (PKFN), who reside in the area. The following section describes traditional practices which are common in the general project area.

## 2.1 Recorded Heritage Resources

As of the printing of the Dehcho PDR (Dessau 2012), thirty-five archaeological sites have been recorded within 1.5 km of the existing winter road between Wrigley and the southern border of the Sahtu Settlement Area. The archaeological sites are shown in Figure 4 at a large scale to safeguard the integrity of the sites. The types of sites recorded in this section are representative of the full range of cultural history postulated for this region of the Mackenzie Valley. They include prehistoric stone tool making sites, prehistoric camps, historic aboriginal camps, cabins, trails, graves and recent camps/cabins. None of the sites are located along the proposed MGAR alignment.

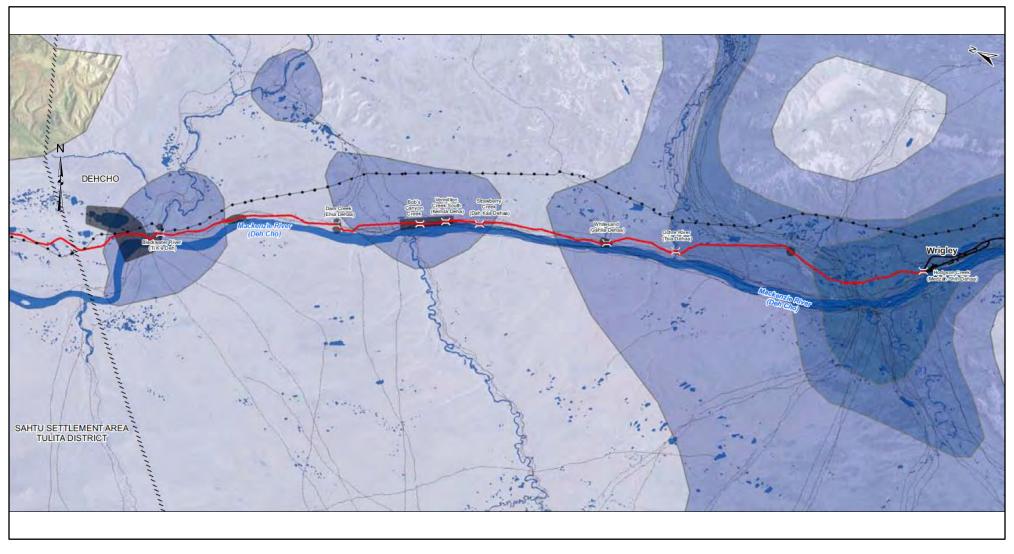




The DLUPC has identified areas along the proposed MVH alignment between Wrigley and the Sahtu Settlement Area (SSA) boundary containing low, moderate and high densities of traditional land use and occupancy (Figure 5). Common land uses in these areas include resource procurement as well as culturally important sites such as burial grounds. Additional information about traditional land use along the proposed MVH alignment was collected from the community of Wrigley under the conditions of a Memorandum of Understanding which was signed between DOT and PKFN in 2010. During public consultations, PKFN members provided information about traditional practices and the areas where traditional activities occur (Figure 3). Reported traditional land uses often included on-the-land communicative activities for the purpose of transferring traditional knowledge. Traditional land use areas described by the PKFN included burial grounds, traditional hunting grounds, including hunting cabins and trap-line locations, sensitive moose pasture areas and moose hunting areas, and important spiritual and cultural sites. Several watercourses and riverbanks in the region were also reported to be important for traditional land use. Identified TLU sites located near the proposed MGAR route included moose pasture and moose hunting areas and traditional trails.

Many culturally significant sites are known to occur at important landscape features, such as the confluence of rivers. The occurrence of such sites is largely associated with the historical use of these landscape features for seasonal travel, as reflected by the presence of prehistoric trails and habitation sites in these areas (Janes, 1983). The Mackenzie Valley region also contains a number of spiritual sites where burial grounds are present, and many of these sites have been used by the local Indigenous people for many generations. During the public consultations process for the MVH held in the community on July 7, 2011 (Dessau, 2012), no burial or spiritual sites were identified between Wrigley and Mount Gaudet, although a moose pasture was identified within approximately 2 km of the proposed quarry site along the MVH winter alignment (Figure 6; Figure 7; Figure 8; Figure 9).

At present, most of the First Nations communities in the Dehcho are reliant to some degree on a monetary economy. Since traditional land use activities tend to be seasonal, a mixed economic approach helps communities support traditional subsistence practices such as the hunting of caribou, moose and waterfowl, trapping of small game, ice fishing, wood hauling and berry and vegetation harvesting (Figure 3; Figure 5). The hunting of ungulate species is one of the most important subsistence harvesting activities for Dehcho communities.





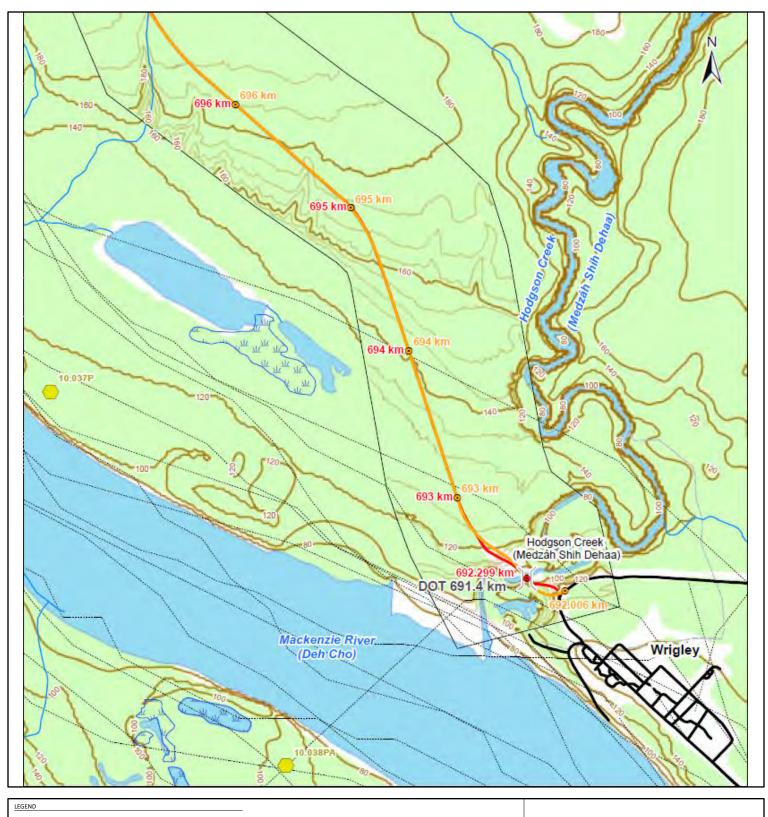
During consultations on the MVH, Wrigley residents identified the protection of traditional land use areas as a primary point of concern. Residents expressed concerns that construction of an all-weather highway would lead to more people moving through the Pehdzéh Kı´(Ndeh - Dehcho Region, increasing the potential for negative impacts on important wildlife habitat and spiritual sites. With regards to the preservation of natural areas, the PKFN emphasized the importance of protecting rivers, creeks and forests, as well as harvested wildlife resources such as moose, caribou and fish for the benefit of current and future generations. The chief and council of the PKFN identified several sites along the edges of the Mackenzie River which are of cultural and spiritual importance. During the final design of the access road, major consideration should be given to potential impacts of the Project on traditional land use activities in this area, and appropriate precautions should be taken to prevent or mitigate these impacts as much as possible.

# 2.2 Land Occupancy

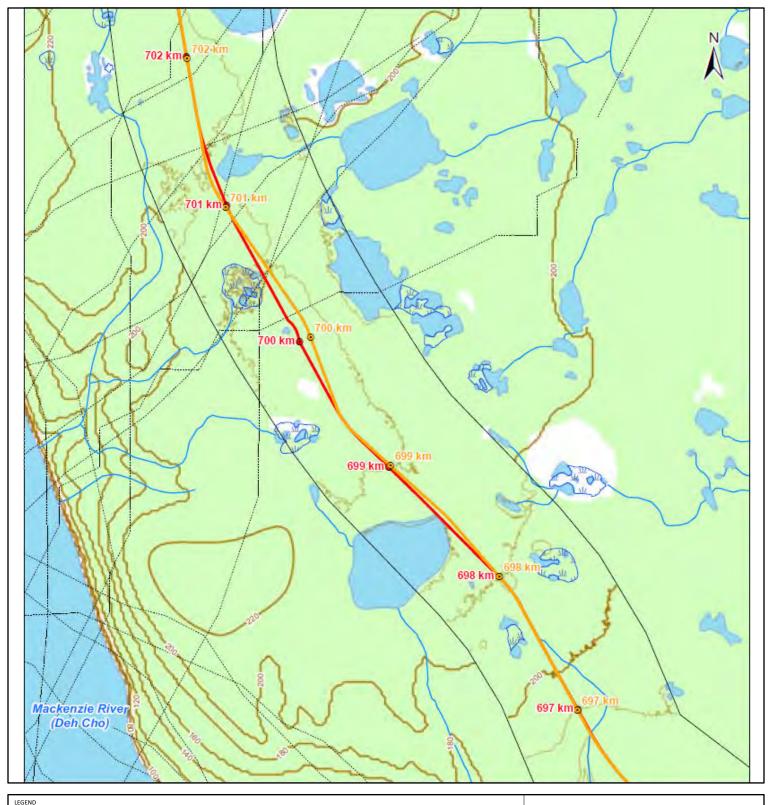
Land occupancy areas are distinct from natural harvesting areas in that land occupancy areas are occupied exclusively for a single type of land use while natural harvesting areas may be utilized for several purposes at a given time. For example, an area used for wildlife harvesting might also be used for vegetation harvesting at the same time. Land occupancy, on the other hand, includes areas used by Indigenous people for shelter, travel, teaching, or other cultural or spiritual activities. Information on land occupancy in the Mackenzie Valley was provided during public consultations for the MVH in January of 2012 (Dessau 2012). However, apart from current and historical hunting trails, none of the occupancy sites reported during consultations are near the proposed MGAR alignment.

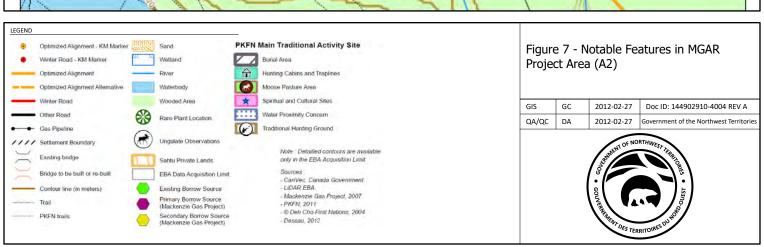
## 2.2.1 Travel (Trails)

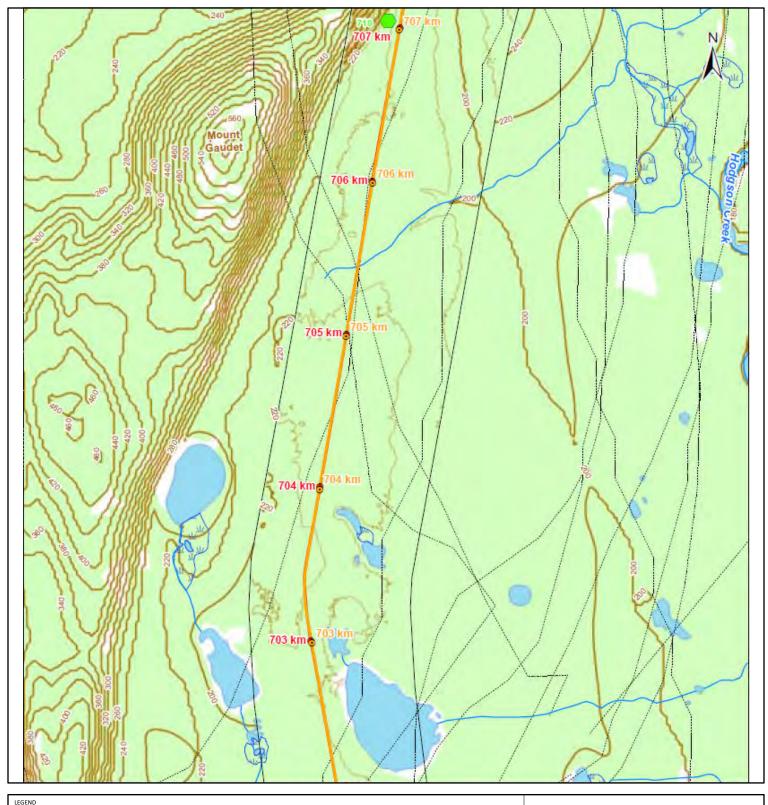
A number of trails have been identified within the Mackenzie Valley, and have been utilized by the local population for many generations. Traditional trails near the Project area are mainly concentrated along the Mackenzie River, and the majority of these trails lead to the community of Wrigley, which has been a major historical point of interest for local Indigenous groups. PKFN makes use of these trails for natural resources harvesting activities such as fishing, hunting, trapping, and snaring and for gathering medicinal plants and other kinds of vegetation. Trails which are known to occur within the Project region based on information in the Dehcho PDR (Dessau 2012) are illustrated in Figure 6; Figure 7; Figure 8; and Figure 9.



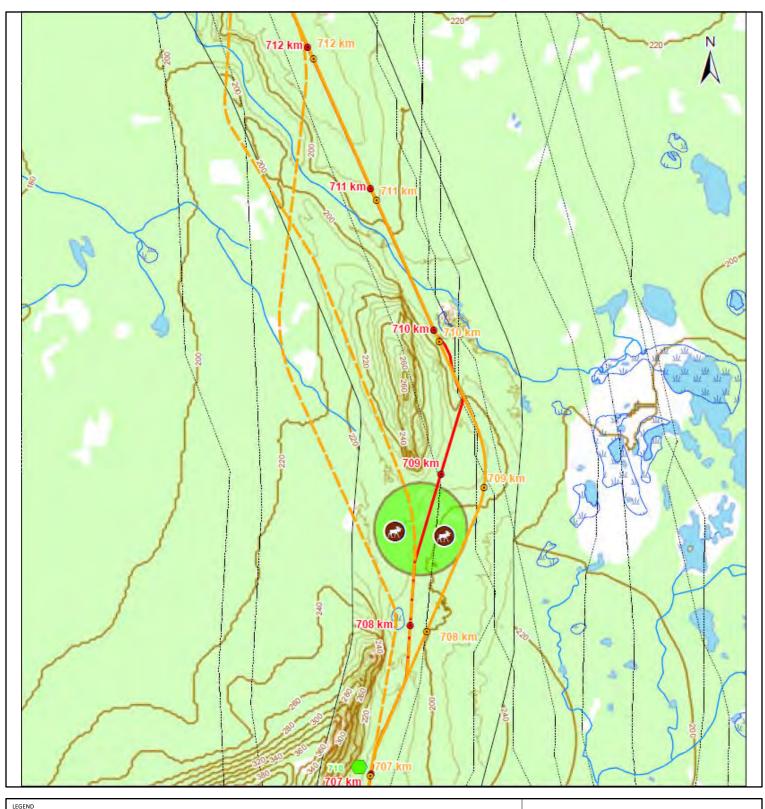


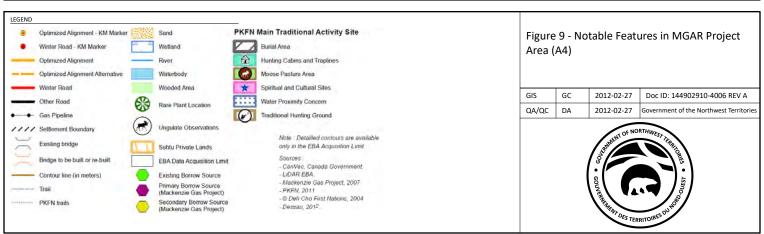












## 2.3 Natural Resource Harvesting

The hunting of large ungulates such as moose and caribou is an important harvesting activity for PKFN, and has major cultural and historical significance. The movements of caribou herds are closely related to strategies of subsistence harvesting, and have been an important factor in determining the seasonal movement patterns of Indigenous people both historically and presently. The proposed MGAR route is outside of the typical winter, summer, and calving range for Woodland Caribou (Boreal Population) (Figure 9), although it does cross through areas which caribou use to cross between seasonal habitat (Dehcho First Nations, 2012).

The project would also occur within the habitat range for moose, which covers much of the Mackenzie Valley (Wilson and Haas, 2012). Resource harvesting activities in the Dehcho include fishing, hunting and vegetation harvesting. The areas where these harvesting activities are most frequently carried out are identified in the Dehcho PDR (Dessau 2012), however, the primary areas for hunting big game have not been reported by the DLUPC due to the sensitivity of this data. In a modern context, traditional harvesting activities continue to be an important element of traditional culture in the region. Investigations of traditional activities in the Dehcho region by Norwegian and Cizek (2004) indicated that between 22 and 36% of all dietary protein requirements in Dehcho communities are fulfilled by wild foods.

### 2.3.1 Wildlife Harvesting

The Pehdzéh Ki<sub>2</sub>Ndeh area of interest contains land used by the PKFN throughout the year for subsistence harvesting and other traditional and cultural activities, including hunting of wildlife, fishing, trapping and snaring, berry picking, medicinal and spiritual vegetation harvesting, harvesting of wood for fuel, and collection of crafting materials (IMG-Golder Corporation, 2006; Norwegian, H. and P. Cizek, 2004).

The following summary of wildlife harvesting activities has been compiled based on information conveyed by the DLUPC and Wrigley residents during community consultations in 2011 and 2012 (Figure 3). Surveys conducted within and around the community of Wrigley indicate that lands surrounding creeks, including Hodgson Creek within the MGAR project area, are significant sources of traditional resources. The general locations of resources harvested by the PKFN, as reported in the Dehcho PDR (Dessau 2012), are provided in Figure 3. This information should be considered preliminary and non-absolute, as traditional resource procurement activities are inherently mobile, and there is considerable variability in the occurrence of seasonal activities and the availability of local knowledge. Because geographic features such as rivers and creeks are generally a major source of traditionally harvested resources, these areas are likely to remain culturally important. Additionally, certain landscape features within the Mackenzie Valley serve as important travel corridors for game species, and may have been used by Indigenous people since the prehistoric period.

#### 2.3.1.1 Caribou

The MGAR would be located within the general Boreal Caribou range. However, no caribou harvesting sites have so far been identified in the area based on previous TK studies and community consultations. Additionally, activities associated with the project will occur outside of boreal caribou winter, summer, and calving range. Therefore, the Project is not expected to have significant impacts on caribou harvesting activities

#### 2.3.1.2 Moose

A culturally important moose pasturing area is located just north of Mount Gaudet. This site has been identified as being among the best moose hunting in the area, and plays a valuable role in providing local food security for PKFN members. To confirm the extent of this moose pasture area, as understood by PKFN, INF conducted a helicopter survey of the MGAR alignment in June 2020 with two members of PKFN who frequently hunt in the area. The boundaries of the moose pasture identified during this survey are to the north and outside proposed MGAR alignment and Mount Gaudet Quarry. Therefore, the Project will not overlap with this traditional use area.

#### 2.3.1.3 Bears

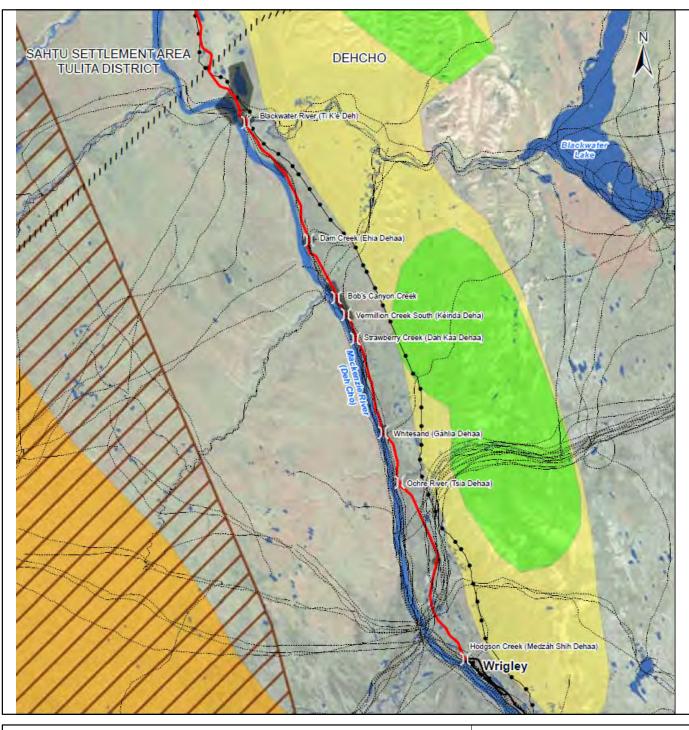
No bear habitat or bear harvesting areas have been identified within close proximity of the MGAR development area (Figure 10).

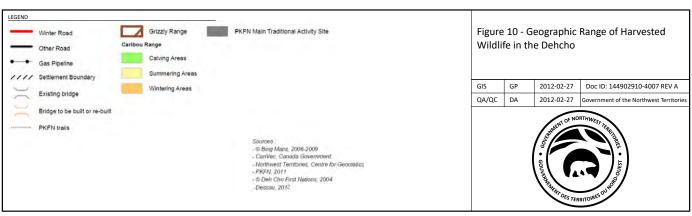
#### 2.3.1.4 Trapping

A few trapping sites have been reported near the proposed MGAR area during past community consultations (Figure 3). Whether these sites are currently in use, however, still needs to be confirmed.

#### 2.3.1.5 Fish

The proposed MGAR route passes near Hodgson Creek, which is known to contain several fish species. The route also runs within 2km of the Mackenzie River along some sections. A few traditional fishing areas have been identified in previous TK studies (Figure 3), but these locations are unlikely to be impacted by MGAR project activities.





#### 2.3.1.6 Waterfowl

No specific waterfowl harvesting areas have been reported in close proximity to the MGAR development area.

#### 2.3.1.7 Vegetation Harvesting

Within the Dehcho section of the Mackenzie Valley, the harvesting of vegetation is an important traditional activity, and provides a source of subsistence, medicinal resources, and art materials. Berry harvesting is known to be a popular activity within the PKFN community, and occurs throughout the Mackenzie Valley (IMG-Golder Corporation, 2006). Local berries may be used for subsistence and, along with other types of vegetation such as birch bark, wood, and lichens, serve as important art and crafting materials. Locations where vegetation gathering activities occur, as reported in the MVH PDR, are shown in Figure 3.

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