CREE
DEVELOPMENT CORPORATION

## LA GRANDE ALLIANCE <br> PRE-FEASIBILITY STUDY - PHASES II \& III TRANSPORTATION INFRASTRUCTURE

# TECHNICAL NOTE 3 LAND USE 

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PREPARED BY


Karine Neumann, M.A.
Antropologist, Environment

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## EXECUTIVE SUMMARY

The purpose of Technical Note 3 is to understand the various forms of land use in the vicinity of the transportation infrastructure proposed as part of Phases II and III of La Grande Alliance. Engagement sessions were held with Cree land users for traplines found within a defined corridor around the various components, as well as group sessions with Jamesians ${ }^{1}$. In addition, a compilation of all titles and servitudes within the study area was completed.

Information presented herein highlights the results of documentary research and interviews, as well as other considerations and recommendations. It should be noted that some information compiled is not presented in this report, due to its sensitive nature (e.g. harvesting areas) or to protect the privacy of individuals (e.g. family camps). This information is subject to confidentiality agreements, which will be passed on to the Client, the Cree Development Corporation (CDC), to be used in future phases if this is deemed desirable. Furthermore, Inuit communities were not involved at this stage as this remains a Cree initiative that may not be extended beyond this study. However, if any study components overlapping Inuit territory are pursued, such as the proposed small craft harbour, or the road and railway from La Grande to Whapmagoostui/Kuujjuarapik, engagement with Inuit communities would be initiated immediately in subsequent steps.

This specific approach of involving consultation with the territory users prior to the design phase is innovative. The objective is to feed the technical team with all the information gathered through this engagement process in order that the development of the proposed infrastructures alignment is done in respect with the territory (refer to Report 3). This innovative approach also includes an ongoing engagement process with Cree land users to collect and document their feedback on the proposed technical alignments (refer to Report 4).

The engagement exercise allowed to identify the various forms of land use, the titles and servitudes within the study area. As shown on the figure, the study area is located within the territory of the Eeyou Istchee Baie-James region of northern Québec. The study area is divided in three zones:

- Study Area 1 (SA1): Railway along the Billy-Diamond Highway - Rupert - La Grande;
- Study Area 2 (SA2): Road \& Rail Extension, and Harbour - La Grande - Whapmagoostui/Kuujjuarapik;
- Study Area 3 (SA3): Route 167 Extension - Renard Mine - Trans-Taiga Road.

It is to be noted that these study areas are slightly different that the ones described in La Grande Alliance MOU, thus, to suit the proposed infrastructures scope. Notably, and for numerous reasons not necessarily cited in the report, the proposed road connecting the Trans-Taiga to Schefferville was dropped from the study in its early stages.

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## TECHNICAL NOTE 3 - LAND USE



Figure Study Areas

## STUDY AREA 1 (SA1): RAILWAY ALONG THE BILLY-DIAMOND HIGHWAYRUPERT - LA GRANDE

This Study Area (SA1) is composed of 33 traplines, namely eight traplines from Waskaganish, one from Nemaska, nine from Eastmain, ten from Wemindji and five from Chisasibi. Except for one trapline in Wemindj, all the tallymen (or main user of traplines) were interviewed. The Study Team recorded the following information in this Study Area:

- Extensive Land use along the railroad corridor, particularly for spring and fall hunts;
- Total of five Protected Areas (three existing and two projected located in the Waskaganish, Eastmain and Wemindji traditional territories) (For more details, see section 7 of this Technical Note).
- 85 occupation leases (40 vacation leases and two outfitting leases, located mostly in the northern part of the Study Area, on Chisasibi traplines);
- Almost 9000 mining claims distributed along the alignment, but mainly concentrated in the centre, around the Eastmain traditional territory;
- Total of 182 Cree camps ( 93 main camps, 67 old camps, 18 secondary camps, three planned camps and one cultural camp);
- Three groups of camps on the shores of culturally significant lakes are located near the projected railway alignment between km 282 and 296 of the Billy-Diamond Highway;
- Numerous goose and moose hunting areas; beaver streams and lodges; spawning and fishing sites, caribou and black bear habitat (for more details on the Quebec government's strategy regarding the caribou, see section 8 of Technical Note 6);
- Numerous water sources;
- Presence of Snowmobile trails;
- High value commercial mushroom harvesting sites.

This area is the foreseen location for the proposed 340 km railway infrastructures Rupert to La Grande. The main concerns and comments raised by the Cree Land Users about the railway are summarized here:

- Facilitate land exploitation by non-Natives and be of little benefit to the Crees themselves in terms of land use;
- Increased pollution, dust and noise from construction of the railway and operations of the train;
- Impacts on wildlife and Cree harvesting activities;
- Impacts on Cree camps.
- Note that following the proposed technical alignment, Cree land users concerns and comments will be revisited and documented (refer to report 4).


## STUDY AREA 2 (SA2): ROAD AND RAIL EXTENSION, AND HARBOUR - LA GRANDE - WHAPMAGOOSTUI/KUUJJUARAPIK

This Study Area 2 (SA2) is composed of 19 traplines, 11 from Chisasibi and eight from Whapmagoostui. All trapline representatives, except one from Chisasibi were met. It should be noted that the overall understanding of the study among land users was minimal, such that it took a good amount of time to brief participants on the objectives and desired outcomes prior to collecting information. Within Study area 2, the Study Team recorded the following highlights:

- Because no transportation infrastructure was ever developed in most of this area, the presence of Highly Sensitive Areas (HSA) were identified out of the interviews with land users. According to participants, these areas are particularly sensitive to environmental impacts, and therefore should be avoided as much as possible when developing the corridor alignment;
- Two "Territorial Reserves for Protected Area Purposes"2 (Chisasibi and Whapmagoostui territories);
- Intensive activities pursued at the mouth of the Great Whale River including goose hunting in the northern area;
- Intensive use of the Hudson Bay for hunting, fishing and recreational activities by community members near the community of Whapmagoostui/Kuujjuarapik;
- 25 leases, mostly for commercial purposes and residences near Radisson as well as one (1) outfitting lease;
- Relatively few mining claims were found;
- Nunavik Inuit Marine Land Claim area with a Protected Area representing an Ecological Interest Zone;
- Total of 49 camps ( 28 main camps, 10 old camps, seven secondary camps, one planned camp and one cultural camp);
- Three Cree camps Areas (with many camps) and one area planned for a future camp along the projected road alignment. One such camp area is located along the Hudson Bay and counts with Cree and non-Cree camps, notably Inuit camps;
- Soil instability, leading to increased landslides as a result of climate change becoming increasingly hazardous;
- Numerous fishing and hunting areas identified as HSAs along the Hudson Bay shoreline;
- Presence of navigation routes and snowmobile trails throughout the study area;
- Goose, caribou, bear and beaver hunting areas throughout the study area;
- Important caribou migration corridors and porcupine habitat throughout the study area.

This area is the foreseen location for the proposed 219 km extension of the railway infrastructures from La Grande, the 207 km roadway infrastructures extension as well from La Grande and a deep-water port along the Whapmagoostui/Kuujjuarapik coastline (which was then redefined to a seasonal Small Craft Harbour). The highlights raised by Cree land users during interviews are the following:

- Opening of the territory caused by the proposed transportation corridor;
- Increase pollution, dust and noise from construction of the railway and operation of the train;
- Impacts on wildlife and Cree harvesting activities;
- Further aggravation of soil instability;
- Limited interest in the rail project for land users, resulting in a high level of resistance to accommodate this corridor in the vicinity of existing land use areas;
- Impacts of the construction of the harbour on wildlife, most notably on fish and birds;
- Increased economic opportunities related to tourism development with the harbour;

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## - Impacts on Cree camps;

- Discussions included any potential road alignments passing through LG 1 dam and spillway. Interviews confirmed that land users concerned were very resistant to the idea of a road crossing their land and opening up this area, namely due to a high concentration of HSAs as well as a large Protected Area further north;
- The proposed road infrastructure tended to be more favourably received and considered more useful than the railroad. The overall familiarity of rail was low relative to roads among interviewees;
- Possibility of passenger rail service for land users as a means to build broader social acceptance;
- A northern harbour location seems to be the most appropriate for most land users, although several community members practice goose hunting in the area; this impact would require appropriate mitigation.
Note that following the technical proposed alignments, those Cree land users concerns and comments will be revisited and documented (refer to report 4).


## STUDY AREA 3 (SA3): ROAD 167 REFECTION AND EXTENSION - RENARD MINE - TRANS-TAIGA ROAD

This Study Area 3 (SA3) is composed of 12 traplines, namely 11 traplines from Mistissini and one trapline from Chisasibi. Interviews were conducted with all tallymen or land users. Within that study area, the following highlights have been recorded:

- Three Protected Areas and some Highly Sensitive Areas (HSA) have been identified;
- Few leases related to the Stornoway mine and two (2) outfitting leases;
- Several mining claims are located in the Study Area, mainly in the areas of Stornoway Mine and Delmas Lake;
- A total of 36 camps ( 17 old camps, 13 main camps, 3 planned camps, 1 secondary camp and 2 other not categorized camps);
- Presence of navigation routes and snowmobile trails;
- Presence of caribou (woodland and migratory), moose habitats and hunting activities.

This area is the foreseen location for the proposed upgrading of the existing Route 167 over 204 km and the 172 km road extension from the Stornoway Renard Mine access road to the Trans-Taiga. The Cree land users concerns and comments that were raised during interviews about the proposed infrastructures are as followed:

- Users are generally in favor of the potential extension project, mainly due to the ease of access to their territory that the road would provide;
- Potential impacts to wildlife: the presence of caribou herds and habitat (both woodland and migratory) as well as moose habitat (for more details on the Quebec government's strategy regarding the caribou, see section 8 of Technical Note 6);
- Potential impacts to Cree camps;
- Potential impacts on existing areas of activity, notably along the road to Renard Mine;
- Potential impacts on moose hunting areas;
- Potential disturbance of navigation routes and snowmobile trails.

Note that following the proposed technical alignment, those Cree land users concerns and comments will be revisited and documented (refer to report 4).

## GENERAL COMMENTS

In addition to the information presented above, interviews about the different Study Areas allowed land users to describe historical changes in key species' distribution and abundance on their respected territories, which they usually associate with climate change. These changes have had important effects on hunting, fishing, and trapping activities. However, the most important impact of climate change on land users activities is the change in the ice cover which significantly limits winter travel by snowmobile, which in turn modifies the timing of harvesting while limiting the area available for hunting and the overall ability to practice certain traditional activities. Some land users interviewed therefore perceived year-round access roads as important to counter these negative impacts of climate change on traditional practices.

In addition to the potential positive impacts of increased access, land users understand that proposed transportation infrastructure is an important vector for land use change, which can brings with it potentially negative repercussions. Indeed, the creation of access allows a greater number of people, both Natives and non-Natives, to come to the territory. Furthermore, because a healthy environment is necessary for the continuation of the Cree way of life and culture, pollution related to the construction and operation of the infrastructures is a major concern, as well as future mining development that roads and railways may facilitate.

For all the reasons cited above, most Crees interviewed expect to be continually engaged, listened to, and involved in development projects on their traplines, so that the territory is managed with all necessary considerations for Cree values and identity.

Finally, it is recommended that, should La Grande Alliance continue in future phases (Feasibility phase or ESIA), strong relationships with land users continue to be developed, such as maintaining the role of the Liaison Officer and the network of CIOs.

It should be noted that the Cree land users' further recommendations about the transportation alignments on their traplines are presented in Technical Note 17.

## LIST OF ACRONYMS

| ACRONYMS |  |
| :--- | :--- |
| CHTISB | Cree Hunters and Trappers Income Security Board |
| CIO | Community Information Officer |
| CTA | Cree Trapper Association |
| ESR Complex | Eastmain-Sarcelle-Rupert Complex |
| GCC (EI) / CNG | Grand Council of the Crees (Eeyou Istchee) / Cree Nation Government |
| ISP or ESP | Income Security Program for Cree Hunters and Trappers, renamed since 2019, Economic <br> Security Program. |
| JBNQA | James Bay and Northern Quebec Agreement |
| NILCA | Nunavik Inuit Land Claim Agreement |
| NMR | Nunavik Marine Region |
| NMRPC | Nunavik Marine Region Planning Commission |
| NMRIRB | Technical Note |
| TN |  |

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## 1 INTRODUCTION

### 1.1 OBJECTIVES

The purpose of Technical Note 3 is to understand the various forms of land use in the vicinity of the transportation infrastructure proposed as part of Phases II and III of La Grande Alliance. Engagement sessions were held with Cree land users for traplines found within a defined corridor around the various components, as well as group sessions with Jamesians ${ }^{1}$. In addition, a compilation of all titles and servitudes within the study area was completed.

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### 1.2 SCOPE AND STUDY AREA

The engagement exercise allowed to identify the various forms of land use, the titles and servitudes within the study area. As shown on Figure 1-1, the study area is located within the territory of the Eeyou Istchee Baie-James region of northern Québec. The study area is divided in three zones:

- Study Area 1 (SA1): Railway along the Billy-Diamond Highway - Rupert - La Grande;
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- Study Area 3 (SA3): Route 167 Extension - Renard Mine - Trans-Taiga Road.

It is to be noted that these study areas are slightly different that the ones described in La Grande Alliance MOU, thus, to suit the proposed infrastructures scope. Notably, and for numerous reasons not necessarily cited in the report, the proposed road connecting the Trans-Taiga to Schefferville was dropped from the study in its early stages.

[^2]

Figure 1-1 Study Areas

## 2 CREE HISTORICAL AND CURRENT LAND USE

According to the Cree Nation Government website, Eeyou Istchee, the traditional territory of the Eeyouch-Crees ${ }^{2}$, includes Cree communities and over three hundred traplines or traditional family hunting and trapping grounds. The traditional territory, which extends over 400,000 square kilometres, is located primarily in the Nord-du-Québec region of Eeyou Istchee James Bay ${ }^{3}$. It includes the lands on the eastern shore of James Bay and southeastern shore of Hudson Bay, as well as the lakes and rivers that flow into it. The traditional territory also includes lands in Ontario that the Crees have historically occupied (CNG, 2022).

There are currently nine Cree communities in Quebec ${ }^{4}$ that are part of the James Bay and Northern Quebec Agreement (see Technical Note 2). Each of these communities is administered independently through its local government (Band Council). Each elected Chief of these Band Councils sits on the Board of Directors of the Grand Council of the Crees (GCC-EI) and on the Board of the Cree Nation Government (CNG), for the purpose of addressing common Cree Nation issues (GCC(EI)/CNG, 2022). The GCC-EI/CNG are chaired by an elected Grand Chief.

The description of the pre-contact period up to the 1970s, briefly presented in this section, is taken from the Toby Morantz's book The White Man's Gonna Getcha: The Colonial Challenge to the Crees in Quebec (Morantz, 2002). The overview of the following period, from 1970 to the present, is taken from the Environmental Impact Statement -Eastmain-1-A Powerhouse and Rupert Diversion (HQP, 2004), and from the websites of the Eeyou Istchee James Bay Regional Government (GREIBJ) and the Cree Nation Government - Eeyou-Istchee (see section 11 References).

### 2.1 PRE-CONTACT TO 1970

Prior to European contact, the Cree were divided into small hunting groups scattered throughout Eeyou Istchee. The earliest recorded occupation of the territory, according to archaeological data, dates back 4,200 years, and is located on the Broadback River near Waskaganish (Izaguirre et al. 2017). Several Cree bands gathered near good fishing sites during the summer. Towards the end of the 17th century, trading posts began to be established along the main navigation routes. Some of these became the summer gathering places for the Cree bands of the region.

In the 1870s, subsistence hunting was still the main economic activity of the Crees, followed by the trade of furs and other products from the Hudson's Bay Company (HBC). The inland Crees ${ }^{5}$ were less present at the coastal trading posts than the coastal Crees who visited several times a year to obtain supplies, but the HBC soon established outposts inland to accommodate the inland Crees and collect the fruits of their trapping activities. Nevertheless, until the beginning of the $20^{\text {th }}$ century, both the coastal and inland Crees lived their lives primarily on the land with little to any outside domination other than their trading activities with the HBC. From 1876 onwards, as was the case with other Indigenous communities in Canada, the Crees were subject to the Indian Act, an assimilative law that allowed the federal government to administer Indian status, First Nations local governments and reserve land management.

In the 1940s, the Crees still had control over their daily subsistence activities, but their room for manoeuvre shrank due to the influence of world markets, the intrusion of non-native inhabitants from the south and the increasing intervention of governments (federal and provincial). However, the vastness of the territory, its isolation from southern Quebec and Canadian society, and the absence of a road network meant that most of the region was spared

[^3]
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the destruction of wildlife by settlement, clear-cutting and mining. During this period, a dramatic decline in the beaver population led to bureaucratic decisions that resulted in the establishment of beaver preserves boundaries and later registered traplines, which more formally and rigidly delineated family hunting territories.

Technological progress, particularly in the fields of transportation and telecommunications during the second half of the 20th century, opened up the territory to southern interests, promoting forestry, mining and hydroelectric development, among other things. Little by little, both the federal and provincial governments imposed their vision of economic and social development on the Cree communities. By the late 1950s, the Crees still saw themselves as subsistence hunters living in a hunter-trapper society, although a series of government measures resulted in an increasing number of families being turned away from life in the bush.

### 2.21970 TO TODAY

In the early 1970s, the Cree population numbered approximately 5,000 people living in six villages. In 50 years, the population has almost quadrupled with three new villages being established and formally recognized (Waswanipi, Nemaska and Ouje-Bougoumou).

Table 2-1 presents the population distribution in the various Cree villages in 1971 and 2021. The data for 1971 is taken from the EM1A-Rupert Preliminary Design Study report (HQP, 2004), and the most recent data is from Statistics Canada (2022).
Table 2-1 Population in Cree communities in 1971 and 2021

| 1971 |  | 2021 |  |
| :---: | :---: | :---: | :---: |
| COMMUNITY | POPULATION | COMMUNITY | POPULATION |
| Great Whale River (Poste-de-la-Baleine) | 329 | Whapmagoostui | 1,022 |
| Fort-George (Chisasibi) | 1,280 | Chisasibi | 4,985 |
| Nouveau-Comptoir | 514 | Wemindji | 1,562 |
| Eastmain | 282 | Eastmain | 924 |
| Fort-Rupert (Rupert House) | 755 | Waskaganish | 2,536 |
| Mistissini | 1,598 | Mistissini | 3,731 |
| Waswanipi | - | Waswanipi | 1,759 ${ }^{\text {a }}$ |
| Nemaska | - | Nemaska | 832 |
| Ouje-Bougoumou | - | Oujé-Bougoumou | 797 |
| TOTAL | 4,758 | TOTAL | 18,148 |
| The data includes all of the enumerated inhabitants of each community, except for Great Whale River, which includes only the Crees (329 out of 1019 inhabitants (HQP, 2004)). <br> a 2016 census figure for Waswanipi. |  |  |  |

Source: Hydro-Québec Production, 2004 and Statistics Canada 2022

It should be noted that in 1971, the members of certain communities were scattered in different places. Those of Waswanipi did not live on the newly created reserve site, but were mainly based in the Waswanipi River area, Matagami, Miquelon, Lebel and Chapais. The Nemaska members, relocated in 1979, lived mainly in Mistissini or Fort Rupert (Waskaganish), and those from Oujé-Bougoumou lived in Mistissini or in the Lac Doré near Chibougamau (HQP, 2004).

The Grand Council of the Crees was established in 1974, following the temporary injunction of the James Bay hydroelectric project ordered by Judge Malouf. In this regard, the Cree Nation Government states on its website: "Since the announcement of the massive James Bay Hydroelectric Project in the early 1970 's, the Cree Nation has been on a remarkable journey toward Indigenous Nation-Building-a journey marked by dramatic struggles, difficult negotiations, and ground-breaking successes." The James Bay and Northern Quebec Agreement (JBNQA) was signed in 1975. It provides political and administrative autonomy for the Cree communities and establishes the land categories (I, II and III) (see Technical Note 2), among other things. The Cree Regional Authority (which became the Cree Nation Government in 2014) was created in 1978 (GCC(EI)/CNG, 2022).

Thus, the completion of the La Grande Complex, the implementation of the James Bay and Northern Quebec Agreement (JBNQA) and the adoption of the Cree-Naskapi (of Quebec) Act (1984) resulted in a series of changes for the Crees. The creation of local and regional administrative bodies allowed them to exercise various powers within the nation and to obtain important levers for economic development (HQP, 2004) ${ }^{6}$.

The JBNQA provided incentives for the continuation of traditional activities on the territory, including the creation of the Cree Hunters and Trappers Income Security Board (CHTISB). This organization administers the Cree Hunters' and Trappers' Income Security Program (ISP) ${ }^{7}$, which aims to promote the maintenance of the traditional lifestyle by guaranteeing an income to those who devote at least 120 days per year to traditional activities on the land (CHTISB, 2021). The rate of enrollment in the program has steadily declined since its inception, reaching a level of stability in recent years. For the past twenty years, Nemaska, Mistissini and Waskaganish are the communities that have the lowest participant rate (between $5 \%$ and $15 \%$ of the population), while Whapmagoostui, Waswanipi and Chisasibi have the highest participation rate (between $15 \%$ and $35 \%$ of the population).

Finally, the Agreement concerning a new Relationship between le Gouvernement du Québec and the Crees of Québec (the "Paix des Braves"), signed in 2002, reaffirmed the JBNQA and defined specific modalities around hydroelectric, mining and forestry activities on the territory, in addition to recognizing the Crees as a Nation with legitimate aspirations of self-determination and autonomy. Through this Agreement, the Crees also agreed in principle to the creation of two powerhouse projects: Eastmain-1 and Eastmain-1-A/Sarcelle/Rupert (the latter subject to a complete Environmental and Social Impact Assessment - ESIA - as defined in Section 22 of the JBNQA). Once construction was completed in 2012, these two projects were grouped under the name: Eastmain-Sarcelle-Rupert Complex (ESR Complex).

## HYDROELECTRIC DEVELOPMENTS AND CREE LAND USE MONITORING BY HYDRO-QUÉBEC

A Cree land use assessment undertaken by Hydro-Québec in the early 2000s (several years after the completion of the La Grande Complex construction) ${ }^{8}$ and continuous monitoring conducted for the Eastmain-1 and Eastmain-1A/Sarcelle/Rupert hydroelectric projects (with data before and after construction) up to 2016, have made it possible to compile certain documented aspects of land use, which are described in the sections below. A complementary literature review and interviews with the tallymen ${ }^{9}$ and other land users of the traplines involved in the present study completed the data on land use (see section 3).

[^4]The La Grande hydroelectric Complex included the construction of eight powerhouses with a total capacity of 15,244 MW and reservoirs on the La Grande, Opinaca and Eastmain Rivers in two successive phases, respectively between 1973 and 1985 and between 1987 and 1996. Thousands of square kilometres of land were flooded following the creation of these reservoirs, including Robert-Bourassa Reservoir, the largest, with a surface area of $2,835 \mathrm{~km}^{2}$. The project also required the total diversion of the Eastmain and Opinaca Rivers, the construction of several control structures, 735 and 315 kV power lines, the construction of the James Bay Highway, now renamed the Billy-Diamond Highway, and the Trans-Taiga Road, as well as multiple access roads to the various structures. The main structures affected land in the communities of Chisasibi, Wemindji, Mistissini and Eastmain.

The Eastmain-1 project saw the construction of the Eastmain-1 powerhouse along the Eastmain River, upstream from the point of diversion. The project created the Eastmain-1 Reservoir ${ }^{10}$ of $603 \mathrm{~km}^{2}$ and retaining structures, flooding traplines in Mistissini, Eastmain and Nemaska, as well as a 315 kV transmission line.

The Eastmain-1-A/Sarcelle/Rupert project resulted in the construction of two additional powerhouses, the Eastmain-1-A Powerhouse (located next to the Eastmain-1 Powerhouse) and the Sarcelle Powerhouse at the outlet of Opinaca Reservoir, as well as the partial diversion of the Rupert River and the creation of two smaller reservoirs, referred to as Diversion Bays, as water flows northwards towards the Eastmain-1 Reservoir (see Figure 1-1). The Rupert River partial diversion was commissioned in November 2009, while Eastmain-1-A and Sarcelle Powerhouses were commissioned in 2011 and 2012 respectively. The project impacted traplines from the communities of Mistissini, Nemaska, Waskaganish, Eastmain, Wemindji and Chisasibi.

The construction of the La Grande and Eastmain-Sarcelle-Rupert Complexes has had a significant impact on the way several Cree families use their territory, particularly through the flooding of territories, changes in access to resources, the relocation of activities and easier access to the territory. Indeed, this project required the construction of a network of permanent roads. In addition to the Billy-Diamond Highway and Trans-Taiga Road, it is important to mention the Muskeg-Eastmain-1 Road (linking Muskeg substation to the Eastmain-1-Nemiscau Road over a distance of 40 km ), and the construction of temporary roads leading to the construction sites. Some of these temporary roads are still used by foot, All-terrain vehicles (ATV) or snowmobile if they are not otherwise accessible. On the other hand, within the framework of these various projects, various measures to mitigate impacts and notably facilitate access to the territory for users were implemented in collaboration with the Crees. For example, camps, goose-hunting ponds, boat ramps, snowmobile and ATV trails have been built. Ice cover charts and navigation charts have also been produced. For a more exhaustive list of recent measures implemented for each community, please refer to the Cree Land Use Follow-up Study 2015-2016 (Consortium Genivar-Waska, 2020a) ${ }^{11}$. The results of various follow-ups were also reviewed when they involved traplines affected by the La Grande Complex or the Eastmain-Sarcelle-Rupert Complex and by La Grande Alliance infrastructure projects.

[^5]
## AgREEMENT ON GOVERNANCE IN THE EEYOU ISTCHEE JAMES BAY TERRITORY

Following the Paix des Braves Agreement, and in an effort to modernize the governance regime and create a joint Cree-Jamesian regional government, the Agreement on Governance in the Eeyou Istchee James Bay Territory was signed by the Crees of Eeyou Istchee and the Government of Quebec in July 2012. The ensuing Eeyou Istchee James Bay Regional Government (EIJBRG) represented a landmark initiative to harmonize relations between the Jamesians (mostly of European descent) and the Cree First Nations in the governance of the territory. It allows both communities to contribute significantly to the prosperity of the territory. Since January 2014, this regional government has replaced the Municipality of James Bay and assumed the latter's jurisdiction over Category III lands (GREIBJ, 2022).

As a result of the Agreement on Governance of the Eeyou Istchee James Bay Territory (Agreement on Cree-Quebec Governance, 2012), the Eeyou Planning Commission (EPC) was established in 2017 by the CNG to undertake the responsibilities related to land and resource planning in Eeyou Itschee. This organization works to build a collective Cree vision of land and resource use for all of Eeyou Istchee and works with regional planning partners to harmonize various land use plans to best reflect the collective vision, interests and aspirations of the Crees. The EPC is composed of ten Commissioners, each appointed by one of the Cree communities. Within the framework of this EPC, consultations conducted with the communities in 2017 and 2018 have brought to light a few topics related to land use. These are mainly the state of the territory, accessibility and costs for access and stays on the territory, and the transmission of traditional knowledge. Other topics included governance, environmental protection, natural resource development and culture (Eeyou Planning Commission, 2022). The specific elements for each community are mentioned in Section 3.

Finally, in 2020, the Government of Quebec, the Cree Nation Government, and the Grand Council of the Crees (Eeyou Istchee) signed the Memorandum of Understanding on the Cree-Quebec Sustainable Infrastructure Development Program, known as "La Grande Alliance," which aims at the long-term economic development of the Municipality of Eeyou Istchee Baie-James (Government of Quebec, 2021).

## 3 IMPACTED CREE COMMUNITIES AND TRAPLINES

The Pre-Feasibility Study is based on information gathered indirectly through existing documentation or directly via interviews with Cree land users ${ }^{12}$ who shared their knowledge and use of their respective territories within the Study Areas. This specific approach of La Grande Alliance to engage with the territory users prior to the design phase is innovative.

This information was then shared with the technical team to develop the proposed infrastructures alignment in respect with the territory (refer to report 3). This innovative approach also includes to re-engage with Cree land users to collect and document their feedback on the proposed technical alignments (refer to report 4).

In cases where the proposed infrastructures are found in areas free of previous development, interviews also served to identify Highly Sensitive Areas (HSAs). HSAs, identified by land users, are locations on traplines where the impacts of any proposed infrastructure raise significant issues, making it preferable to totally avoid them. In the context of La Grande Alliance, HSAs were identified in the following areas:

- Between the La Grande River and Whapmagoostui (including the potential harbour area near Whapmagoostui);
- Between the northern limit of Route 167 and the Trans-Taiga Road.

In fact, the identification of HSAs includes, at a minimum, the Chisasibi, Whapmagoostui and Mistissini traplines which cross the above-mentioned preliminary corridors, i.e., 20 traplines for the La Grande-Whapmagoostui area (Chisasibi and Whapmagoostui traplines) and 11 traplines for the northern extension of Route 167 (Mistissini traplines).

Where areas are considered to be highly sensitive in proximity to existing infrastructure, other designations are used, such as Valued Area or Sensitive Area, for example, depending on the specific uses undertaken in these areas, as these areas have often already been impacted by the construction of the Billy-Diamond Highway in the 1970s.

Special effort was made by the engagement team, with the support of CIOs, to document HSAs with participating land users. A series of specific questions on this subject was added to the questionnaires planned for the interviews in Mistissini, Chisasibi and Whapmagoostui. During these interviews, it was explained that, although no transportation corridor had yet been specified, it was assumed that it could be located anywhere on the trapline, within the study area and that the HSAs had a sufficiently high value that they would be avoided (see the conclusion of Technical Note 3).

The following types of sites could be considered as HSAs, all clearly defined for each Study Area in Technical Notes 3:

- Camps (permanent or temporary);
- Significant water bodies and appropriate buffer zones;
- Important harvesting areas;
- Historic and cultural heritage sites (burial grounds, meeting places, etc.);
- Any other sites deemed important by land users, with relevant details.

WSP kept a record of all the HSAs identified during the discussions, using G.I.S. tools when possible. The list of HSAs was used at many stages of the infrastructure project design. This information remains confidential, with access restricted to the technical team, participating land users, CIOs as well as Client representatives.

[^6]Interviews were carried out in collaboration with La Grande Alliance Community Information Officers (CIO). The interview grids, survey protocol and consent forms were first presented to the CIOs, who had the opportunity to suggest modifications prior to interviews. The CIOs also arranged meetings with the Tallymen whose land was included into the Study Area, according to the list provided to them. Tallymen were invited to bring along family members, other land users or any other guests as they saw fit. The CIO invited the Tallyman and informed him that he could be accompanied by family members or guests if he wished. The interviews were conducted by a team consisting of an anthropologist and a Cree interviewer. Where previous land use studies were available, the Tallyman of the trapline concerned was asked to use and update this data. The interviews were conducted in English and Cree. The Cree interviewer's main role was to ask the questions in Cree and to translate the answers to the anthropologists for their note-taking, which was done in English. Interviews were audio recorded with permission from the interviewees, where appropriate, and georeferenced data was plotted on maps during the interview ${ }^{13}$.

The CIOs are responsible for liaising between their community members and the pre-feasibility study team. They have access to a registry of comments, concerns and suggestions that allows them to enter new information or requests from land users and other members of their community at any time. This registry is regularly consulted by the members responsible for the Pre-Feasibility Study.

The sections below present, by community, the past and present land use, the Study Area for specific projects by trapline and the interviews conducted as part of this study. It is to note that the sections "History" and "Contemporary use of the (community) territory" are based on existing reports or documents and on information found on the communities Websites.

As shown on Figure 1-1, the distribution of communities within the study area and impacted by the proposed infrastructure is as follows:

- Study Area 1 (SA1) Billy-Diamond Highway Railway - Rupert - La Grande
- Waskaganish, Nemaska (one (1) trapline), Eastmain, Wemindji and Chisasibi
- Study Area 2 (SA2) Road \& Rail Extension, and Harbour - La Grande - Whapmagoostui/Kuujjuarapik
- Chisasibi and Whapmagoostui
- Study Area 3 (SA3) Route 167 - Renard Mine - Trans-Taiga Road.
- Mistissini and Chisasibi (one (1) trapline)


### 3.1 WASKAGANISH

The community of Waskaganish is located at the mouth of the Rupert River. In March 2022, the First Nation had 2,895 registered members, 2,297 of whom lived in Waskaganish (CIRNAC, 2021). The community's territory consists of 36 traplines located along the banks and at the confluence of the Nottaway, Broadback, Rupert and Pontax Rivers (see Figure 3-1).

Since 2001, Waskaganish has been accessible via a 100 km road that connects to the Billy-Diamond Highway (formerly known as the James Bay Highway). This road has made major urban centres in Southern Quebec and Ontario, as well as several traplines, accessible by vehicle to Waskaganish residents. The closest Cree community by road is Nemaska ( 260 km to the east). The community of Eastmain is the closest by water and air. It is located approximately 90 km north by plane. Waskaganish is approximately 590 km by road from the city of Val-d'Or.

[^7]In this section, a brief history of land use by the members of the Waskaganish First Nation is presented, along with an overview of contemporary land use. The Study Area is then described, by trapline, followed by a summary of the engagement activities held as part of this study. The results of these engagement activities are presented in Section 6

- Preliminary Data and Issues by Project.

For information on the social and economic aspects of the Waskaganish First Nation, the reader may refer to the market study report (VEI, 2022).

### 3.1.1 HISTORY

According to recent excavations at the Sanders Pond site located on the Broadback River approximately 30 km southeast of Waskaganish, the earliest evidence of human presence dates back 4,200 years (Izaguirre et al. 2017). The current wildlife-rich site where the community of Waskaganish is located was frequented by hunting groups throughout the year and was a summer meeting place for bands. Europeans first arrived in 1668, when the Hudson's Bay Company established its first trading post. They founded Fort Charles, which over the years became Fort Rupert, Rupert House, and then Waskaganish, which means little house in reference to the trading post. Waskaganish is an important historic site today, as it is the oldest Cree community in James Bay and the cradle of the British fur trade to Western Canada (CNW, 2022).

According to the Cree Nation of Waskaganish website, the dawn of the $20^{\text {th }}$ century marked a difficult period for this community. In addition to the epidemics that created havoc, starvation affected both the community and scattered hunting camps. This is believed to be linked to a weak natural cycle of the main species trapped and hunted. In addition, various factors, including the introduction of modern rifles (in opposition to muskets) in 1903 by the Révillon frères company, increased the pressure on the beaver. The harsh winters and the decrease in the number of fur-bearing animals pushed families to settle near the trading post. The creation of beaver preserves inspired by the Cree land management model was an initiative created in Waskaganish in 1932. It was successful and was later extended to other communities (CNW, 2022).

Rupert House was one of the most important trading posts along eastern James Bay and employed Crees to lead canoe brigades (a group of several dozen canoes used to transport furs and supplies between trading posts), to maintain winter roads to Nemiskau Post and to work at the canoe factory established in the community in 1923. The latter remained a source of employment until the 1960s and nearly 900 canoes have been built since its creation. After the Second World War, the federal government and the Anglican mission invested in local infrastructure and community expansion (housing, school, church, community hall and freezer). The first federally elected leader was Frank Moar in 1947. With the decline in worldwide interest in fur and a drop in the population of trapped species, the Crees have turned more to wage employment and some parts of the territory have become less travelled (CNW 2022). Also, from the 1930s and 1940s onwards, children were sent to different residential schools in Ontario and Quebec, sometimes followed by one or both of their parents (when sent to Moosonee for instance), with all the consequences on the loss of the traditional way of life and its transmission to their generation and the ones to come (Morantz, 2002).

### 3.1.2 CONTEMPORARY USE OF THE WASKAGANISH TERRITORY

Land use remains an important aspect of the Cree Nation of Waskaganish identity and way of life. Fishing, trapping and hunting still contributes to the local subsistence economy and remains an expression of cultural and spiritual values (CNW, 2022).

In 1999, the community was connected by land to the Billy-Diamond Highway with the construction of the Waskaganish access road. This road has naturally democratized travel for the community's inhabitants to other communities and to the south, as travel by vehicle is less expensive than by plane. The access to the traplines located along this road has also been facilitated. However, this ease of access is often combined with increased health and social issues.

In 2009, the partial diversion of the Rupert River, which borders the community and runs along eight Waskaganish traplines (R04, R05, R11, R12 and R13 on the north shore, and N09, N02 and N01 on the south shore), was a major milestone in the lives of the Waskaganish Crees. This component of the Eastmain-Sarcelle-Rupert Complex has had various impacts on the activities and lives of the Crees of Waskaganish. Although the economic and entrepreneurial aspects have been positively affected with the development of jobs and Cree businesses that participated in the construction work and environmental monitoring, cultural, social, and economic repercussions that are sometimes positive, sometimes negative, have been noted in the impact studies.

In terms of land use in particular, new access points have been built, especially for access to structures and as part of mitigation measures. These accesses make it easier for the Crees to reach various parts of the territory and the Rupert River, although the latter is sometimes less attractive than it was before the diversion in terms of navigability and resource harvesting. ${ }^{14}$ Nevertheless, the river is now used by a greater number of Waskaganish members who have access to areas previously only used by experienced trapline users. As a result, activities on the territory have continued to grow and gain in popularity. All indications are that this trend should continue with population growth combined with the growing popularity of land based activities, albeit for shorter durations than in the past (see below for more details).

Traditional activities such as hunting, fishing, trapping, collecting certain plants and various ceremonies remain at the heart of the identity and values of the Waskaganish Crees. Community sites continue to be occupied and used by community members, for gatherings as well as hunting, fishing and trapping activities, such as the estuary, throughout the year, and the Smokey Hill Rapids on the Rupert River, every fall.

It should be noted that, for the year 2019-2020, 233 members of Waskaganish (169 adults and 64 children) were enrolled in the Cree Hunters and Trappers Income Security Program, accounting for $8 \%$ of the population. Five years earlier (2014-2015) this number was slightly higher, with 242 enrollees ( 171 adults and 71 children), accounting for $9 \%$ of the population receiving income for days spent on the land (CHTISB, 2021).

Over the years and with the development of roads, land use patterns have changed. Outings on the land have often become shorter, but more frequent, and concerns related to climate change are more and more present. The Climate Change Adaptation Action Plan proposed in 2018 by the community of Waskaganish indicates that members are concerned about the preservation of their lifestyle, safety, health, culture and environment in relation to the observations they make on the territory and in their community (CNW and CNG, 2018). As an example, for hunting and fishing activities, the Action Plan proposes monitoring priority species, animal behaviour, and the presence of parasites. It also suggests adapting hunting and fishing activities accordingly (period, quantity, species and harvesting technique). Monitoring of other indicators such as fish populations, ice and snow cover, drought and precipitation periods is also addressed. The priorities identified are as follows:

- Climate change awareness;
- Cultural preservation;
- Food safety;
- Safe travel;
- Emergency planning.

According to the plan, knowledge exchange between youth and elders needs to be encouraged, and that the crosscutting issue of climate change needs to be addressed in a collaborative manner with the business sector and community members. The ability to continue the traditional way of life and activities in the territory is a concern that also emerges from the Eeyou Planning Commission (EPC) report, in relation to the intergenerational transmission of culture to younger people and the impacts of development projects on the territory (EPC Waskaganish, 2017).

[^8]
### 3.1.3 STUDY AREA

The Study Area for the proposed railway corridor from Rupert to La Grande along the Billy-Diamond Highway includes eight traplines in Waskaganish (see Figure 3-1). Note that on the map, the Study Area also includes two traplines south of the Rupert River (N01 and N02). However, this area is part of the Study Area for Phase I of La Grande Alliance, and the users of these traplines were interviewed as part of the latter.
Traplines are generally used by the Tallymen and their family members, or by other community members. Camps are mainly located along road accesses and along rivers or lakes. The following traplines are included into the Study Area:

- R01A: This area is approximately 75 km long and runs on a northeast-southwest axis. The northeastern half is within the Study Area, and the Billy-Diamond Highway runs through its eastern sector. This area also contains an active borrow pit;
- R06: Trapline R6 is one of the smallest traplines in Waskaganish ( $270 \mathrm{~km}^{2}$ ). The western part of the Study Area touches on a small area of this trapline (about $47 \mathrm{~km}^{2}$ ). Its eastern border is located 17 km from the BillyDiamond Highway;
- R07: Trapline R7 is spread out over nearly 70 km along a northeast-southwest axis, in line with the Pontax River that runs through it. The northeast half of the trapline is within the Study Area, and the Billy-Diamond Highway follows the eastern boundary of the trapline;
- R08: Trapline R8 is intersected by the Billy-Diamond Highway to the west. The Enistuwach River flows through the entire trapline, which extends approximately 65 km on a northeast/southwest axis and lies almost entirely within the Study Area;
- R09: The Billy-Diamond Highway runs through the western end of trapline R9. The Pontax River runs through the entire trapline;
- R12: Trapline R12 is bordered on the south by the Rupert River. Except for the western section of the trapline, it lies almost entirely within the Study Area. The eastern limit of the trapline is about 5 to 10 km away from the Billy-Diamond Highway;
- R13: Trapline R13 is crossed by the Billy-Diamond Highway to the west and by the Route du Nord to the north. The Rupert River borders the southern part of the trapline. The entire trapline ( $544 \mathrm{~km}^{2}$ ) lies within the Study Area;
- R14: Trapline R14, counting with several lakes, is entirely within the Study Area ( $544 \mathrm{~km}^{2}$ ). The BillyDiamond Highway runs through its centre.


### 3.1.4 ENGAGEMENT ACTIVITIES

In Waskaganish, the first round of interviews was held in November 2021. Six semi-structured interviews were conducted with the main users of the traplines in the Study Area. The main users of traplines R01A, R08, R09, R12, R13 and R14 were interviewed. In June 2022, the Tallymen of traplines R06 and R07 were also interviewed.

Validation of the interview data was conducted in September 2022. Section 6 presents the results of these.
The tallymen agreed to update the data from the previous land use studies that were available for R12 and R13.
It should also be noted that all members of the community were invited to attend the public presentation of La Grande Alliance's projects at the Annual General Assembly (AGA) in September 2022. In addition, various discussion groups were held in Waskaganish. The results of these engagement activities, when related to land use, are also presented in section 6 of this Technical Note.

## TECHNICAL NOTE 3 - LAND USE



Figure 3-1 Waskaganish Study Area

### 3.2 NEMASKA

Nemaska (where fish is plentiful) is one of the inland Cree communities and is located on the shores of Champion Lake. As of March 2022, the First Nation had 848 members, 772 of whom lived in Nemaska (CIRNAC, 2021). The Nemaska territory consists of 15 traplines located mainly east of the Billy-Diamond Highway and south of the Paix des Braves Reservoir (formerly named Eastmain-1 Reservoir) (see Figure 1-1). The village of Nemaska is located approximately 80 km east of the Billy-Diamond Highway as the crow flies, or about 120 km by the Route du Nord. The closest community by road is Waskaganish ( 260 km to the west). Nemaska is also connected to Chibougamau by the Route du Nord and to Matagami by the Billy-Diamond Highway. Val-d'Or is located south of Nemaska, over 410 km away as the crow flies.

This section presents a brief history of land use by Nemaska First Nation members, as well as an overview of contemporary land use. The Study Area is then described, by trapline, followed by a summary of the interviews held as part of this study. The results of the engagement activities conducted as part of La Grande Alliance study are presented in Section 6 - Preliminary Data and Issues by Project.

For information on the social and economic aspects of the Nemaska First Nation, the reader may refer to the market study report (VEI, 2022).

### 3.2.1 HISTORY

The Nemaska First Nation website indicates that the Nemaskau Eenouch have occupied Lake Nemiscau (Nemaskau Sagaheegan) since time immemorial. Petroglyphs on the shores of the lake show a very ancient presence well before the arrival of missionaries and fur traders. The latter reached the settlement on the shores of Lake Nemiscau around 1663, and a Jesuit priest in 1672. The first trading post was established during this decade and various trading companies followed (Northwest Company, Réveillon et Frères, Hudson's Bay Company), at Old Nemaska itself or elsewhere along the lake. The first houses were provided by the Department of Indian Affairs in the 1950s. As for the other Cree communities, from the 1930s and 1940s on, the children were sent to different residential schools in Ontario and Quebec with all the consequences on the traditional way of life and its transmission this implied for this generation and the ones to come.

The last trading post established in Old Nemaska, the Hudson's Bay Company, closed its doors in 1970, shortly after the Nemaskau Eenouch were informed that the construction of a hydroelectric development would flood the lake shore and the village, and that they would therefore have to leave. They left their village and were relocated to Mistissini and Waskaganish. Seven years later, the Nemaskau Eenouch decided to gather at Champion Lake (Doethawagen) to discuss the establishment of a new village, which was made possible following the signing of the JBNQA. The relocation site was suggested by the elders. The Nemaskau Eenouch therefore built a new village while preserving their way of life in relation to the territory (CNN, 2022). The Old Nemaska site is still very popular with the community members, who gather there every summer.

### 3.2.2 Contemporary Use of the Nemaska Territory

The construction of the Eastmain-1 Powerhouse and Reservoir took place from 2002 to 2007 and mainly affected traplines in the communities of Eastmain and Mistissini, but also a few traplines in the community of Nemaska, where one trapline was partially flooded, but mainly because of the access road to the construction site and the workers' camp. The workers were transported via the Nemiscau airport. This project had economic benefits for members of Nemaska who worked on it, but some tallymen whose territory was close to the new roads observed an increase in the number of hunters and sport fishermen on their territories.

In 2009, the partial diversion of the Rupert River along eight Nemaska traplines (R16, R17, R18, R21 on the north shore, and $\mathrm{N} 23, \mathrm{~N} 24, \mathrm{~N} 24 \mathrm{~A}$ and N 25 on the south shore) was a major milestone in the lives of the Nemaska Crees. Lake Nemiscau, on the shores of which Old Nemaska is located, was also affected, since it lies on the course of the Rupert River. The river diversion is a component of the Eastmain-Sarcelle-Rupert Complex, as is the creation of the Rupert diversion bays, which flooded areas on Nemaska traplines N25, R21 and R19. The Eastmain-Sarcelle-Rupert Complex has had various impacts on the activities and lives of the Nemaska Crees. As in the case of Waskaganish, although the economic and entrepreneurial aspects were positively affected with the development of jobs and Cree businesses that participated in the construction work and environmental monitoring, cultural, social and economic repercussions that were sometimes positive and sometimes negative were noted in the impact studies.

The Nemaska community territory is very rich in lithium, which attracts several mining prospectors to the region. There are several potential lithium mining projects in the territory, including Nemaska Lithium, which has been formally approved but which has been suspended due to the drop in the price of lithium as well as administration and financing issues. Nevertheless, mining activities are one of the main sources of concern for the users of the territories affected by this reality.

In the wake of all these projects, and more specifically with regard to land use, new accesses have been built to access the hydraulic structures build along the Rupert River or as part of mitigation measures related to the EM-1-A project. These accesses make it easier for the Crees to reach various parts of the territory and the Rupert River, although the latter is sometimes less attractive than it was before the diversion in terms of navigability and resource harvesting ${ }^{17}$ However, the river is now used by a greater number of Nemaska members. They have access to areas that were once reserved for active trapline users, and new camps have been built, often along the access roads or the river. As a result, activities on the territory have continued to grow and gain in popularity. It is likely that this trend will continue in light of the demographics that show population growth combined with a growing interest for traditional activities within the population.

Traditional activities such as hunting, fishing, trapping, gathering certain plants, and holding ceremonies remain at the heart of the identity and values of the Nemaska Crees. The main communal site is Old Nemaska, which is used year-round, but more intensively in summer. Many camps are built there. Fishing (especially sturgeon), hunting (geese, ducks, moose) and trapping are practiced by many community members.
It should be noted that for 2019-2020, 43 Nemaska members ( 38 adults and 5 children) were enrolled in the Cree Hunter and Trapper Income Security Program, or 5\% of the population (CHTISB, 2021). Five years earlier (20142015) this number was nearly identical ( 41 enrolled, including 36 adults and 5 children), or $5 \%$ of the population receiving income for days spent on the land (CHTISB, 2016).

As is the case for most other Cree communities, over the years, and with the development of roads, there has been a change in the way the territory is used. Trips to the territory are now often shorter, but more frequent. However, concerns related to climate change are increasingly present, particularly for snowmobile travel. In addition, as indicated by the Eeyou Planning Commission (EPC Nemaska, 2017), a major concern raised by Nemaska members is the presence of non-natives and developers on the territory, and the impacts they are having on wildlife, the territory and Cree activities. Underlying these concerns is a desire to reassert control over the territory so that impacts are minimized.

[^9]
### 3.2.3 STUDY AREA

Trapline R17 is included into the proposed railway corridor Study Area from Rupert to La Grande (Phase II of La Grande Alliance) - (see Figure 3-2). It should be noted that trapline N23 on the south bank of the Rupert River is also included into the railway Study Area, but users were interviewed as part of Phase I of the project (extension of the Matagami River railway to km 257 ).

- R17: The trapline is bordered on the south by the Rupert River. The Route du Nord crosses the northern section of the trapline, and a road leads to Lake Nemiscau. The Study Area covers the western portion of the trapline, and the proposed railroad alignments do not touch trapline R17.


### 3.2.4 ENGAGEMENT ACTIVITIES

The former Tallyman of trapline R17, who is the father of the current Tallyman, was interviewed in November 2021. He agreed to update the data from previous land use studies that were available.

Section 6 presents the engagement activities results.
It should be noted that all community members have been invited to participate in the public presentation of La Grande Alliance projects (Phases I, II and III) in June 2022. The results of the Nemaska engagement activities will be available in the Phase I socio-environmental report since this community was more directly concerned by this Phase of the La Grande Alliance.

## TECHNICAL NOTE 3 - LAND USE



Figure 3-2 Nemaska Study Area

### 3.3 EASTMAIN

Eastmain, or Wapanoutauw in Cree (land east of James Bay), is one of the five communities located along the James Bay coast. It is located on the south shore of the Eastmain River Mouth (see Figure 1-1). As of April 2022, the First Nation had 950 members. Of these, the vast majority, or 837 people, lived in Eastmain (RCAADNC, 2021). The Eastmain territory consists of 15 traplines located on either side of the river. This territory includes a large part of Opinaca Reservoir and Paix des Braves Reservoir, which were flooded in 1980 and 2006 respectively (HQ, 2006).

The community can be accessed by the Eastmain Road from the Billy-Diamond Highway. The closest community reachable by land is Nemaska, some 300 km away, while Waskaganish and Wemindji are 318 km and 357 km away respectively. By air or by boat, these two communities are roughly the same distance, less than 100 km from Eastmain.

This section presents a brief history of land use by the members of the Eastmain First Nation as well as an overview of contemporary land use. The Study Area is then described, by trapline, followed by a summary of the interviews held as part of this study. The results of the engagement activities conducted as part of La Grande Alliance study are presented in Section 6 - Preliminary Data and Issues by Project.

For information on the social and economic aspects of the Eastmain First Nation, the reader may refer to the market study report (VEI, 2022).

### 3.3.1 HISTORY

Eastmain is located on the site of the Hudson's Bay Company's first permanent trading post, the East Main House. Traditionally, Indigenous people met here to trade caribou skins for birch bark used to make canoes. The first trading post was established in 1690 and, after being moved a few times, it was permanently established on the coast in 1723 (EIJBRG, 2022).

According to the to the Cree Nation of Eastmain website, the first contacts between the Crees and the Europeans probably took place in 1610, during the explorations of Henry Hudson. The creation of the Hudson's Bay Company followed, and the company has maintained its presence in Eastmain until recently. The community of Eastmain was established in the early $18^{\text {th }}$ century, although the land was not reserved for Cree use until 1962 under the Lands and Forests Act (CNE, 2021). The Crees of Eastmain maintained an economy based on the traditional activities and the fur trade system up to the second half of the $20^{e}$ century. As was the case for the other Cree communities, from the 1930s and 1940s onwards, children were sent to different residential schools in Ontario and Quebec with all the consequences on the loss of the traditional way of life and its transmission for their generation and the ones to come.

With the development of the La Grande Complex in the late 1970s, over $90 \%$ of the course of the Eastmain and Opinaca Rivers was diverted into Sakami Lake, thereby significantly drying these rivers and causing considerable impacts on community members. The Opinaca and Eastmain Rivers and their tributaries have been used as navigation routes for centuries as well as important hunting, fishing and trapping grounds. They are an important part of the history and culture of the Crees of Eastmain, and the diversions caused a significant disruption of traditional land use along these waterbodies. Subsequent phases of the hydroelectric projects resulted in the flooding of a section of the Eastmain River further upriver from the original point of diversion to create the Eastmain-1 Reservoir, which became the Paix des Braves Reservoir (refer to Figure 3-3). These developments and related works including road development have also significantly impacted the territory, its resources, and the Cree's modes of transportation (EPC Eastmain, 2017).

In 1994, the access road to the community was built from the Billy-Diamond Highway. Prior to this date, access was by plane, boat or snowmobile on winter roads. This road access has naturally democratized the travel of the community's inhabitants to other communities and to the south, as travel by vehicle is less expensive than by plane. The access to the traplines located along this road has also been facilitated. However, this ease of access is often combined with increased health and social issues.

### 3.3.2 CONTEMPORARY USE OF THE EASTMAIN TERRITORY

As mentioned in the Eastmain Eeyou Planning Commission (EPC) report, land use continues to be very important for Eastmain members. This includes hunting with family and friends, summer gatherings and sharing meat with relatives and community members. In Eastmain, the Crees especially enjoy spending time on the bay, coastal islands and lakes for traditional activities. They enjoy being able to share these moments with elders and younger people (EPC Eastmain, 2017).

Since 2002, the eastern part of the Eastmain territory has been affected by the construction of Eastmain-1 Powerhouse, now called Bernard-Landry Powerhouses, and by the flooding of the Paix des Braves Reservoir (Eastmain-1) in 2006. Traplines VC34, VC35, VC37 and RE01 were particularly affected by the flooding of water bodies and the construction of the transmission line. These same lands saw further changes a few years later with the development of EM1A-Sarcelle-Rupert project. Users of affected lands continued to use them by adapting their activities on the territory. ${ }^{18}$ The ESR Complex therefore had various impacts on the activities and lives of the Crees of certain Eastmain families. As has been the case for the other communities affected by the ESR Complex, although the economic and entrepreneurial plan was positively affected with the development of jobs and Cree businesses that participated in the construction work and environmental monitoring, cultural, social and economic repercussions that were sometimes positive and sometimes negative were noted in the impact studies.

Regarding land use, new accesses have been created over time, particularly from the Billy-Diamond Highway, north of the Eastmain River, facilitating the use of various areas, mainly on traplines RE01 and VC35, and promoting the construction of a few camps. However, some areas, particularly along the borders of the reservoirs, are less and less frequented, mainly due to difficulties in travelling on the ice, due to conditions becoming more uncertain as a result of the water-level regulations in the reservoirs and higher flows induced by the Rupert River partial diversion, both exacerbated by climate change. These variations also have an impact on feeding grounds or habitats suitable for certain species such as geese and beavers. Thus, since most of the major rivers between the Rupert and La Grande Rivers that formerly provided access to the inland have been affected by hydroelectric developments, other areas are now preferred by land users. Land use often now concentrates near roads and other access, most notably on or near the Billy-Diamond Highway.

According to the consultation conducted in Eastmain by the EPC in 2017-2018, the use of the territory by community members is subject to certain issues and concerns. These focus mainly on environmental impacts of industrial developments (as hydroelectricity and mining), difficulties in securing access to the territory, and problems of over-hunting, waste dumping and pollution. In addition to the issues related to hydroelectric developments, Eastmain members expressed concerns about mineral resource development and environmental pollution, among other things. Land use is also constrained, according to them, by:

- Increased presence of non-Cree hunters and fishermen;
- The consequences of significantly large forest fires ${ }^{19}$, affecting several traplines and greatly reducing the available habitat for wildlife;
- Poor waste management practices related to hydroelectric development or mining exploration, as well as from non-Cree hunters and Crees members (at bush camps or in the community), which can negatively affect the territory;
- Overexploitation of resources (hunting and fishing) and non-compliance with codes of conduct, which undermines resource conservation;
- The weakening of the recognition of the trapline system due to non-compliance with existing rules (which in turn affect wildlife), made worse by population growth;

[^10]- Difficulties accessing hunting areas and constraints limiting time spent on the land such as costs, family and work obligations, or the family not having access to a trapline (EPC Eastmain, 2017).

The members of Eastmain have considered several possible solutions to improve the use of the territory. The Eastmain Crees' vision for the future of their community and the territory includes improving environmental management, monitoring, and protection, reducing overexploitation (overhunting and overfishing), maintaining and improving access to the territory and the ability to make a living from it, promoting Cree development and establishing a new community cultural site.

Finally, for 2019-2020, 81 Eastmain members (61 adults and 20 children) were enrolled in the Cree Hunter and Trapper Income Security Program, or $9 \%$ of the population, and received income for days spent on the land (CHTISB, 2021). Five years earlier (2014-2015) this number was about the same ( 79 enrolled, including 64 adults and 15 children) and represented $10 \%$ of the population at the time (CHTISB, 2016).

### 3.3.3 STUDY AREA

The Study Area for the proposed railway corridor from Rupert to La Grande (Phase II of La Grande Alliance) (see Figure 3-3) includes traplines RE02, RE3, VC30, VC33 and, to a lesser extent, RE01, RE04, RE05, VC35 and VC15. These traplines range in size from $63 \mathrm{~km}^{2}$ to $94 \mathrm{~km}^{2}$ within the Study Area.

Land users along Billy-Diamond Highway (RE02, RE03, VC30 and VC33) extensively use the road to access various activity areas. The traplines included into the Study Area are the following:

- RE01: The Study Area touches a small portion to the west of this trapline, which is bordered on the north by the Paix des Braves Reservoir. The land is therefore crossed by the roads that run along the reservoir;
- RE02: The trapline is bordered on the north by the Eastmain River. The KM 381 truck stop and the James Bay Lithium (Galaxy) mining project are also located on this trapline, on either side of the Billy-Diamond Highway. The trapline is almost entirely within the Study Area;
- RE03: A significant portion of this trapline is located within the Study Area where it is crossed by the Eastmain Road and the Billy-Diamond Highway.
- RE04: The Study Area touches a small portion to the east of this trapline that extends westward to the edge of James Bay. The Eastmain Road crosses the northern part of the trapline and the Billy-Diamond Highway is located 15 km east of the trapline. It should be noted that the portion of the trapline that lies within the Study Area is a Protected Area;
- RE05: The Study Area touches a small portion east of this trapline that extends west to the edge of James Bay. The Billy-Diamond Highway is located 12 km east of the trapline;
- VC15: The Study Area touches a small portion east of this trapline that extends west to the edge of James Bay. The Billy-Diamond Highway is located 11 km east of the trapline. Note that the entire trapline is in a Protected Area;
- VC30: The trapline extends from James Bay to the Billy-Diamond Highway. Only a small portion of the VC30 is in the Study Area, the eastern end where the Billy-Diamond Highway passes, less than 2 km ;
- VC33: The Study Area covers a large portion of trapline VC33. It is bordered on the south by the Eastmain River and the Billy-Diamond Highway crosses its eastern section;
- VC35: A small portion of this tralpine is located in the Study Area. The central part of this trapline was flooded when Opinaca Reservoir was created in the 1980s, and the eastern part has become more difficult to reach. The western boundary of the trapline is located approximately 6 km from the Billy-Diamond Highway.


### 3.3.4 ENGAGEMENT ACTIVITIES

Four semi-structured interviews were held in Eastmain in June 2022 with the main users of the traplines in the Study Area, i.e., RE02, RE03, VC30 and VC33. The validation of the interview data was conducted with users of trapline RE02 and VC30 in August 2022, and Section 6 presents the results of these engagement activities.
Other traplines are touched by the Study Area, but in smaller areas (less than $100 \mathrm{~km}^{2}$ per trapline). Users interviewed during the validation interviews were asked to comment on the alignment.

It should be noted that all members of the community were invited to participate in the public presentation of La Grande Alliance's projects at the AGA in September 2022, and various discussion groups were held in Eastmain. Where they relate to land use, the results of these engagement activities are also presented in section 6 of this Technical Note.

## TECHNICAL NOTE 3 - LAND USE



Figure 3-3 Eastmain Study Area

### 3.4 WEMINDJI

Wemindji is located at the mouth of the Maquatua River, which flows into James Bay (see Figure 1-1). The name Wemindji (which can mean red ochre mountain, painted mountain, or bright red, according to various sources) comes from the ochre found in the hills, used to make paint. In May 2022, the First Nation had 1,648 registered members, the vast majority of whom $(1,455)$ lived in Wemindji (CIRNAC, 2021). The Wemindji territory consists of 21 traplines. It includes Lakes Boyd and Sakami, which were affected by hydroelectric development in 1980 (Phase I of the La Grande Complex).

The community can be accessed from the Billy-Diamond Highway via the access road built in early 1990s. The closest community by road is Radisson, 203 km away. By air or water, the communities of Eastmain (to the south) and Chisasibi (to the north) are both approximately 100 km away as the crow flies, but 366 km and 264 km respectively by road.

This section presents a brief history of land use by the members of the Wemindji First Nation, as well as an overview of contemporary land use. The Study Area is then described, by trapline, followed by a summary of the interviews held as part of this study. The results of the engagement activities conducted as part of La Grande Alliance study are presented in Section 6 - Preliminary Data and Issues by Project.

For information on the social and economic aspects of the Wemindji First Nation, the reader may refer to the market study report (VEI, 2022).

### 3.4.1 HISTORY

Wemindji, formerly known as Paint Hills, Old Factory or Vieux-Comptoir was, until 1959, established on an island at the mouth of the Vieux-Comptoir River, about 45 km from the present location of the village. The North West Company opened a trading post there in 1686, before the Hudson's Bay Company took over in the late 18th century. Its trading posts operated there until the 1960s (Histoire du Québec, 2019b).

According to research conducted in 1941, 195 inhabitants lived at Vieux-Comptoir (Old Factory), mainly from hunting and trapping. "This community was formed by a number of families from Eastmain and Fort George who had settled on the Vieux-Comptoir River in 1930. They arrived in Wemindji in 1959 after abandoning the VieuxComptoir post located about 45 km to the south. Wemindji was erected as a Cree village municipality on July 19, 1978". (Blondeau, 2009) Wemindji strives to keep the memory of the historic Old Factory site alive where annual gatherings are held (EPC Wemindji, 2017).

The Crees of Wemindji maintained an economy based on the traditional activities and the fur trade system up to the second half of the $20^{\mathrm{e}}$ century. As was the case for the other Cree communities, from the 1930s and 1940s onwards, children were sent to different residential schools in Ontario and Quebec with the dramatic consequences on the practice and transfer of traditional way of life in the families and the intergenerational individual and collective traumas.

In the late 1970s, the development of the La Grande Complex affected some Wemindji traplines. The creation of Opinaca Reservoir, the construction of La Sarcelle control structure and the change in water levels in Lakes Boyd and Sakami caused by the operation of the hydroelectric development modified the availability and quality of resources as well as the travelling on the territory, in particular on those waterbodies. The subsequent developments, most notably the construction of the Sarcelle Powerhouse and the partial diversion of the Rupert River into the existing complex have further amplified these impacts. The effects of climate change have created additional challenges, forcing users to find new ways of adaptation ${ }^{20}$.

[^11]Since 1995, Wemindji is connected with the Billy-Diamond Highway, with both positive and negative impacts. This road access has naturally democratized travel for the community's inhabitants to other communities and to the south, as travel by vehicle is less expensive than by plane. Access to the traplines located along this road has also been facilitated. However, this ease of access is often combined with increased health and social issues.

### 3.4.2 CONTEMPORARY USE OF THE WEMINDJI TERRITORY

As with other Cree communities, Wemindji remains deeply attached to the territory and many continue to visit it regularly. As mentioned in the Wemindji Eeyou Planning Commission (EPC) report, the most important thing in this regard for the community members is to be able to continue to hunt, trap, fish and be on the territory. In order to do so, the sharing of knowledge is essential, as is the quality of the environment. In addition, according to the results of the EPC, respect for animals and protection of the water are essential and important elements to consider. Respondents do not consider themselves anti-development, but it must be done within the framework established by the values and practices related to the territory and with an inclusive approach (EPC Wemindji, 2017).

In addition to hydroelectric developments, Wemindji has seen the development of mining activities on its territory, most notably the Éléonore underground gold mine, located on the eastern shores of the Opinaca Reservoir. During the consultation carried out within the framework of the EPC, the Wemindji community-members described their concerns in relation to the impacts of industrial development, particularly the mining exploration activity and mining projects whose activities are initiated prior to all necessary studies being completed. Cree management of the territory is not always respected by development project proponents. On the other hand, it seems that the customary monitoring of hunting and fishing is now insufficient to evaluate the current pressure on wildlife resources. For example, many respondents felt that the various fishing derbies on their territory have led to overfishing by fellow community-members. The customary way of managing such problems, such as allowing time for animals to rest and regenerate should be pursued (EPC Wemindji, 2017).
For the Wemindji community, the Maquatua River estuary, located in front of the community, is heavily used by community members for various activities. The Billy-Diamond Highway and Trans-Taiga Road are also important corridors used to access traplines, including neighbouring areas for which no other road access exists.

In 2019-2020, 149 Wemindji members ( 139 adults and 10 children) were enrolled in the Cree Hunter and Trapper Income Security Program, representing 9\% of the population, and received income for days spent on the land (CHTISB, 2021). Five years earlier (2014-2015) this number was slightly higher ( 147 enrolled, including 134 adults and 13 children), representing $10 \%$ of the population (CHTISB, 2016).

### 3.4.3 STUDY AREA

Traplines VC12, VC13, VC16, VC17, VC18, VC19, VC20, VC23, and to a lesser extent VC14 and VC22 are included into the Study Area of the proposed railway corridor from Rupert to La Grande (Phase II of La Grande Alliance) (see Figure 3-4). Most of Wemindji's land in the Study Area is crossed by the Billy-Diamond Highway (VC12, VC13, VC16, VC17, VC18, VC19 and VC23), and its users use it to access various activity areas.

- VC12: The trapline extends from James Bay to east of the Billy-Diamond Highway in the Study Area;
- VC13: The trapline extends from James Bay to east of the Billy-Diamond Highway in the Study Area. Note that the trapline is almost entirely located into a Protected Area;
- VC14: The western part of the Study Area touches a small area of the trapline ( $219 \mathrm{~km}^{2}$ ). Lac du Vieux Comptoir is located in the easternmost part of the trapline. The entire trapline is into a Protected Area;
- VC16: The trapline, which includes Yasinski Lake, crosses the Study Area. The Billy-Diamond Highway runs through the eastern portion of the Study Area;
- VC17: The trapline extends from James Bay to east of the Billy-Diamond Highway in the Study Area. The portion west of the Billy-Diamond Highway is entirely within a Protected Area;
- VC18: This trapline is located within the Study Area, with the Billy-Diamond Highway running through its centre. Most of the trapline is located in a Protected Area;
- VC19: This trapline is located entirely within the Study Area with the Billy-Diamond Highway running through its centre;
- VC20: This trapline, crossed by the Trans-Taiga Road, is included into the Study Area in its western portion;
- VC22: The eastern part of the Study Area includes a very small area of the trapline ( $27 \mathrm{~km}^{2}$ ), a section crossed by the right-of-way of a power transmission line, which users are likely to use for snowmobile travel;
- VC23: The trapline is largely within the Study Area, and the Billy-Diamond Highway crosses the western portion of the trapline.


### 3.4.4 ENGAGEMENT ACTIVITIES

Seven semi-structured interviews were held in Wemindji in June 2022 with the main users of the traplines in the Study Area, i.e., VC12, VC13, VC14, VC16, VC18, VC19 and VC23. The main users of traplines VC17 and VC20 could not be met during the June interviews, but the Tallyman for trapline VC17 was interviewed during the validation round in August 2022, which took the form of virtual meetings. It should be noted that the users of these traplines were invited to comment on the alignment during this validation round. Section 6 presents the results of these interviews.

Other traplines are included into the Study Area, but on a very small area, namely VC22 and VC21 (21.8 km ${ }^{2}$ and $5.7 \mathrm{~km}^{2}$ ). Users of these traplines, as well as other community members, were invited to participate in the public presentation of La Grande Alliance projects at the AGA in August 2022. In addition, a meeting was held in Wemindji with the Chief and Council (see Appendix B). The results of these engagement activities, where they relate to land use, are also presented in section 6 of this Technical Note.

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Figure 3-4 Wemindji Study Area

### 3.5 CHISASIBI

The community of Chisasibi is located at the mouth of the La Grande River which flows into James Bay. It is the last northernmost Cree community accessible by road, and also the most populous in Eeyou-Istchee. In March 2022, the First Nation had 4,826 registered members, the vast majority of whom $(4,538)$ lived in Chisasibi (CIRNAC, 2021). The community's territory consists of 37 traplines spread out between the mouth of the La Grande River and the Caniapiscau Reservoir (see Figure 1-1). The La Grande Complex infrastructures are located mainly on the territory of Chisasibi. The Chisasibi Road and part of the Billy-Diamond Highway and Trans-Taiga Road cross the Chisasibi lands. Radisson, which is 100 km from the community, is the closest village.
This section presents a brief history of land use by Chisasibi First Nation members as well as an overview of contemporary land use. The Study Area is then described, by trapline, followed by a summary of the interviews held as part of this study. The results of the engagement activities conducted as part of La Grande Alliance study are presented in Section 6 - Preliminary Data and Issues by Project.

For information on the social and economic aspects of the Chisasibi First Nation, the reader may refer to the market study report (VEI, 2022).

### 3.5.1 HISTORY

Until 1981, the community was located on Fort George Island. Fort George was the site of a Hudson's Bay Company trading post built in 1804. The island was named after George Atkinson, a Scottish Métis who ran the post from 1807 to 1813 . During the $19^{\text {th }}$ century, Fort George remained one of the most important trading posts in the region (William, 1987; Histoire du Québec, 2019c). It was on this site that in 1930, a building housing both a hospital and a residential school was constructed by the Catholic mission (Morantz, 2017). The Crees of Chisasibi maintained an economy based on the traditional activities and the fur trade system up to the second half of the $20^{\text {e }}$ century, and as for the other Cree communities, from the 1930s and 1940s on, the children were sent to the residential school built in Fort George, some parents staying there with them instead of spending the winter on the territory, and then, for higher studies, to different residential schools in Ontario and Quebec with the dramatic consequences on the practice and transfer of traditional way of life in the families and the intergenerational individual and collective traumas.

The community of Fort George was greatly affected by the Hydro-Québec La Grande Complex megaproject that began in the mid-1970s. This project led to the flooding of numerous Chisasibi traplines, and resulted in the redrawing of several boundaries to accommodate those families whose lands were in the middle of the new reservoirs, with the intent of allowing them sufficient land to continue to practice traditional activities. In 1980, following the signature of the Chisasibi Agreement with Hydro-Québec, the Crees of Fort-George left the island to settle on the mainland in Chisasibi, located roughly 5 km up-river. The relocation of the village led to major social and economic changes. Fort George Island has remained an important gathering place and festivity site, hosting a large powwow each summer (EIJBRG, 2022 and Histoire du Québec, 2019c).

The La Grande River represents a large part of the identity of the members of Chisasibi. It played a crucial role in the community's history as a travel route, site of gatherings and food and cultural activities, before being heavily impacted by the aforementioned hydroelectric development. In addition to the creation of four reservoirs along its course, the current flow of the river in front of the community of Chisasibi is roughly three times stronger than what it was under natural conditions, the result of numerous watersheds diverted into the La Grande Complex. Nevertheless, the river remains a very meaningful place in the eyes of community members (EPC Chisasibi, 2017).

### 3.5.2 CONTEMPORARY USE OF THE CHISASIBI TERRITORY

According to the results of a survey conducted by the Chisasibi Eeyou Planning Commission (EPC), for the community members, spending time together on the territory, as well as the sharing of culture, knowledge and values, are important values. Also, the old camps and cultural sites are highly valued and their protection is essential to keep the link to the territory and to the identity. Indeed, the dramatic changes that the Cree lifestyle has undergone in recent decades has made the preservation of cultural identity a challenge that the Crees of Chisasibi tend to address with determination for future generations (EPC Chisasibi, 2017).

The EPC report indicates that the main issues concerning land use are related to hydroelectric development, namely damages to the land, changes to a large part of the territory and the reduction of opportunities to practice Cree culture. Water quality, changes in goose migration patterns, the reduction of the Cree presence in the territory and the decline of culture and language are other issues that the Crees of Chisasibi associate with the impacts caused by hydroelectric development on their territory. In addition, community-members have voiced concerns about the hunting methods of non-Natives, which go against their values as well as being perceived as unsafe. Concerns have also been raised about Cree hunters who do not always respect animals as well as traditional hunting practices (e.g. overhunting and not sharing the harvest with the broader community).

In their vision of the future, the Crees of Chisasibi who participated in the EPC survey intend to do all they can to protect the territory that has not yet been altered. Several unaltered sites are highly valued as activity areas and areas of cultural significance. People wish to be involved in decisions about the territory so that development can take place according to their values and wishes. They also believe that programs and other opportunities could facilitate the movement and presence of members on the territory. Finally, respondents believed that the trapline system should be reviewed to ensure its implementation continues to respect Cree values (EPC Chisasibi, 2017).

In 2019-2020, 1,009 Chisasibi members ( 737 adults and 272 children) were enrolled in the Cree Hunter and Trapper Income Security Program (CHTISB), or $21 \%$ of the population, and received income for days spent on the land (CHTISB, 2021). This is the community with the highest percentage of enrollment in the CHTISB for this period. Five years earlier (2014-2015) this number was slightly higher (1,007 enrolled, including 713 adults and 294 children), representing $23 \%$ of the population (CHTISB, 2016).

### 3.5.3 STUDY AREA

The territory of Chisasibi is included into three Study Areas of Phases II and III of La Grande Alliance, namely those of the Route 167 upgrading \& extension to the Trans-Taiga Road, the proposed railway corridor from Rupert to La Grande and the proposed road and railway corridors from La Grande to Whapmagoostui/Kuujjuarapik. The traplines included into the Study Areas are described below under the corresponding Study Area (see Figure 3-5).

Study Area 1 (SA1): Billy-Diamond Highway and Railway - Rupert - La Grande:

- VC02/CH34: A very small portion at the eastern end of this trapline is included into the Study Area (14.5 $\mathrm{km}^{2}$ );
- VC03/CH35: The northern portion of the Study Area up to La Grande touches part of this trapline, which is crossed by the Chisasibi road. La Grande River runs along the northern part of the trapline, upstream of the La Grande-1 Generating Station;
- VC04/CH36: The northern portion of the Study Area up to La Grande includes a large part of this trapline, which is crossed on the west by the Billy-Diamond Highway. The Robert-Bourrassa Reservoir occupies the eastern portion of the trapline;
- VC05/CH37: This trapline extends from James Bay to east of the Billy-Diamond Highway;
- VC06/CH38: This is the southernmost trapline in the Study Area and extends from James Bay to east of the Billy-Diamond Highway;

Study Area 2 (SA2): Road \& Rail Extension, and Harbour - La Grande - Whapmagoostui/Kuujjuarapik:
FG01/CH01: The eastern end of this trapline touches the western end of the rail and road corridor Study Area and includes Lake Awichina, which is part of a Protected Area;

- FG02/CH02: The eastern end of this trapline touches the western end of the rail and road corridor Study Area, north of the La Grande River. A portion of this area is part of a Protected Area;
- FG03/CH03 and FG05/CH05: Only a small portion at the eastern end of these traplines touches the western end of the rail and road corridor Study Area, west of Roggan Lake. A portion of the Study Area on FG03/CH03 and all of the Study Area on FG05/CH05 is part of a Protected Area;
- FG06/CH06: A small portion at the eastern end of the trapline abuts the rail and road corridor Study Area and is entirely within a Protected Area;
- FG07/CH07: The eastern portion of this trapline is located within the rail and road corridor Study Area, half of which is within a Protected Area;
- FG08/CH08: This trapline, which includes Lake Julian, is almost entirely within the rail and road corridor Study Area, but also entirely within a Protected Area;
- FG09/CH09: This trapline, located north of Radisson, is almost entirely within the rail and road corridor Study Area. It contains three different sections located in Protected Areas;
- FG10/CH10: This trapline, located north of the Robert-Bourassa Reservoir, is almost entirely within the rail and road corridor Study Area. Two Protected Areas occupy a portion of this trapline;
- FG11/CH11: The western half of this trapline is included into the rail and road corridor Study Area;
- FG12/CH12: The western portion of this trapline is located within the rail and road corridor Study Area.

It should be noted that VC03/CH35 and VC04/CH36 are included into two Study Areas but are considered in the railway corridor Study Area to La Grande, which covers these traplines to a greater extent.

Study area 3 (SA3): Route 167 - Renard Mine - Trans-Taiga Road:

- FG26/CH26: This trapline is the only one in Chisasibi to be included into the Route 167 extension Study Area. It is crossed by Trans-Taiga Road in an east-west axis.


### 3.5.4 ENGAGEMENT ACTIVITIES

In Chisasibi, interviews were held in November 2021 and March 2022. Sixteen semi-structured interviews were conducted with the main users of the traplines in the Study Areas. The main users of traplines FG12/CH12 and FG08/CH08 ${ }^{21}$ could not be met during the November and March interviews, but those of trapline FG12/CH12 were interviewed during the validation round, which took place in person in August 2022, as well as the tallyman of FG08/CH08 that was met in April 2023. Users of eight traplines, primarily those concerned by the Whapmagoostui road extension, attended the validation interviews. A meeting gathering the tallymen of the traplines crossed by the road to Whapmagoostui, members of the Chisasibi Band Council as well as members of the CTA was also organized during this validation round, in order to introduce the studied road alternatives. Section 6 and NT17 present the results of these engagement activities.

The tallymen agreed to update the available data from previous land use studies for traplines FG01/CH1, FG02/CH2, FG09/CH09, FG10/CH10, FG11/CH11, FG26/CH26, VC03/CH35, VC04/CH36, VC05/CH37 and VC06/CH38.

[^12]It should be noted that all community members were invited to participate in the public presentation of La Grande Alliance projects at the AGA in August 2022. In addition, various discussion groups were held in Chisasibi. The results of these engagement activities, where they relate to land use, are also presented in section 6 of this Technical Note.

TECHNICAL NOTE 3 - LAND USE


Figure 3-5 Chisasibi Study Area
CREE DEVELOPMENT CORPORATION (CDC)
PRE-FEASIBILITY STUDY - PHASES II \& III - TRANSPORTATION INFRASTRUCTURE

### 3.6 WHAPMAGOOSTUI

The community of Whapmagoostui (place of the beluga) is the northernmost Cree village in Eeyou Istchee and is located at the mouth of the Great Whale River on the north shore, and on the eastern shore of Hudson Bay in Nunavik (see Figure 1-1). Whapmagoostui is the only Cree community without a land access. It is accessible by plane and during the summer, by boat. Whapmagoostui borders the Inuit village of Kuujjuarapik (see section 4). The twin villages were created under the 1975 James Bay and Northern Quebec Agreement. Until the 1980s, the village was known as Great Whale River and Poste-de-la-Baleine (WFN, n.d).

As of April 2022, the First Nation had 1,021 registered members, the vast majority of whom (903) lived in Whapmagoostui (CIRNAC, 2021). There are 26 traplines in the community, extending approximately 400 km east from Hudson Bay. Whapmagoostui is located approximately 180 km north of the nearest Cree community, Chisasibi.

This section provides a brief history of land use by Whapmagoostui First Nation members, as well as an overview of contemporary land use. The Study Area is then described, by trapline, followed by a summary of the interviews held as part of this study. The results of the engagement activities conducted as part of La Grande Alliance study are presented in Section 6 - Preliminary Data and Issues by Project.
For information on the social and economic aspects of Whapmagoostui First Nation, the reader may refer to the market research report (VEI, 2022).

### 3.6.1 HISTORY

The First Nation's website states that permanent cohabitation between the Crees and Inuit at the mouth of the Great Whale River dates back to the 1950s, although the two nations had been living together for a long time, with the Inuit frequenting the coast and the Crees the interior. However, the Crees were hunting and fishing along the Hudson Bay coast long before the arrival of Europeans. A Hudson's Bay Company trading post was established here around 1820, and Catholic and Protestant missions were established in the 1880s. The site was used as a summer camp. In 1940, many Cree and Inuit abandoned their nomadic lifestyle to be employed at the newly opened U.S. military air base. The trading post closed in 1941, and after World War II the military base was transferred to the Canadian government, which operated a radar station (for the Mid-Canada Line of Defence) there from 1955, thus establishing the village permanently (WFN, n.d.). In these same years, the children were sent to different residential schools in Ontario and Quebec with the dramatic consequences on the practice and transfer of traditional way of life in the families and the intergenerational individual and collective traumas.

In 1961, the name of Great Whale River was changed to Grande-Baleine, then Poste-de-la-Baleine. The Cree village was officially named Whapmagoostui in 1986 (WFN, n.d.). In this regard, as indicated on the Histoire du Québec website, as early as 1744, we find the written form of Wapa Macusto, later Wabamakkoustik, and in 1931, anthropologist Frank G. Speck speaks of Wapamekustikuwinnu, men of Wapamekustiku, to identify the Crees of the White Whale River band hunting north of Little Whale River. It should also be noted that a trading post (Whale River House) was established as early as 1752 at the mouth of the Little Whale River, before it was replaced by the Great Whale River House, 100 km further south at the mouth of the Great Whale River (Histoire du Québec, 2019d).

### 3.6.2 CONTEMPORARY USE OF THE WHAPMAGOOSTUI TERRITORY

As mentioned in the report of the Whapmagoostui Eeyou Planning Commission (EPC), the opportunity to spend time on the land to hunt, trap and fish is of primary importance to its members. Flexible work schedules in the community, a relatively pristine territory and the financial assistance provided by the Income Security Program as well as the Cree Trappers' Association help to facilitate access to these opportunities for Whapmagoostui members (EPC Whapmagoostui, 2017).
According to the EPC report, some of the main values that underlie the use of the territory were identified, such as having a clean environment and healthy wildlife, respecting the animals, having a good knowledge of the language and traditional knowledge. The isolation of the community, which has helped to protect it from certain negative impacts, also results in a higher cost of living.

Thus, life on the territory continues to be valued despite the constraints the community faces in maintaining traditional activities; members are retained in the community for obligations such as work, school, or medical care for example, not to mention the high cost of travel to the territory and, in some cases, the need to obtain permits to exploit coastal areas designated to the Inuit. These factors complicate the organization of stays in the territory, although financial assistance may alleviate some of these constraints (EPC Whapmagoostui, 2017).

One of the objectives expressed by the members consulted within the framework of the EPC is to strengthen the Cree presence on the territory by improving access (trails, roads and infrastructure) and by re-examining the trapline system for the benefit of the entire community. This enhancement also requires ensuring that the integrity of the territory is maintained through a monitoring and protection system (Whapmagoostui EPC, 2017).

Whapmagoostui is the community with the highest percentage of members enrolled in the Cree Hunters and Trappers Income Security Program (ISP). For 2019-2020, 168 Whapmagoostui members (126 adults and 42 children) were enrolled in the Program, or $16 \%$ of the population, and received income for days spent on the land (CHTISB, 2021). Five years earlier (2014-2015) this number was much higher, with 325 enrolled (including 212 adults and 113 children), and represented $34 \%$ of the population (CHTISB, 2016). Several factors can affect ISP participation, which varies from year to year depending on, among other things, the economic climate and employment opportunities, or readjustments to eligibility criteria.

### 3.6.3 STUDY AREA

The Whapmagoostui territory is concerned by Phases II and III of La Grande Alliance, so within the proposed road and railway corridors from La Grande to Whapmagoostui/Kuujjuarapik as well as the proposed harbour project in Whapmagoostui/Kuujjuarapik. These different projects are all part of the same Study Area 3 (SA3) (see Figure 3-6). The following traplines are included into this Study Area:

- GW01: This trapline, located on the banks of the Great Whale River, which borders the trapline to the south, is home to the community of Whapmagoostui. It is thus concerned by the various projects in the Study Area;
- GW02: The western part of this trapline touches a section of the Study Area specifically related to the rail and road corridor. It is bounded to the north by the Great Whale River;
- GW03: The entire trapline is located within the harbour and rail/road Study Area. The Great Whale River borders the trapline to the northeast, and Hudson Bay to the northwest;
- GW04: The trapline is concerned by the three projects in the Study Area. The northwestern part of the trapline borders Hudson Bay and the eastern section is close to the proposed railroad and road alignment;
- GW05: This trapline extends over 140 km and is concerned by the three projects in the Study Area as it borders Hudson Bay (harbour area) and crosses the entire rail and road corridor Study Area. Part of this trapline is located in a Protected Area (southwestern border strip). The Chisasibi territory is located south of this trapline;
- GW06: A substantial portion of this trapline extends into the Study Area more specifically from the rail and road corridor, east of the proposed alignment;
- GW20: This trapline, the smallest in Eeyou Istchee ( $69 \mathrm{~km}^{2}$ ), lies entirely within the rail and road corridor Study Area, between traplines GW03 and GW05;
- GW22 ${ }^{22}$ : the trapline is particularly concerned by the harbour project since Hudson Bay borders its western boundary. Part of the coastal zone of the trapline as well as the northwestern end is in a Protected Area. To the north, it is bounded by the Goulet Channel (Kwaakuschuun in Cree, which means "channel where the current comes and go with the tide"" (Commission de toponymie du Québec).


### 3.6.4 ENGAGEMENT ACTIVITIES

In Whapmagoostui, interviews were held in June 2022. A total of 8 semi-structured interviews were conducted with key users of all traplines that touch the Study Area.

Validation of the interview data was conducted in August 2022. Users of seven of the eight traplines included into the Study Area were interviewed in person during this exercise. Section 6 presents the results of these engagement activities.
It should be noted that all community members were invited to participate in the public presentation of La Grande Alliance projects in August 2022, at the AGA. In addition, various focus groups were held in Whapmagoostui (see Appendix B for details). The results of these engagement activities where they relate to land use are also presented in Section 6 of this Technical Note.

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## TECHNICAL NOTE 3 - LAND USE



Figure 3-6
Whapmagoostui Study Area
CREE DEVELOPMENT CORPORATION (CDC)

### 3.7 MISTISSINI

Mistissini (big rock) is one of the inland Cree communities (see Figure 1-1). It is located at the southeastern end of Lake Mistissini, the largest natural freshwater lake in Quebec, and is in the centre of the large Albanel-Mistassini-and-Waconichi Lakes Wildlife Reserve (Histoire du Québec, 2019a). In April 2022, the First Nation had 4,164 registered members, and the vast majority, 3,785 individuals, lived in Mistissini (CIRNAC, 2021). The community's territory includes 77 traplines distributed between the south of Lake Mistissini and the north of the Caniapiscau Reservoir. The village of Mistissini is located less than 90 km by road from Chibougamau, and the closest Cree village is Oujé-Bougoumou, located 150 km by road from Mistissini.
This section presents a brief history of the use of the territory by the members of the First Nation of Mistissini as well as an overview of the contemporary use of the territory. The Study Area is then described, by trapline, followed by a summary of the interviews held as part of this study. The results of the engagement activities conducted as part of La Grande Alliance study are presented in Section 6 - Preliminary Data and Issues by Project.

For information on the social and economic aspects of the First Nation of Mistissini, the reader may refer to the market study report (VEI, 2022).

### 3.7.1 HISTORY

The community's current site was used as a summer and spring meeting place long before a trading post was established in 1821. Located on the shores of the largest natural lake in Quebec, the First Nation has developed a tradition and expertise in canoe travel (Cree Nation of Mistissini, 2020).

Mistissini Lake plays a key role in the history and culture of the community as its shores are ancient gathering places, its waters have nurtured Cree families for generations, and it is an important travel route to access other areas of the territory (Mistissini EPC, 2017).

As indicated on the Mistissini website, at the height of the fur trade period, canoe brigades travelled from the trading post on Mistissini Lake to Waskaganish. This ability to travel over vast expanses of land and water linked the inland Crees with the coastal Crees. It was an important aspect of survival and remains a valuable part of the heritage. The canoe brigades, which supplied the trading posts, were most active between 1821 and 1925, before the railroad was built. The Hudson's Bay trading post remained in operation until 1987 when a significant decline in the fur trade prompted its closure. The fur trade was a central activity in Mistissini, involving several family members in trapping, hunting and preparing the furs. Travelling by canoe to reach the territory also often involved women leaving before the men to prepare the camps while the men carried equipment and provisions.

The Crees of Mistissini maintained an economy based on the traditional activities and the fur trade system up to the second half of the $20^{e}$ century, and as for the other Cree communities, from the 1930s and 1940s on, the children were sent to different residential schools in Ontario and Quebec with the dramatic consequences on the practice and transfer of traditional way of life in the families and the intergenerational individual and collective traumas.

Prior to the construction of the access road to the community in the 1980s, supplies to Mistissini were provided by canoe or float plane.

### 3.7.2 CONTEMPORARY USE OF THE MISTISSINI TERRITORY

The Mistissini Eeyou Planning Commission (EPC) report states that the territory plays a central role in the lives of the community members. In many ways, the village is only a backdrop for the activities on the land that are central to Cree cultural and traditional life. The land is considered and cared for as part of the family, upon which the Crees knowingly depend for their livelihood (EPC Mistissini, 2017).

The EPC report also indicates that members of Mistissini greatly appreciate the opportunities that the community and its location provide for the practice of traditional activities. Indeed, in addition to numerous resources, Lake Mistissini offers relatively easy access to numerous traplines. In addition, industrial development activities (mining, forestry, and hydroelectricity) are limited to some parts of the territory (EPC, Mistissini, 2017).

However, the flooding of the Caniapiscau Reservoir in the late 1970s affected a large part of trapline M01, located northeast of the Mistissini territory. In addition, in 2007, the flooding of the Paix des Braves Reservoir affected some Mistissini traplines, and in 2009, the partial diversion of the Rupert River involved the creation of the Rupert diversion bays in Mistissini territory (southwestern section) and affected other families in the community. Four traplines (M18, M25, M26 and M33) had sections flooded by the hydroelectric development. Closer to the study corridor, the Renard mine (Stornoway) and the construction of the road leading to it also changed how the land was used.

The EPC report also indicates that there is strong opposition to forestry activities because of the damage they cause to the land without significant returns, the difficulties they cause to fishing, hunting, and trapping activities, and the disruption that traffic causes near the camps. In addition, a general impression of disrespect for rules and communities by forestry companies emerges from the consultations conducted in the context of the Mistissini EPC (EPC Mistissini, 2017).

The declining transmission of language and culture is also an issue perceived by some community members in relation to the use of the territory, particularly because fewer people are staying on the territory to support themselves. Cultural programs and community events on the territory try to compensate for this decline. The lack of control over the development of the territory, the presence of non-natives and the accessibility of traplines (since some are difficult to reach and involve high financial costs), are other issues facing the community. There are also concerns about the extension of Route 167 and other accesses because of the opening of the territory that these accesses provide to non-Crees and the difficulties or conflicts that this situation may create when practicing activities (EPC Mistissini, 2017).

In 2019-2020, 357 Mistissini members (292 adults and 65 children) were enrolled in the Cree Hunter and Trapper Income Security Program, representing $9 \%$ of the population, and received income for days spent in on the land (CHTISB, 2021). Five years earlier (2014-2015) this number was slightly lower ( 330 enrolled, including 265 adults and 65 children), still representing $9 \%$ of the population (CHTISB, 2016).

### 3.7.3 STUDY AREA

The 100-km-wide Study Area 3 (SA3) of the Route 167 upgrade and extension to the Trans-Taiga Road (Phase II) includes one (1) Chisasibi trapline (CH26) (see Section 3.5), and ten Mistissini traplines, namely M01, M01A, M03, M04, M10, M11, M12, M13, M16 and M23 (see Figure 3-7).

The traplines with the largest surface in the Study Area are M01A and M11, with more than $3,000 \mathrm{~km}^{2}$ included in this area. Other traplines have a small area included into the Study Area, such as M13 ( $43 \mathrm{~km}^{2}$ ) and M03 (94 km²), respectively on the eastern and western borders of the Study Area.

The southern traplines of the Study Area are primarily reached by Route 167, and the northern traplines by TransTaiga Road, before continuing on to the snowmobile routes. Air travel is also used. The traplines included into the Study Area are described below:

- M01: The northeastern section of the Study Area touches part ( $2428 \mathrm{~km}^{2}$ ) of this large trapline of $14,082 \mathrm{~km}^{2}$ that was impacted about 50 years ago by the flooding of the Caniapiscau Reservoir under the La Grande Project. The main camps and activity areas are mainly located along Trans-Taiga Road outside the Study Area. Construction of a camp is planned for the northern border of the Study Area.
- M01A: The trapline is almost entirely within the Study Area and is located in its northwestern section. There are no roads on the trapline, which is reached by snowmobile from Trans-Taiga Road, or by plane.
- M03: The Study Area covers a small portion of trapline M03 and touches major activity areas located nearly 35 km from the proposed alignment.
- M04: The Study Area covers a large part of trapline M04 and includes the main activity areas. The proposed alignment is located on its western boundary.
- M10: A strip of the trapline is included into the western part of the Study Area. The trapline, which is reached by snowmobile from Route 167, does not touch the proposed route, and the main activity area is outside the Study Area.
- M11: Trapline M11 is mostly covered by the Study Area. Activities and camps are located on both sides of and away from Route 167. The alignment cannot totally avoid them.
- M12: Part of the trapline is located southeast of the Study Area, more than 40 km away from the proposed alignment. The trapline is accessed in fall, winter, and spring by snowmobile.
- M13: A very small portion of the trapline is included into the southeastern part of the Study Area ( $42.6 \mathrm{~km}^{2}$ out of $4104 \mathrm{~km}^{2}$ ). Users access the trapline by snowmobile from Route 167 . Before the presence of this road, they accessed the trapline by plane.
- M16: The southern part of the Study Area includes part of trapline M16. Route 167 and the southern section of the alignment, which bypasses certain activity areas, crosses this trapline.
- M23: The Study Area covers a small portion ( $75 \mathrm{~km}^{2}$ ) of the northeast section of trapline M23.


### 3.7.4 ENGAGEMENT ACTIVITIES

In Mistissini, interviews were held in November 2021 and March 2022. A total of 13 interviews were conducted. Ten semi-structured interviews were conducted with the main users of the traplines adjacent to the Study Area, and three interviews were conducted with the tallymen of the traplines located to the west (M02A) and east (M06 and M07) of the Study Area to take into account the users' broader considerations regarding opening up the territory.

Two interviews were conducted for trapline M01, since four brothers share the use of this trapline. One interview was conducted in Mistissini and the second in Nemaska, where one of the brothers lives. The interviews for Mistassini traplines M01A and M02A were also conducted in November 2021, in Nemaska, where the tallymen lives. The validation of the interview data was carried out with the users of four traplines, online, in September 2022. Section 6 presents the results of these.

The tallymen agreed to update the data from previous land use studies that were available for traplines M01 and M1A.

It should be noted that all community members were invited to participate in the public presentation of La Grande Alliance projects in August 2022, at the AGA. In addition, focus groups were organized in Mistissini in 2021, other the activities were held in 2022 to involve more community members. The results of these engagement activities, where they relate to land use, are also presented in section 6 of this Technical Note.

## TECHNICAL NOTE 3 - LAND USE



Figure 3-7 Mistissini Study Area

## 4 INUIT LAND USE

Nunavik, formerly known as Nouveau-Québec, is located north of the $55^{\text {th }}$ parallel and extends over $507,000 \mathrm{~km}^{2}$. For about 4000 years, different human groups have occupied this territory. The Inuit arrived in the Canadian Arctic 700 to 800 years ago and today inhabit the entire circumpolar region (Avataq, n.d.). Nunavik has 14 villages spread along the coasts of Hudson Bay, Hudson Strait, and Ungava Bay. Its population totals approximately 12,000 permanent residents, of which nearly $90 \%$ are Inuit.
It is also to note that there is a minority of Inuit in the village of Chisasibi, they are 240 members according to the 2021 census (Statistique Canada, 2022). Kigaluk (or Kiggaluk) is an inuit reserved land of about $45 \mathrm{~km}^{2}$ implemented by the JBNQA and administered by the Kiggaluk Land holding corporation in Chisasibi (formerly Fort George Land Holding) for the use of these Inuit (MRNF, 2023 and LégisQuébec, 2023).

The villages of Kuujjuarapik and Umiujaq are also closely concerned by La Grande Alliance projects, the first community being located within the Study Areas of the rail and road corridor as well as that of the harbour, and the second being located on the coast, approximately 180 km north of this same proposed harbour. The community of Sanikiluaq, Nunavut, with a population of nearly 900 inhabitants located on the Belcher Islands in southern Hudson Bay, 150 km from the coast of Nunavik, may also be concerned with the traffic routes created through the construction of a harbour. However, given that the entire Nunavik territory is currently enclaved, the connecting of Kuujjuarapik to the Billy-Diamond Highway and, subsequently, the Quebec road network, will likely have a lasting effect on all of the Inuit communities in the province.

According to the Makivik Corporation's website dedicated to Kuujuuarapik, the population of this community numbered 1,517 in 2021. It states:

> Ancestors of the Inuit, as well as Cree, have occupied the area for roughly 2,800 years. In the 18th century, hunters travelled throughout the region setting up camps on Richmond Gulf, Little Whale River and Great Whale River. The Hudson's Bay Company opened a trading post called Great Whale River in 1820 on the site of today's Kuujjuaraapik. The main activities at the post were processing whale products of the commercial whale hunt and trading furs. An Anglican mission was established in 1882 and a Catholic mission in 1890. Although the federal government set up a weather station in Great Whale River in 1895, it only started providing some medical assistance and policing services through the Royal Canadian Mounted Police in the first half of the 20th century. The village itself started to develop in the late 1930s. During World War II, the United States built in Kuujjuaraapik a military base and airport, which they turned over to the Canadian government in 1948. This base was also the control station of the Mid-Canada Line, a line of military radar stations constructed in 1955 from the Atlantic Ocean to the Hudson Bay along the 55 th parallel. The population of Kuujjuaraapik decreased significantly however in 1985 when many families, fearing the negative impacts of the Great Whale River hydro-electric project, decided to relocate to Umiujaq, another Inuit community about 160 km north of Kuujjuaraapik (Makivik Corporation, 2022).

The village of Umiujaq was inaugurated in 1986 after the Inuit requested that a clause in the James Bay and Northern Quebec Agreement provide for the relocation of the Inuit to Lac Guillaume-Delisle in the event of the completion of the Great Whale project. The inhabitants of Kuujjuuarapik voted in a referendum in 1982 to create a new community where they could preserve their traditional way of life in an area where fish and game would not be threatened. The village has 390 residents (Makivik, 2022).

The Inuit's traditionally nomadic way of life, based on caribou, beluga, seal and ptarmigan hunting and fishing, was profoundly disrupted by the arrival of whalers, missionaries, and fur traders in the late 19th century. Government services, such as education, health, and social assistance, were introduced in the 1950s, forcing the Inuit to settle.

Like the Crees, they signed the James Bay and Northern Quebec Agreement in 1975, which granted them new responsibilities in the areas of economic and social development, education, environment, and land management (Avataq Institute, 2022).

Another important Agreement establishing rules for the management and sharing of land between the Inuit and the Crees is the Nunavik Inuit Marine Land Claims Agreement, signed in 2006 between the Nunavik Inuit represented by Makivik Corporation and Canada. The objective of this agreement was to determine with certainty the ownership and use of lands and resources, including marine resources. As defined in this agreement, the coastal area included in La Grande Alliance harbour Study Area is part of a Cree/Inuit Joint Development Area. North of Umiujaq, however, the offshore area is reserved for the Inuit, while the area between Louis XIV Point (Cape Jones/Aamichishtaawaayaach/ Tikirarujaq) and Chisasibi is reserved for the Cree. The main objective of this agreement was to ensure that the Crees of Eeyou Istchee and the Nunavik Inuit could continue their harvesting activities in the Cree/Inuit Offshore Overlap Area and to establish the land and resource management regime in the Joint Zone. The agreement also provides for the creation of the Nunavik Marine Region Planning Commission (NMRPC). The main responsibilities of the NMRPC are to establish general planning policies and objectives for the Nunavik Marine Region (NMR) and to develop land use plans to guide and regulate resource use and development in the NMR (Part 6.4). The Nunavik Marine Region Impact Review Board (NMRIRB) is another body also created by this enactment. Its main functions are to conduct the screening of projects to determine whether a review is required, to assess and determine the extent of regional impacts of a project, to review the ecosystemic and socioeconomic impacts of projects, and to decide, based on this review, whether projects should proceed and under what conditions (Part 7.2) (Government of Canada, 2006).

From the outset of the study, the CDC established that a Nation-to-Nation arrangement between the Cree and Inuit was required prior to undertaking engagement with the Inuit population. However, Inuit communities were not involved at this stage as this remains a Cree initiative that may not be extended beyond this study. However, it is strongly recommended that, if any study components overlapping Inuit territory were to be pursued, engagement with Inuit communities be initiated immediately in subsequent steps.

## 5 JAMESIAN LAND USE

### 5.1 LAND USE

As early as the 1600s, traders, explorers and 'coureurs des bois' of European or mixed ancestry settled in the James Bay region, which was coveted for its natural resources. The geological potential of the region was discovered in the early 19th century by explorers such as Richardson (1857), Bell (1895) and Obalski (1906) (Attraction Nord, undated).

Chibougamau was founded in 1954 thanks to a market boom for metals, particularly copper. The mining villages of Chapais and Matagami were also founded at this time. The forest, which represents another important natural resource of the region, allowed the Jamesian towns to develop economically. This was particularly the case for Lebel-sur-Quévillon. Finally, the rivers of the James Bay Eeyou-Istchee region, which represent one of the greatest hydroelectric potentials in the world, also contribute to the development of Jamesian cities and towns. The locality of Radisson was created in 1974 to house the thousands of workers of the La Grande hydroelectric project (Mouvement Jeunesse Baie-James, 2012 and Attraction Nord, undated).

Today, these communities that have long relied on natural resources (mineral, forestry and water) are attempting to diversify their activities. For example, there is the development of agricultural land in Chapais, the development of recreational tourism in Chibougamau and Radisson, and the development of commercial activities in Lebel-surQuévillon (Attraction Nord, undated).

The numerous lakes and forests of the region have attracted hunting and fishing enthusiasts for many years. Outfitters have been built on the territory for this purpose, and vacation leases for small cottages and shelters have been granted (see section 7 - Servitudes and titles). In fact, since the 1990s, in order to strengthen the region's recreational and tourism potential, the municipalities of the James Bay region have invested in tourism infrastructure, often through projects that enhance the environment such as hiking and interpretive trails, bicycle paths, municipal beaches or ski centres (Mouvement Jeunesse Baie-James, 2012).

### 5.2 ENGAGEMENT ACTIVITIES

Engagement activities with Jamesian municipalities and towns were conducted jointly for Phases I, II and III of La Grande Alliance proposed transportation infrastructures. In January 2022, information letters were sent to the cities of:

- Chapais;
- Chibougamau;
- Lebel-sur-Quévillon;
- Matagami;
- Radisson.

The Eeyou Istchee - James Bay Regional Government was identified as another stakeholder to be consulted. However, the hiring of an Executive Director was late in relation to the common engagement schedule of each consultant for Phases I, II and III. The Eeyou Istchee - James Bay Regional Government should be included in the engagement activities of the subsequent studies.

These letters, which briefly described the projects of La Grande Alliance, aimed to propose information meetings to the cities concerned and to evaluate with them the need to carry out public meetings as well as with stakeholders from different sectors.

The first meetings were held by videoconference to introduce the projects to the general managers of the cities and towns as well as to council members or elected officials. These meetings were held for Chapais, Chibougamau, Matagami, Radisson and Lebel-sur-Quévillon between January and July 2022.
Between May and September 2022, two other face-to-face activities took place in each of these Jamesian municipalities and localities: a public presentation in the evening, followed the next day by an engagement activity with various stakeholders and community actors.

It is important to specify that each consultant team (WSP-Maamuu and VEI) analysed the results of the engagement activities held with specific Jamesian municipalities and localities attributed to their mandate. Therefore the analyses presented in TN3 and TN5 only concern the municipalities attributed to WSP (Chibougamau, Matagami and Radisson). If Chapais and Lebel-sur-Quévillon are mentioned in the analyses, it is because these two municipalities may have been mentioned by participants from the previously mentioned Jamesian entities.

The public presentations involved the presence of 17 people in Radisson, 10 people in Matagami and 15 people in Chibougamau. In Radisson and Matagami, the interested community stakeholders attended the public session only. In Chibougamau, these meetings involved the presence of representatives from the Ministère des Transports du Québec, the Ministère de l'Économie et de l'Innovation, the non-profit organization (NPO) FaunENord, Développement Chibougamau, the Fédération Québécoise des Clubs de Quad, the Board of Directors of Tourisme Baie-James, the Chibougamau Chamber of Commerce, the Table Jamésienne de concertation minière (TJCM) and the Centre d'étude collégiale de Chibougamau (for a complete list, refer to Appendix C).

The results of the engagement activities conducted, and which concern land use, are described in section 6 , under the corresponding projects. Comments, concerns and suggestions regarding socio-economic aspects are presented in Technical Note 5.

## 6 PRELIMINARY DATA AND ISSUES

This section presents, by study component, the results of the engagements activities carried out under Phase II and Phase III of La Grande Alliance. For each study component, the highlights of the interviews are presented first in a general way, and then in more detail, by trapline. Comments received during engagement activities other than those with land users are then presented. Finally, a report on the issues of increased access to the territory and data on land use from the engagement activities with the Jamesians are presented.

### 6.1 SA1 - RAILWAY ALONG THE BILLY-DIAMOND HIGHWAY RUPERT - LA GRANDE

### 6.1.1 CREE TRAPLINES INVOLVED

Study Area 1 (SA1) of the proposed rail corridor along the Billy-Diamond Highway (Phase II) extends from Rupert to La Grande. It includes the traplines of five Cree communities, namely:

- Waskaganish: R01A, R06, R07, R08, R09, R12, R13 and R14;
- Nemaska: R17;
- Eastmain: RE02, RE03, VC30, VC33 and to a lesser extent RE01, RE004, RE5, VC35 and VC15;
- Wemindji: VC12, VC13, VC16, VC17, VC18, VC19, VC20, VC23 and to a lesser extent VC14, VC15 and VC22;
- Chisasibi: VC03/CH35, VC04/CH36, VC05/CH37, VC06/CH38 and to a lesser extent VC02/CH34.


### 6.1.2 DATA AND ISSUES BY TRAPLINE

The meetings with Cree land users made it possible to document the use of the territory, with the objective of avoiding as much as possible the activity zones and the zones of interest defined by the Crees. It should be noted, however, that some of this data was made available late, and that an alignment, based on best practices in terms of railway design with respect to environmental, technical, and economic factors, was nevertheless proposed (see Technical Note 12). In a few cases, work will be required to reconcile the alignment with Cree land use in light of new information gathered in the late stages of the study. This additional information already gathered and affecting the proposed alignment is part of NT17. The following section presents the results of these meetings grouped by community, in relation to the study corridor and the proposed alignment.

## HIGHLIGHTS

- At the time of the first round of interviews, no alignment was proposed to the land users interviewed, because it was intended to be defined as a result of their input;
- Land use along the railway corridor is extensive, particularly for spring and fall hunts;
- A major forest fire on the territory in 2013 impacted activities on several traplines (north end of Eastmain traplines and south end of Wemindji traplines along BDH ), some impacts are still felt today;
- Some feel that the rail corridor would facilitate access to land use by non-Natives and would be of little benefit to the Crees themselves in terms of their land use;
- Pollution, dust, and noise generated by the construction and train passage were mentioned as potential impacts of concern.

Other key issues raised include the presence of camps:

- A total of 182 Cree camps, namely 93 main camps, 67 old camps, 18 secondary camps, three planned camps and one cultural camp were listed in the Study Area. In addition, there are three groups of camps centred on lakes located near the rail lines between km 282 and 296 of the Billy-Diamond Highway. In one case, the construction of a new camp is planned approximately 600 m from the proposed alignment. Further development of the project may result in a reconsideration of the site for this new camp;
- The presence of goose and moose hunting areas, beaver streams and lodges, spawning and fishing sites, water sources, snowmobile trails, caribou and black bear habitat, and high value commercial mushroom harvesting sites, all within close proximity of the proposed railway corridor were also mentioned as key issues. For more details on the caribou, see Technical Note 6.


## WASKAGANISH

## TRAPLINE R01A

The land is used by four families throughout the year, but less frequently in the summer. The main camps are located between the Billy-Diamond Highway and Mirabelli Lake, less than 3 km east of the highway. The Tallyman indicates that the railway should ideally run as close to the road as possible in order to avoid spreading the impacts on a greater extent of land, especially on moose feeding areas. However, this should be done whilst trying to avoid existing harvesting areas along the road. In these areas, the proposed alignment should be moved as it currently encroaches on a significant beaver trapping area for the Tallyman. Moose tend to move west of the road in this area, probably due to noise pollution on the east side from the operation of a borrow pit (access from km 224 of the BillyDiamond Highway). The noise affects users as well, as it affects goose hunting.
The Tallyman reiterates that the site must be left in good condition after construction to protect water quality and wetlands.

Although it avoids certain areas or sites of interest, the proposed alignment, elaborated before the Tallyman was met for validation:

- encroaches on a significant beaver trapping area for the Tallyman;
- encroaches on a highly valued drinking water source;
- encroaches on a blueberry harvest area that is already being disturbed by workers' harvests;
- crosses a snowmobile trail and a trapping area (marten);
- passes within 400 m of a main camp ( 5 camps );
- passes within 500 m of goose hunting sites;
- passes within 1.5 km of a woodland caribou habitat;
- passes near a moose feeding area.

In such, the alignment will have to be redefined to consider the information gathered after the validation round to best avoid sensitive areas or land users' activity areas.

## TRAPLINE R06

The Tallyman and his family use the trapline with two other related families. They fish, hunt moose and trap beaver on the land, including an area of the Study Area about 15 km from the proposed alignment.

The Tallyman believes that the Crees and the animals will adapt to the railway after a period of change and impact. He is not particularly concerned about the proposed project.

## TRAPLINE R07

The Tallyman shares the trapline with other related families. In the Study Area, they hunt moose and partridge, trap beaver, fish (pike, trout, walleye, sturgeon, whitefish) and harvest blueberries.

The Tallyman does not have a clear idea of the impacts that the railway could cause, but he believes that the Crees will adapt, just as they adapted to the construction of the Waskaganish road and its impacts. However, he is concerned about the tracks crossing his winter trail (snowmobile and snowshoes), and says that animals must be able to cross the tracks safely, at least with corridors.

## TRAPLINE R08

About ten main users occupy this trapline, mainly from fall to spring. A main camp is located near the BillyDiamond Highway.

Various activity sites were avoided in the development of the alignment, including a wood harvesting area, a goose hunting area, a potential woodland caribou area and a camp. The proximity of two berry picking areas and a poplar harvesting area that is valued was also avoided.

The Tallyman is satisfied with the proposed alignment, although it:

- crosses a staging area for migratory birds;
- passes within one kilometre of a potential woodland caribou range, although no tracks have been seen since the forest fire 10 years ago;
- passes within 3.5 km of an area where the subterranean river system flows to the east (watershed) and has been identified as a sensitive area for protection.

The users we interviewed had no major concerns about the proposed infrastructure but wanted more information.

## TRAPLINE R09

The trapline is shared by the Tallyman, his sons and their respective families. Goose hunting sites are located on both sides of the road, and one is located 1.5 km from the route. The Pontax River, which crosses the Billy-Diamond Highway, is used for hunting and trapping (moose, goose, beaver and bear), and a main camp (4 cabins) is located at the intersection of the highway and the river. The areas around the Billy-Diamond Highway are now more heavily travelled for mobility reasons. Although the Tallyman indicated during the first round of interviews that the railway should ideally run as close to the road as possible to avoid spreading impacts, and despite the fact that the proposed alignment runs more than 2.5 km away from the road in some area in order to avoid his main camp and a goose hunting site, the Tallyman proposed an alignment change to run even further from his goose hunting area. He indicated that his proposed alignment passing slightly further west of the Billy-Diamond Highway would cross the Pontax River in a more suitable location because of the more solid ground, and that this proposal would also avoid crossing a quarry that would likely be converted to a goose hunting pond in the future.

The Tallyman appreciates being consulted upstream of the technical work. He is not opposed to the railroad proposed infrastructure if there is a possibility for the members of the community to use the train for their travel. He wishes that jobs be provided for the Crees.

## TRAPLINE R12

The Tallyman and members of his extended family occupy this land in the Study Area. They mainly hunt moose, fish and trap beaver. The latter activity is now restricted because the ice cover is no longer as thick, so the Tallyman no longer traps on the Rupert River as of late February.

The camps and main activity areas are located along the Rupert River and to the north of the trapline (reachable by snowmobile from the Billy-Diamond Highway). The proposed alignment is located about ten kilometres from these main activity areas, although activities may be closer (up to 4 km ).

The Tallyman feels that the train could be useful if it provided a service for passengers, which could reduce travel costs.

## TRAPLINE R13

Several members of the Tallyman's extended family occupy this trapline, and the main camps are spread out along the Billy-Diamond Highway, the Route du Nord and the Rupert River. An area to be protected for wildlife and all traditional activities is located directly along the Billy-Diamond Highway and extends east of it. The banks of the Rupert River west of the road also represent an area to be protected for wood harvesting. According to the Tallyman, the noise disturbances that are already present degrade the experience at the camp and while doing activities. He is concerned about water quality and wetlands, as there are marshes, nesting sites, fish and bears along the road. He is also concerned about migratory caribou that could be hit by train.

The proposed alignment runs directly over a highly valued and tested drinking water source used by both Waskaganish and Nemaska residents. The Tallyman also feels that the alignment runs too close to a goose hunting site. He believes that a reasonable distance would be a minimum of 2 kilometres. For this reason, he proposed an alignment modification that would avoid the drinking water source and its goose hunting area. However, he stated that if the alignment could not be modified to avoid crossing the access road, the goose hunting site could be replaced as mitigation measure. He also considers the locations where the alignment crosses an access road to be a source of danger; in addition to this busy access road leading to a goose hunting pond, the current alignment crosses the Route du Nord, which is problematic. The Tallyman considers that the alignment should run west of the BillyDiamond Highway in this area.

At the time of the interview, the Tallyman was not in favour of the railway crossing. He questions the interest of the proposed infrastructure for the Crees and believes that further discussions should be held with other users and tallymen concerned.

## TRAPLINE R14

The Tallyman, his sister and family are the primary users of this trapline. The main camps are located along the Billy-Diamond Highway, which runs through the trapline, as well as in the eastern part of the trapline. According to the users interviewed, it would be less disruptive if the alignment was done in the areas that have experienced forest fires, i.e., west of the road and Lake Nistam Esachistuwach, which is considered a Protected Area. Although this proposed alignment may encounter obstacles (mountains, rivers, streams, marshes), this area is less valued by users and the Tallyman states that it is also less mountainous than the eastern sector. Also, a large valued area extends along the road to the east. Preservation of the land (especially large lakes) and the traditional way of life is important for future generations. Users note a general decline in wildlife over the past decade in their main areas of activity, related to increased traffic.

The proposed alignment encroaches on the valued area that encompasses the section east of the Billy-Diamond Highway and runs much too close to the lake where one of the main camps is located. The Tallyman feels that the alignment should be moved at least 500 metres east of this location. The alignment also runs close to another valued area, west of the road, but the distance from the main lake to this area is considered adequate. It also crosses two old
winter trails and runs close to three camps located along the road. The Tallyman therefore proposes to modify the route so that it runs west of the road and thus avoids their main activity areas.

The Tallyman wishes to be involved in the future studies and evaluation of the alignment.

## NEMASKA

## TRAPLINE R17

Seven families use the trapline throughout the year. The camps are mainly spread out along the access roads that cross the trapline, i.e., the Route du Nord, and a road that goes to Lake Nemiscau. The user interviewed, who is the former Tallyman of the trapline, did not express any concerns about the proposed infrastructure, whose alignment passes over 15 km away from his trapline. However, he appreciates being consulted and would like a discussion group to be held between Tallymen so that everyone can express their point of view.

He reports that the 2015 fire destroyed hare habitat and migratory caribou (Georges River herd) feeding grounds. Also, due to climate change, snow is melting earlier, and migratory bird behaviour has changed; geese no longer land in specific areas, making hunting more difficult.

## EASTMAIN

## TRAPLINE RE02

Several users frequent this land and engage in various hunting, fishing, trapping, and gathering activities, mainly along the Billy-Diamond Highway.

According to the users interviewed, since the forest fire of 2013, there are few caribou on the land. Furthermore, changes in snow and ice cover and in the levels of certain water bodies are being observed in relation to climate change.

It is difficult for the users interviewed to have a clear idea of the impacts without knowing the proposed alignment. More information will be needed to that effect. They recall that sturgeon is very sensitive to disturbance and that there is an area to protect for this reason. Preservation of streams is also very important, especially for beavers, including the branch connecting Nistam Siyachistawach Lake to their camp lake, which passes under the BillyDiamond Highway north of km 372. The Tallyman also points out that their proposal for a Protected Area was rejected because of the mining development (James Bay Lithium Project) on their trapline.

The users questioned the interest of the railway and asked if a train stop was considered at the truck stop at km 381 which is on their trapline.

The alignment crosses or borders several activity areas and valued areas and runs close to their main camp located at km 371.5 east of the Billy-Diamond Highway. They are therefore concerned about being disturbed by train noise when they are at their camp. Along the road, the alignment crosses the users' main activity areas (goose hunting, trapping, fishing and berry picking) and a snowmobile trail. It also runs over a sturgeon spawning ground, a sensitive area, which is of great importance to the family and users who fish on the Eastmain River. For all these reasons, the users of RE02 request that the railway completely avoid crossing their trapline and instead run east of it.

## TRAPLINE RE03

This trapline, which is crossed by the Eastmain Road and the Billy-Diamond Highway, is frequented by members of the Tallyman's extended family and by several members of the community. Some non-natives also hunt there. The Tallyman and his family hunt moose, fish and trap beaver mainly.

The Tallyman indicates that the construction or operation phases of the infrastructure could impact their trapline and its activities, either because of noise and vibrations, the hunting and fishing activities of the workers, and the risk of fire. He recalls that the trapline almost completely burned down in 2013, severely restricting users' activities for a few years. He indicates that there are numerous bears on the land feeding on the multiple berries now growing there as a result of the wildfire.

The Tallyman would like to avoid crossing the railway tracks to get to his trapline from the Billy-Diamond Highway; therefore, he indicates that the railway tracks should run east of this road. In fact, he would prefer that a second road be built parallel to the Billy-Diamond Highway, for trucks only, rather than a rail line.

Another user also indicated that his moose hunting activities are already disrupted by truck traffic on the BillyDiamond Highway and he is concerned that the proposed infrastructure will further disrupt his activities on the small section of land he uses.

Currently, the alignment is planned west of the Billy-Diamond Highway (see Technical Note 12). It runs along the activity areas on both sides of the road (beaver trapping).

## TRAPLINE VC30

This trapline is crossed by a small section of the alignment, about 2.5 km . This area has been used for several years by a user of trapline VC23 in Wemindji who has a camp there consisting of two cabins. The Tallyman also plans to build a camp on this site in 2023 to carry out hunting, fishing and trapping activities. For the time being, he frequents more the western sector. Almost the entire trapline was burned in the 2013 fire.

It is difficult for the users interviewed to have a clear idea of the impacts without more information on the proposed infrastructure. However, they are concerned about the risk of accidents at crossings on the Billy-Diamond Highway and when the rails cross their trails. They wonder if this proposed infrastructure could have an impact on the price of furs, which is already very low.

The proposed alignment runs one kilometre from the existing camp and crosses the area planned for future activities of the Tallyman who plans to build a camp on a site located approximately 600 m from the proposed alignment.

## TRAPLINE VC33

The Tallyman and several members of his extended family frequent this land, although they are still experiencing impacts from the 2013 wildfire that ravaged the land extensively. Wildlife remains generally less abundant. They hunt, trap, fish, and harvest berries. Depending on the time of year, they frequent different areas of the land. However, due to climate change, the routes are more dangerous in some areas, and they restrict their movement around the land.

The users consider all their land to be protected. They had concerns about the impacts associated with the construction and operation of the railway, but felt that the impacts on wildlife, land, and activities might be less significant on the east side of the trapline than on the west side, because there is less topography (mountains and hills) and therefore less blasting would be required. They are concerned that construction-related blasting will cause a lot of impacts on wildlife and streams, and that non-natives will add additional pressure on wildlife if they come in greater numbers to hunt and fish or set up camps. They are also concerned about the health of people who eat country food if wildlife is affected.

The proposed alignment crosses several streams where there are beaver lodges that users trap. It also crosses the Opinaca and Eastmain Rivers (to be protected), on which users fish and hunt moose and bear in particular.

The users interviewed mentioned that community members should be hired for the construction of the proposed infrastructure.

## WEMINDJI

## TRAPLINE VC12

The trapline, which extends from the bay to the Billy-Diamond Highway, is mainly used by several members of the Tallyman's extended family and by members of another family who engage in various hunting, fishing, trapping, berry and timber harvesting activities. Moose hunting is mostly carried out in the bay area. The Tallyman is concerned about the change in the moose's diet that he has observed. Moose appear to be changing their food source due to the changing availability of resources in the area as a result of climate change (appearance of new plants) and the increase in the moose population, among other things. He indicates that this can affect the health of moose meat consumers, relating his own case where he was diagnosed with a high level of potassium after consuming moose meat. He notes that there are fewer animals (large mammals and fish) on the trapline than there were before the fire. Because of this, harvesting activities are now more concentrated in the James Bay area.

The proposed alignment crosses the land along the Billy-Diamond Highway in a north-south direction for 4 km . The Tallyman is concerned that he will have difficulty crossing the railway tracks or being able to use the land in the vicinity of the tracks. He wondered if there would be a signal to warn of the passing train. He is also concerned about air pollution and wildlife and water quality due to the dust generated by the train, fuel, and the risk of spills. He says the potential for contamination could extend to the bay through streams flowing westward.

The positive aspect of the train, according to the Tallyman, is the possibility of transporting passengers, although there may be an increase in alcohol and drug trafficking in the territory. It is necessary to give voice to the young people since they are the ones who will be most affected, he says. However, he deplores the fact that differences of opinion regarding the proposed railway are dividing families.

On the section of the trapline within the Study Area, the proposed alignment is located to the east of the road and does not encroach any of the listed activity areas, as they are located to the west of the road.

## TRAPLINE VC13

The trapline, which extends from the bay to the Billy-Diamond Highway, is used by several members of the Tallyman's extended family. The Tallyman hunts birds (goose, ptarmigan, partridge, and duck), traps beaver (for traditional food) and fishes. Big game (moose, caribou, and bear) is more rarely hunted. He also notes, as does the Tallyman of trapline VC12, a change in the mooses' feeding habits; they normally feed on the young shoots of poplar or balsam fir, but the scarcity of this food source for the moose population, which is growing on the territory year-round, means that they are reduced to eating bark or other vegetation. He also notes a decrease in the vegetation consumed by the beavers and thus foresees a decrease in the beaver population on his land in the future. Berries are also harvested on the trapline, as well as mushrooms. The latter are collected by Asians who have met him for this purpose, but he does not know if this is for commercial purposes. The Tallyman also notes that now that most of the eastern part of the land, where the Study Area is located, is included in a Protected Area, there is no longer any mining prospecting.

It should be noted that the alignment does not cross any activity areas but does pass near two large harvesting areas and a fishing area.

The Tallyman's main concern regarding the proposed railway is related to the types of train loads and the risks of accidents. He is concerned about the pollution that could be generated depending on the different possible loads (chemical, mineral or equipment). He also indicated that the fuel used by the trains could also impact wildlife and waterways. The Tallyman also mentioned that the soil, which is made up of clay, is very unstable and may, under the effect of climate change, generate risks during the construction of infrastructures.

However, he indicated that the rail line, like the proposed road north of La Grande, could be a positive aspect if it allowed less expensive access to the territory or to the southern cities of the province. He also felt that it would be more convenient for users to have a road along the bay, and that the Billy-Diamond Highway be used for the railway. He reminds us of that due to climate change, snowmobile travel is often compromised on the territory, especially along the bay, and that not everyone has the means to travel by air (plane or helicopter).

Finally, he believes that measures must be implemented to avoid the increase of drugs and alcohol trafficking in the communities.

## TRAPLINE VC14

Only the eastern end of the trapline is included in the Study Area, but the entire trapline is also part of a Protected Area. Note that Lac du Vieux Comptoir, a well-known archaeological site, is located at the eastern end of the trapline, on the border with trapline VC18. This lake, as well as the navigation route on the Vieux Comptoir River that connects the lake to the community, has a particular importance in the history of Wemindji.

Several families use trapline VC14 for different activities. However, the railway alignment does not pass on trapline VC14. It should be noted, however, that the Tallyman's main area of activity is on trapline VC18, where the proposed alignment encroaches on its activity areas. The Tallyman mentions moose hunting as the main activity along the Billy-Diamond Highway but feels that if the proposed railway is properly conducted and potential impacts are closely monitored, it should not unduly affect the moose population.

The Tallyman is concerned about pollution contamination (dust, spills) during construction and operation of the proposed railway, but also contamination from boats that are brought in from outside without being cleaned. He points out that wetland areas must be protected, and that particular attention must be given to the choice of materials used to build bridges and culverts to cross important rivers such as the Vieux Comptoir River. He also fears that noise and vibrations will scare away animals, that camps will have to be moved, and that non-natives will settle in the area. If the infrastructures facilitate access to the territory for all, this could affect the wildlife (moose, fish, and bears). According to the Tallyman, a control point should be planned to regulate access to the territory. However, if the railway is built, he hopes that a passenger service will facilitate the access of users to their land. He also mentions that a road should be built along the coast to better serve the communities.

For the Tallyman, it is important that the proposed railway be beneficial to the Crees, through the creation of jobs or tourism development opportunities, that their voice be considered, and that there be close monitoring of potential impacts.

## TRAPLINE VC16

Several members of the Tallyman's extended family frequent the land. They engage in hunting, fishing, gathering and trapping activities (particularly for the sale of fur). In the Study Area, the Tallyman uses the section near the Billy-Diamond Highway in particular. In fact, the alignment crosses various activity areas (hunting, trapping, harvesting), including a valued area, and passes near fishing areas.

He mentioned that the ground is not stable enough for a railway since it is made up of swamps. He is particularly concerned about the construction of a railway parallel to the Billy-Diamond Highway because of an important spawning ground that is located near the highway. This spawning ground at Yasinski Lake and the fish had already been impacted by the construction of the road, mainly because of the culverts, according to him. He also believes that wildlife will be frightened away by the trains. Also, he anticipates that the construction work will involve disturbances on the territory, affecting their activities and their lifestyle. For this reason, even if the proposed railway would facilitate their access to the territory, the Tallyman would not support it.

Finally, the Tallyman reiterates that the important thing is to preserve the territory, to minimize the impacts and to undertake only the necessary work.

## TRAPLINE VC17

Two Tallymen share responsibility for trapline VC17. The Tallyman interviewed occupies the eastern part of the trapline, which is crossed by the Billy-Diamond Highway, while the second Tallyman occupies the coastal area.

The Tallyman has prepared a list of over 100 names of land users. He and his family concentrate their activities around the three main camps located at kilometres 496, 504 and 510 of the Billy-Diamond Highway on the east side. They hunt caribou, moose, and geese in this area. Several beaver trapping and fishing areas were identified within the Study Area, both east and west of the Billy-Diamond Highway. The roadside is also a blueberry and mushroom picking area. In addition, three drinking water sources, also identified as sensitive areas, are located on the east side of the Billy-Diamond Highway at kilometres 496, 511 and 515. A former camp site is located on the shores of a lake west of the Billy-Diamond Highway at kilometre 503 and a non-native camp is located at kilometre 507 on the east side of the Billy-Diamond Highway.

The main camps are important sites, particularly because they are gathering places for the celebration of various ceremonies such as the Walking Out Ceremony, birthdays, the first hunt, or when a bear is hunted. They are also gathering sites for the spring goose hunt.

The Tallyman emphasizes the importance of ensuring that drinking water sources and water bodies are protected in the event of railway construction. Fish in particular are more vulnerable than other animals as they can hardly move to seek new feeding grounds if their environment is disturbed. However, he believes that a railway is less damaging than a road which causes more pollution, traffic, and accidents. One of the positive impacts of a railway would be the reduction of heavy traffic on the Billy-Diamond Highway.

According to the Tallyman, the main impacts from railway construction would be experienced during construction itself rather than during operation, unless there are spills.

## TRAPLINE VC18

Many families affiliated with the Tallyman's family frequent this land. They hunt moose, bear and waterfowl, trap beaver and fish. Other users, both Cree and non-Cree, also carry out activities on the land (on areas that are not inventoried). The Tallyman deplores the fact that the resulting overhunting of moose is out of control, which prevents him from ensuring that the ecosystem is respected.

The proposed alignment runs within 500 m of a camp area, as well as two water sources. The alignment also crosses snowmobile trails and a navigation route. The area around the road is used for a number of activities, including goose and bear hunting. In this regard, the Tallyman mentions that there are many dens on the territory.

Users were not in favour of the proposed railway at first glance, but felt that they would need more information, including potential impacts, to make up their minds. They also said that they have already been impacted enough by power lines, the Billy-Diamond Highway, forest fires, mining activities, and flooding of reservoirs on nearby traplines that impact VC18. These events affect water quality and wildlife and disrupt operations. Users are particularly concerned about the number of mining claims in the northeast portion of their trapline. These claims border a highly valued lake, Kaychikutinaw Lake, located in the Study Area, whose clear waters are reputed to have healing properties. In addition, they report that they observe many dead animals along the road. While the rail line may be a benefit if it were to reduce the number of heavy trucks on the road, users are concerned that the impacts increase with proposed infrastructure. In addition, they are concerned that the younger generation will no longer be able to discern changes in resource quality and will eat contaminated food. Among the anticipated impacts, users are concerned that non-natives with camps along the road may take advantage of the train to smuggle "wild meat" or alcohol.

As for the alignment, they feel that it should remain as close as possible to the road to avoid affecting too much territory.

Some of the users interviewed consider that the engagement process prior to the execution of a project has improved since the James Bay hydroelectric project, where they were only informed by Billy Diamond. These days, they are more informed about the developments in their territory, also because many of them speak English and French, which was less the case in the 1970s. But they consider that the memorandum of understanding that led to La Grande Alliance was not presented to them before it was signed. They added that it was important to include everyone in the process since all were concerned (including youth, seniors, other users).

## TRAPLINE VC19

The trapline is entirely within the Study Area. The Tallyman and other users frequent the the Billy-Diamond Highway area, along which the user camps are located. Other areas are also used away from the road. In several places on the trapline, users hunt (moose, goose, ptarmigan), trap (beaver, porcupine, marten, hare) and fish (sturgeon, walleye, whitefish, trout).

The Tallyman believes that the positive effects of the proposed infrastructure would be the reduction of heavy vehicle traffic on the Billy-Diamond Highway, the reduction of the price of goods and materials, and the facilitation of the transportation of materials in the communities. However, he is concerned about the increase in drug and alcohol trafficking, as well as the risks of spills of pollutants for the quality of the waterways, fauna, and flora. In this regard, he indicates that measures will have to be taken to prevent them.

The proposed alignment passes near a camp area, a fishing and moose hunting area, and approximately 250 m from a lake used as a drinking water source. In addition, it crosses a few goose hunting areas and black bear areas.

TRAPLINE VC23
Several families use this trapline for year-round activities. The VC23 trapline has been affected in the past by Hydro-Quebec's hydroelectric developments and road construction, which have resulted in unauthorized hunters (native and non-native) and wildlife disturbance.

The Tallyman does not see the point of a railway on his land. He does not want rails on his trapline, which would mainly benefit the natural resources companies. He believes that it would be more relevant for a train to pass along the coast and connect Chisasibi to Whapmagoostui, since the communities would also benefit from it.

The Tallyman also indicates that there are many natural obstacles (rivers, lakes, swamps) to the construction of a railway, and that the soil would not be stable enough to support it. He also sees many negative impacts to the construction and operation of the railway, including impacts on waterways and wildlife (including fish). Water bodies represent habitats for waterfowl and should be protected. He also believes that animals can be easily hit by train, and that user safety will be reduced. As a result, traditional activities will be more difficult to maintain, according to him.

The proposed alignment crosses the westernmost part of the trapline for about 5 km , and no activity has been identified in the vicinity. It should be noted, however, that the alignment passes within 1.3 km of the Tallyman's main family camp, which has been used since the 1980s.

CHISASIBI

## TRAPLINE VC02/CH34

Most of the activities on this trapline occur along the James Bay shoreline, away from the proposed infrastructure. Only a very small portion of this trapline is included into the Study Area, but it contains an area to be protected (source of the watershed), which is located nearly 20 km west of the suggested alignment. Users are concerned about contamination of the watershed in the event of a spill or derailment. They are also concerned about large wildlife being hit by the trains, and that the railway will alter the caribou migration route.

The users interviewed expressed their opposition to this proposed infrastructure which, according to them, will only benefit the mining companies. However, they mention that a road from the community to their camps along the bay would be useful for them to continue their activities in a context of climate change since snowmobile travel on the bay becomes dangerous in the spring.

TRAPLINE VC03/CH35
Several members of the community frequent this trapline which is crossed by the Chisasibi road.
The users interviewed were concerned that caribou may use the proposed rail corridor. They are also concerned about the additional noise pollution generated by the train. It should be noted that the proposed alignment passes almost 20 km from a valued area, and about 12 km from the nearest camp.

They feel that the proposed railway is one additional and unnecessary project as they have already experienced several impacts on their territory related to hydroelectric developments on the La Grande River, in addition to power lines and roads.

## TRAPLINE VC04/CH36

The Tallyman and his extended family frequent the trapline, including moose and goose hunting, beaver trapping, fishing, berry picking for food, and mushroom harvesting for commercial purposes (resale in Japan). Four camps have been identified in the vicinity of the Billy-Diamond Highway, three on the west side of the highway at kilometres 582, 599 and Little Michikusiw Lake, and a fourth on the east side of the highway at kilometre 584, which has seven cabins.

The Tallyman notes that the beaver population has declined in the water bodies near the road because there is already too much activity. It has also decreased in the vicinity of the Robert-Bourassa Reservoir due to water level variations. It should be remembered that the entire eastern half of this territory was flooded by the creation of the reservoir, and the Tallyman indicates that climate change is modifying and restricting hunting activities on the trapline. On the other hand, there are numerous camps and non-native activities on the trapline as well as mining exploration. More than ten non-native camps have been identified around Duncan Lake, mainly dedicated to fishing activities, and another one has been identified at kilometre 586 of the road corridor, on a small lake west of the Billy-Diamond Highway.

The Tallyman is concerned about water quality, particularly for drinking water sources. Two of these, highly valued and used by many community members, are located at km 580 on the east side and km 592.5 on the west side of the Billy-Diamond Highway. He is also concerned about fish due to the creosote treatment of wooden railway ties. He indicated that special attention must be given to the protection of water bodies and fish. It should be noted that two fishing areas have been identified in the vicinity of the road corridor, on the east side at kilometre 586 and on the west side at kilometre 591. Also, the alignment must avoid commercial mushroom harvesting sites that represent a long-term source of income for family members. The Tallyman believes that companies are taking advantage of the territory's resources without any real benefit to the users.

## TRAPLINE VC05/CH37

The proposed alignment passes near several camp sites (about 15) on both sides of the Billy-Diamond Highway.
Camps along the road are used as they are easily accessible and the surrounding areas are used for hunting and trapping activities, but traffic is a nuisance to camp users. When possible, users prefer to go to camps along the bay to be quieter. Users are concerned about the additional noise associated with the train and suggest reducing the frequency of train travel as a mitigation measure during spring goose hunting.

The users are in favour of the proposed infrastructure if it enables them to supply future generations at a lower cost (gasoline, material, food).

## TRAPLINE VC06/CH38

There are several activity areas on the trapline. Access is provided from the Billy-Diamond Highway to various activity areas to the east of the trapline, and a snowmobile trail runs the length of the trapline. Activity areas have also been identified in the centre and along the bay to the west of the trapline.

Since the Tallyman's mobility is reduced and he cannot move around as much as he used to, camps of easier access are important, especially one that can be reached from the Billy-Diamond Highway. This camp, which includes several cabins used by different members of the family, is located at the end of a road starting at km 550 of the Billy-Diamond Highway and must be protected, as must the surrounding area. The proposed alignment would be located 2 km from this area, which is also the location of an old camp with a burial site.

### 6.1.3 COMMENTS FROM CREE COMMUNITY MEMBERS WITHIN THE FRAMEWORK OF OTHER ENGAGEMENT ACTIVITIES OF LA GRANDE ALLIANCE

Comments from other community members who have been consulted as part of La Grande Alliance proposed infrastructures are considered in Technical Note 5 - Community Impacts.

### 6.1.4 LAND USE BY JAMESIANS

The participants in the engagement activities in Matagami have several concerns regarding the use of the territory in relation to the rail corridor from km 257 of the Billy-Diamond Highway to La Grande. The General Director of the Municipality of Matagami is pleased with La Grande Alliance because it will enable, according to him, to have a regional development strategy that mobilizes the decision makers and the actors of the territory and develops their capacities. He also finds the approach "progressive, modern and complete", particularly in terms of engagement with Cree and Jamesian stakeholders. The railway along the Billy-Diamond Highway to km 257 or to La Grande will not bring new economic development projects according to the General Director of the Municipality of Matagami and he fears that the important investments planned will not make a difference in the short, medium, or long-term.

The participants in the engagement activities in Radisson did not raise any concerns about the land use in relation to the rail corridor from km 257 of the Billy-Diamond Highway to their community. Their concerns are mainly related to the road corridor extension towards Whapmagoostui/Kuujjuarapik (see section 6.2.60).

Participants in the engagement activities in Chibougamau did not have any concerns regarding land use in relation to the rail corridor from km 257 of the Billy-Diamond Highway to La Grande.

### 6.2 SA2 - ROAD \& RAIL EXTENSION - LA GRANDE WHAPMAGOOSTUI/KUUJJUARAPIK

### 6.2.1 CREE TRAPLINES INVOLVED

Study Area 2 (SA2) of the Road (Phase II) and Rail (Phase III) Corridor extends from La Grande to Whapmagoostui/Kuujjuarapik. It includes two Cree communities traplines, namely:

- Chisasibi: FG01/CH01, FG02/CH02, FG03/CH03, FG05/CH05, FG06/CH06, FG07/CH07, FG08/CH08, FG09/CH09, FG10/CH10, FG11/CH11 and FG12/CH12;
- Whapmagoostui: GW01, GW02, GW03, GW04, GW05, GW06 and GW20.


### 6.2.2 DATA AND ISSUES BY TRAPLINE

The meetings with the users made it possible to document the use of the territory with the objective of avoiding as much as possible the activity zones and the zones of interest defined by the Crees.

The concept of Highly Sensitive Areas (HSAs) represents areas identified by land users for which the impacts of any proposed infrastructure raise significant issues (see section 3). Development in these areas is very sensitive. A camp, a major water body, an important harvesting area, heritage sites or any other site deemed important by users may be considered a HSA. It is important to note that in the context of this study, the use of the term HSA is limited to areas free of previous development, in this case between the north shore of La Grande River to Whapmagoostui. Where areas are considered to be highly sensitive in proximity to existing infrastructure, other terms are used, such as Valued Area or Sensitive Area, for example.

It should be noted that the understanding of the study among land users was minimal, such that it took a good amount of time to brief participants on the objectives and desired outcomes prior to collecting information.
It should also be noted that some of this data was made available late, and that an alignment, based on best practices in terms of rail and road design with respect to environmental, technical, and economic factors, was nevertheless proposed (see Technical Notes 12, 13 and 17). It will be reviewed in future phases, if these are pursued, in the light of the data collected and the recommendations made in Technical Note 17. The following section presents the results of these meetings, grouped by community, in relation to the study corridor and the proposed alignment.

## HIGHLIGHTS

- Many people were not aware of La Grande Alliance studies until they were invited to the meeting.
- At the time of the first round of interviews, no alignment was proposed to the land users interviewed, because it was intended to be defined as a result of their input.
- Numerous worries and concerns have been expressed by users in relation to pollution, impacts to big game, and the opening of the territory.
- Some users do not see the interest of the proposed railway for themselves, and do not wish to see the implementation of these proposed infrastructure (road and rail) in the vicinity of their land or their areas of activity.
- The proposed road is more favourably received and considered more useful for the users of the territory than the railway. The railway is a less familiar transportation infrastructure for the Crees than the road.
- Land users are more open to a rail service if it included passenger service.
- As stated by the Tallyman of FG12/CH12, whatever decision will be made concerning this proposed infrastructure, the important thing is that it be made in full knowledge of the facts by and for the Crees.
- The alternative route from LG 1 was not presented until the validation interviews in August 2022. The land users of the traplines in the vicinity of LG 1 were resistant to the idea of a road crossing their land and opening the area further.
- Other key issues raised include:
- The presence of camps within the Study Area and the potential impacts of the potential transportation infrastructures: A total of 47 Cree camps were inventoried, namely 28 main camps, 10 old camps, seven secondary camps, one planned camp (located 4 km from the road alignment) as well as one Cree cultural camp. In addition, three concentrations of camps have been identified as well as an area along the road under study for a future camp. One of these camps area is located along the Hudson Bay, and includes Cree and Inuit camps. Most of the camps were identified as HSA (see section 6.2.4).
- The presence of fishing areas; a snowmobile trail and navigation route; a goose hunting site; hunting, and trapping habitats for caribou, bear, beaver; a caribou migration area and a porcupine habitat. Some of these have been identified as HSA (see section 6.2.4).

CHISASIBI

## TRAPLINE FG01/CH01

Several members of Chisasibi use this trapline located on the north shore of the La Grande River. A small section of this trapline is included into the Study Area, but it contains a highly sensitive area (HSA), located in a Protected Area, which is a historical activity area for the Tallyman's family and includes a main camp, several spawning grounds, a drinking water source, a caribou area, and a burial site. This area is located nearly 30 km west of the suggested route. ${ }^{23}$

Users are concerned that spills could affect water bodies and wildlife on their land downstream of the proposed infrastructure. They also feel that a rail line may disturb caribou that would use it for travel and risk being hit.

The users interviewed do not support this proposed infrastructure and are very concerned about the opening up of the territory for mining activities, which would have harmful effects on the users. The Tallyman indicates that the territory must be respected and preserved for future generations and the Cree way of life.

## TRAPLINE FG02/CH02

The eastern section of this trapline, which is within the Study Area but away from the suggested alignment, is primarily used in winter for hunting, fishing, and trapping. Small streams to be protected for beaver habitat and moose hunting have been identified by users in the Study Area as HSAs. These are tributaries of the La Grande River on the north shore.

The Tallyman does not support this proposed infrastructure (road and rail) on his trapline because it would bring in other users and increase pressure on the wildlife resource. It is also to note that the road option from La Grande-1 to the north of La Grande River, which crosses trapline FG02/CH02 and is partially outside the SA2, was not under consideration at the first interview. However, they express their rejection of this option during the validation

[^14]interviews, saying that they do not need this road to access their trapline as they already have a snowmobile trail, and that would only bring other users on their land.

## TRAPLINE FG03/CH03

Several users frequent trapline FG03/CH03, in its western end, away from the proposed infrastructure. Only a small portion of this trapline touches the Study Area west of Roggan Lake. A valued fishing area to be protected and a HSA representing a drinking water source are located almost 35 km west of the suggested alignment.

Users are concerned about pollution (especially contamination of water bodies and beavers), which could be generated by mining activities that would be promoted by La Grande Alliance proposed infrastructure.

They also mention, from their experience, that the road can have various impacts such as the reduction of wildlife that is harvested (e.g., geese, ducks and Labrador tea) and the theft of equipment from camps. In addition, they are concerned that more non-native camps will be built along the proposed road.

Users indicate that there might be an interest in the proposed railway if it were also planned for passengers. Unlike many of the other users interviewed, they are less concerned about the proposed railway than the proposed road. They would, however, support the proposed road if the community were to vote in favour, but do not wish to have a road on their land.

## TRAPLINE FG05/CH05

A very small section of the trapline touches the Study Area.
The users interviewed (the Tallyman could not be interviewed) are concerned that the proposed road and railway would impact the caribou migration route as they would tend to use these ways that facilitate their displacement on the territory.

They are also concerned that migratory fish species will be affected, and that Roggan Lake will be subject to contamination and increased use (hunting and fishing). This lake is highly valued and represents a HSA for several activities; it is located downstream of the proposed infrastructures, within a Protected Area, on trapline FG09/CH09.

The users interviewed would like to have an access road as a mitigation measure. They would like to be kept duly informed of the La Grande Alliance proposed infrastructures and those that will result from it. They suggest that the tallymen be met jointly and not separately, which was done in August 2022 in Chisasibi. At this meeting, the Tallyman categorically rejected the proposed infrastructures, citing the risks of contamination of the water bodies flowing into James Bay, which cross his trapline.

## TRAPLINE FG06/CH06

Three families frequent this trapline throughout the year, but less often in summer. They engage in various hunting, trapping and fishing activities in the James Bay sector, but also in the Study Area, where an area has been defined as an HSA, particularly because it contains spawning grounds for various fish species. The HSA is located within 5 km of one of the proposed alignment options and consists of water bodies downstream of the proposed alignment. It should be noted that the entire trapline is located in a Protected Area.

Users are concerned that the proposed infrastructures (road and rail) will contaminate the Roggan River and the lakes on their traplines, especially if a mine is built as a result of these proposed infrastructures.

They do not support these proposed infrastructures in the vicinity of their traplines.

## TRAPLINE FG07/CH07

Many users (over one hundred, according to the users interviewed), frequent the trapline, mainly on the bay side. The proposed alignment crosses the eastern end of the trapline, which is accessed by snowmobile by users.

On this trapline, the proposed alignment crosses a trapping area and a caribou migration route. Another trapping area is located 1.5 km from the alignment. It also passes near ( 1 to 2 km , depending on the route option) a longestablished fishing area (HSA).
The users interviewed are concerned that the land affected by the road and rails will be public and available to anyone for camp construction.

They were concerned that the train would not be able to stop if a herd of caribou used the railway as a migration route. In addition, concerns were raised about possible contamination related to the type of train loads, such as lithium, and the mining activities that could develop. Spills could contaminate water bodies and fish.

During the validation interview, the users of trapline FG07/CH07 clearly stated their refusal to have a road crossing their trapline. They stated that their entire trapline was originally declared a Protected Area, but that the boundaries of the Protected Area had been changed to allow the road to run through their trapline without their knowledge or consultation. Two potential borrow pits have been identified on their land, also within what they consider to be the original Protected Area, and they are opposed to their development. Users wonder in what ways (ownership, management, economic opportunities) the Crees will benefit from these proposed infrastructures.

## TRAPLINE FG08/CH08

The Tallyman of this trapline believes that the alignment should pass to the west of Julian Lake, since this sector is an HSA to be protected, he does not want to see any development in the vicinity because of the potential contamination of the territory and Julian Lake. Note that the entire portion of trapline FG08/CH08 included in the Study Area is in a Protected Area, including Julian Lake. He indicates that, although many people no longer use the area, the few that do use it want to continue to do so in the future. They have always hunted in this area and could not support having it polluted.

The suggested alignment passes east of Julian Lake. It should be noted that one alternative alignment studied that runs through FG08/CH08 crosses a Protected Area and was not retained.

## TRAPLINE FGO9/CH09

The trapline is located in the Study Area, north of La Grande. Due to age or health reasons, the Tallyman and his brother operate in the southern part of the trapline since access is easier there. In addition, due to climate change, they can no longer travel by snowmobile to the north of the trapline for goose hunting as they used to. However, there are some HSAs in the northern half of the trapline, including Roggan Lake.

The proposed alignment:

- passes near a Cree cultural camp for youth (run by the Cree Health Board).
- passes near several goose hunting sites.

The Tallyman is in favour of a road that would provide easier access for youth and elders to some areas to the north of the trapline, such as the Roggan Lake HSA. However, other outside users could also visit.

The Tallyman proposes mitigation measures in the event that a road is built on his trapline, such as to improve access to his main camp and to build a ramp to facilitate the launching of boats near this camp.

## TRAPLINE FG10/CH10

Nine main users and their families frequent the trapline, which is almost entirely located in the Study Area. They mainly hunt geese, moose, and caribou, as well as fish. They access the land by helicopter or snowmobile. Due to climate change, some of the former goose hunting sites are no longer accessible by snowmobile, and they sometimes travel to another area for this activity.
The Tallyman is concerned that the road will impact caribou areas on the land. He asked that these areas be avoided. He is also concerned that the road construction will affect fish and fishing sites and that it will bring many people to the territory. He suggested that the road be built on $\mathrm{FG} 09 / \mathrm{CH} 09$, which is west of their main activity area around Lake Pamigamachi.

The alignment encroaches on several activity areas including a fishing HSA, a caribou area, a fishing area, and passes near goose hunting areas (at $750 \mathrm{~m}, 2 \mathrm{~km}$ and 4 km ).

## TRAPLINE FG11/CH11

Several members of the Tallyman's extended family frequent the land. They trap (beaver, wolf), hunt and fish there. The users feel that a road would facilitate access to the western part of the trapline, especially since climate change is disrupting snowmobile travel and shortening the activity periods.

The Tallyman is not concerned about the increase in traffic that the road might generate on the land, since the land has always been shared with other users. However, the road alignment must avoid sensitive areas and should ideally pass through the western end of the trapline (which is the proposed alignment). In addition, the users are concerned that the construction of the infrastructure will be detrimental to the land because of chemical spills or workers' toilets. They want to keep the lakes intact and want to be kept informed of the location of the workers' camps.

One variant of the proposed alignment passes less than one kilometre from a HSA (fishing area), but land users didn't have a preference between the proposed alternatives (see Technical Note 17).

## TRAPLINE FG12/CH12

The main activity area of the users of this land (which is an HSA) is located in the middle of the study corridor. Their main camp is located on the north shore of the lake along which the easternmost study alternative for the road runs. This lake, called Kapîstewkubaw in Cree (where there is foam on the water) has been identified as a highly valued area. It is used for hunting bear, moose, ptarmigan, geese, fishing and blueberry picking. Two burial sites have been identified on the shores of this lake.

Two lake trout spawning areas were also identified and the two eastern alternatives of the alignment run directly over these spawning grounds.

The Tallyman told stories associated with various lakes in this area, some of which at the origin of the Cree place names for these lakes. Several lakes in the study corridor are used for fishing and for trapping beaver and other furbearers.

The users of this trapline were not met during the first round of interviews but were interviewed during the validation interviews. Three alignment options, which pass over trapline FG12/CH12, are being studied to date. One of them, which crosses a Protected Area, should not be retained. In light of the data collected on land use, it appears that the central variant should be preferred. However, the users recommend that, if the proposed infrastructure is carried out, measures be put in place so that people travelling on the road cannot fish in this lake. Another lake further north, known for its clear waters and abundant fish, was also identified as a site to be protected.

For the Tallyman, whatever decision will be made concerning this proposed infrastructure, the important thing is that it be made in full knowledge of the facts by and for the Crees.

## WHAPMAGOOSTUI

## TRAPLINE GW01

The community of Whapmagoostui/Kuujjuarapik is located on trapline GW01. The Tallyman frequents his trapline year-round, except in summer due to the heat. The trapline is also frequented by other users, including Inuit who occupy several camps along the coast. The Tallyman mentions that a spirit of sharing characterizes the people who use the community's territory. The interior of the land, as well as the bay area, is frequented.

The proposed road and rail alignments touch a large area of activity that includes all the activities along the shoreline across from Whapmagoostui and to the north. From the north of the alignment, several camps, owned by Cree and Inuit, are scattered along the shoreline of this trapline. They hunt for geese in the spring and fall. Community members also fish for trout in a series of small lakes that run northeast from the village along the coast. The Tallyman frequents a camp located on the coast at the mouth of a river where he fishes for lake trout.

The entire section of the Study Area to the northeast of the village is used for hunting by members of the community, particularly in the fall before freeze-up, when it is impossible to cross the Great Whale River by snowmobile. People hunt small game such as ptarmigan, partridge, and hare by ATV.

A snowmobile trail runs along the entire coast and is used by Cree and Inuit land users.
According to the Tallyman, hunting marine mammals and polar bears is more part of Inuit culture, but the black bear, called "grandfather", is an important part of Cree culture.

Five burial sites, including one in the Study Area, were identified on the land, mostly along navigation routes.
He also says that due to climate change, campsites must be moved away from the shoreline because the ice cover is no longer thick enough. In addition, the ground is unstable and there are always more landslides and creation of sinkholes. He points out that these phenomena must be considered in the construction of infrastructures, for the safety of all.

For all phases of the proposed infrastructures, the construction period is deemed to be particularly disruptive for land users who will suffer the inconvenience.

The Tallyman is concerned that non-natives will set up camps without permission on the territory if the road is built. He also fears an increase in drug and alcohol trafficking, and collisions with wildlife. However, he believes that the road would be a good achievement if the impacts are minimized, since it would facilitate the practice of traditional activities such as berry picking, fishing, and hunting outside the winter season, during periods when it is impossible to use snowmobiles. The Tallyman also points out that access to the territory by air is not optimal because of Air Inuit's priority management and the vagaries of weather conditions.

Regarding the proposed railway project, the loss of tranquility, both for wildlife and for the practice of traditional activities, is the main anticipated impact.

## TRAPLINE GW02

The Tallyman and his family are the main users of this land. They mainly hunt (birdlife, caribou and partridge), fish (pike, trout, sucker and whitefish) and trap (beaver and marten).

The proposed alignment does not touch the trapline and the activities identified in the Study Area are located more than 15 km from it.

The Tallyman believes that the road could have a positive effect if access to the south is facilitated, and the price of food and equipment is reduced. The train could also have a positive impact if passenger service is considered.

## TRAPLINE GW03

The Tallyman, his two brothers and their families are the main users of this land. They practice fishing, caribou and goose hunting, as well as trapping (marten, beaver). They travel by ATV, plane, or snowmobile. A coastal snowmobile trail has been marked on the bay, as well as an ATV trail used when snowmobile travel is not possible. Another snowmobile trail runs north-south inland to the Chisasibi traplines. Users frequent both Hudson Bay and the interior. Many people have camps in the coastal area of the trapline where fishing for cisco and sea trout takes place during the thaw period. The Tallyman hunts geese in the fall along the coast while moving inland for the spring goose hunt.

Regarding the proposed infrastructure, the Tallyman notes that due to climate change, more and more landslides are occurring. He believes that the village should be moved a few kilometres south to protect it from climate change since it is located on sandy soil. The permafrost is changing, and this must be taken into consideration. He reminds us that the harshness of the environment, the need for blasting and the need to build several bridges will have to be taken into account during the construction of the various proposed infrastructures. The best season for construction would be after freeze-up.

The alignment crosses an ATV trail, a snowmobile trail, and a navigation route with a portage. Where the road alignment crosses the navigation route, a bridge would have to be built at this location since the watercourse is quite wide, so it would be possible to pass under by boat.

The closest activity areas to the proposed alignment are winter fishing areas identified in three lakes located east of the proposed alignment. Otherwise, the Tallyman's main activity area has been identified 7 km east of the proposed alignment. However, the Tallyman intends, if the road is built, to establish a camp near it so that he can access his main activity area year-round from there by snowmobile or ATV. The Tallyman supports the road construction as it would reduce the cost of living (food, materials, and other goods) and facilitate travel, especially to the trapline, as well as year-round travel for all community members. He would also like the road to be accessible in winter. However, the presence of the road could have an impact on wildlife, through collisions with vehicles, but also through abusive and disrespectful hunting of animals. Garbage could also be found along the road. However, the Tallyman is concerned that this could increase drug and alcohol trafficking and believes that a checkpoint should be set up to monitor what enters the community. It will also be necessary to ensure that there are no drunk drivers.

Regarding the railway, it would provide access to cheaper equipment and could be used to transport cargo and passengers. However, the Tallyman is concerned that drug and alcohol trafficking would be amplified in the community. He indicates that the railway should not be built near rivers because of the risk of landslides.

## TRAPLINE GW04

The Tallyman and his brother frequent the territory for trapping (beaver, otter, marten, mink), hunting (caribou, black bear, goose, partridge, ptarmigan), and fishing. They operate on the coast and inland. Camps used for spring and fall goose hunting by family members and Inuit have been identified along the coast, where geese feed. However, they do not hunt marine mammals as their ancestors did.

A snowmobile trail runs the length of the trapline.
Climate change is causing changes in the territory such as more frequent landslides and forest fires, earlier springs, longer summers, and later winters (winter conditions appear in January rather than December). Thus, each year the season cycle is different. The Tallyman is also concerned that the bay will eventually stop freezing in winter.

He is also concerned that infrastructure construction will impact water bodies and watersheds. He notes that some small lakes are now almost dry. There is a HSA that needs to be protected; it is located about 10 km west of the proposed alignment. No other activity areas are located closer to the proposed alignment. It should be noted that the proposed road and rail alignment is outside the trapline.

The construction of a road could facilitate travel and reduce the cost of food, equipment and other goods. However, it could reduce hunting areas. In addition, the noise could scare away birds and other animals. Regarding the railway, the Tallyman indicates that a train with passenger service is a good travel alternative in the territory. However, he foresees negative impacts on wildlife due to noise and vibrations.

## TRAPLINE GW05

For the past 60 years or so, the Tallyman and his family have occupied mainly the eastern part of the trapline and only occasionally go to the western part. However, a nephew of the Tallyman is planning to build a camp on the banks of the main body of water in the western part of the trapline. The Tallyman hunts (goose, partridge, duck) and fishes on the trapline.

Several camps occupied by members of both the Cree and Inuit communities are located along the bay. These users, some of whom have inland traplines, go there for spring goose hunting and summer fishing. The Tallyman also has a camp on the coast from which he hunts geese in the spring and fall. Four families, Cree and Inuit, with camps on the coast travel to Long Island for goose hunting via a snowmobile trail along the bay on the ice. An ATV trail also runs along the coast when snowmobile travel is not possible. Several burial sites are found on this land, located at the crossroads of several routes.

The construction of a new camp is planned on the shores of a lake that borders the proposed alignment of the road. This camp would be located approximately 3.5 km from the proposed road. The Tallyman does not see any inconvenience in this since it would be less expensive for him to access the camp than by airplane and proposes to build an access road to his future camp from the road as a mitigation measure. He may even decide to build his new camp even closer to the proposed road.

The Tallyman notes that some animals have changed their behaviour in relation to climate change (see section 9) and vegetation is growing in new areas. He is particularly concerned about the melting of the permafrost, which can lead to soil instability, and imply dangers for infrastructure construction. Landslides are becoming more frequent.

The Tallyman fears that the opening of the territory will lead to the establishment of a new non-native community in the area. He is also concerned that opening the community by road may draw undesirable people into the territory (fear of drugs and alcohol trafficking), or more tourists who fish and hunt illegally. The fact that the road passes near a camp may also lead to more theft, which is already a problem according to the Tallyman.

Regarding the train, it could lead to a reduction in the cost of food, equipment, and other goods, and be a good way to travel. However, he fears that people will board the train illegally.
The proposed alignment passes near a valued activity area and is approximately 3.5 km from a proposed new camp site to be constructed in the summer of 2022 and nearly 4.5 km from a fishing site.

## TRAPLINE GW06

The Tallyman and his brothers are the main users of this land, although many people also come to hunt caribou. The users hunt caribou, partridge, goose and bear, trap beaver and fish for trout, pike, and whitefish. Inuit also frequent this trapline. The Tallyman travels to his camp by plane followed by a 3-hour ride on an ATV, or 2 hours by snowmobile. If he builds a new camp, it will be closer to the airstrip to facilitate his travel. However, he would have liked to see the proposed road alignment run closer to his activity area. However, he feels that a snowmobile trail could be built from the road to access his activity area as a mitigation measure, which would allow him to make the trip in one hour.

For about 5 years, moose have been observed on the trapline, but the users do not hunt them because, according to the Tallyman, this hunting is not part of their culture.

The Tallyman does not believe that the proposed infrastructure bring negative impacts related to non-natives, but he does suggest that a checkpoint be set up to reduce the risk of drug and alcohol trafficking.

The road would facilitate access to the south and to activity areas, however, it would cause traffic and noise, especially during construction. The Tallyman is willing to have his camp moved if necessary.

He also has no objection to the railway and would appreciate a passenger service.
The proposed alignment does not touch the trapline and the nearest identified activity area is 12 km to the east.

## TRAPLINE GW20

The Tallyman and other members of the community visit this area mainly in winter. Activities are also carried out on neighbouring traplines. GW20 is one of the smallest traplines in Eeyou Istchee ( $69 \mathrm{~km}^{2}$ ). If the road is built, the Tallyman plans to build a camp along it.

Although from a personal point of view, the Tallyman sees positive impacts to the construction of the infrastructures, he is strongly concerned for future generations. He mentions that this new access and opening of the area will lead to changes in the territory and the dynamics of the region.

Regarding the opening of the territory, the Tallyman is concerned about the possibility that non-natives will come and settle illegally in the territory and that the greater accessibility of the North will lead to the expansion of conflicts.

The Tallyman believes that the construction of a road could have a major impact on noise-sensitive wildlife such as beavers, unlike caribou which are not disturbed by noise. The change in animal behaviour due to noise could affect traditional activities such as hunting.
He also believes that the railway infrastructure could have a major impact on wildlife, including fish, which could be affected by noise and vibration. Hibernating bears could be disturbed in their sleep and consequently weakened. However, he believes that the proposed railway would have a lesser negative impact on wildlife than a road.

The positive aspect to the proposed railway would be the presence of a passenger service that would facilitate travel between the traplines and the community.
Note that the proposed alignment crosses this small trapline on a north-south axis. It crosses two porcupine areas and passes near ( $2-3 \mathrm{~km}$ ) bear hunting areas.

## TRAPLINE GW22²4

The Tallyman, his brother, and several members of the community use the land along Hudson Bay, a few kilometres north of Whapmagoostui. The users fish, trap beaver and hunt (goose, caribou, partridge, black bear). These activities are carried out inland and, on the bay, especially in the southern half of the trapline. The main camp, located inland, is also used by youth for traditional and spiritual activities.

Several Cree and Inuit camps are present on the coast and are used for fishing and goose hunting. Geese are also hunted on an island opposite to the trapline in the bay. Several tributaries flowing into the bay have also been identified as beaver trapping areas.

Two snowmobile trails, one on the ice of the bay and the other on land, have been marked, the first used after freezeup to reach Tursujuq National Park to the north, and the other used before freeze-up. Several ATV trails also connect the bay to inland activity areas.

The road could be useful to the community and its impacts are less significant than those of other developments. Also, the Tallyman feels that it could be very convenient for the train to carry passengers and cargo. He believes that the animals will adapt to the noise and vibrations.

[^15]
### 6.2.3 COMMENTS FROM CREE COMMUNITY MEMBERS WITHIN THE framework of other engagement activities of la grande ALLIANCE

Comments from other community members who have been consulted as part of La Grande Alliance proposed infrastructures are considered in Technical Note 5 - Community Impacts.

### 6.2.4 HIGHLY SENSITIVE AREAS

Areas identified by trapline users as highly sensitive (HSAs) are presented below, by trapline, with a note, where applicable, of their location relative to the proposed alignment:

## CHISASIBI

FG01/CH01: A small section of this trapline is included into the Study Area, but it contains an HSA, located in a Protected Area, which is a historical activity area for the Tallyman's family, including a main camp, several spawning grounds, a drinking water source, a caribou area, and a burial site. This area is located about 30 km west of the suggested alignment ${ }^{25}$.

FG02/CH02: HSAs, which are small watercourses to be protected for beaver habitat and moose hunting have been identified by users. These are tributaries of the La Grande River, on the north shore.
The Tallyman does not support these proposed infrastructures (road and rail) on his trapline because it would bring in other users and increase pressure on the wildlife resources ${ }^{26}$.

FG03/CH03: Only a small portion of this trapline touches the Study Area west of Roggan Lake. A valued fishing area to be protected and a HSA that represents a drinking water source are located almost 35 km west of the suggested alignment.
Users are concerned about pollution (especially contamination of water bodies and beavers) caused by mining activities that would be promoted by La Grande Alliance proposed infrastructures.
FG05/CH05: Users of this trapline are concerned that migratory fish species will be affected, and that Roggan Lake will be subject to contamination and increased use (hunting and fishing). This lake is highly valued and represents an HSA for several activities; it is located downstream of the proposed infrastructures, within a Protected Area, on trapline FG09/CH09.

FG06/CH06: An HSA was identified in the Study Area in part because it contains spawning areas for various fish species. The HSA is located within 5 km of one of the proposed alignment options and consists of water bodies downstream of the proposed alignment. It should be noted that the entire trapline is located in a Protected Area.

Users are concerned that the proposed infrastructures (road and rail) will contaminate the Roggan River and the lakes on their traplines, especially if a mine is built as a result of these proposed infrastructures.

[^16]FG07/CH07: The proposed alignment passes near ( 1 to 2 km , depending on the alignment option) a longtime valued fishing area (HSA). Users are opposed to any infrastructure construction on their land, which was originally intended to be declared a Protected Area in its entirety.

FG08/CH08: The Tallyman of this trapline believes that the alignment should pass to the west of Lake Julian, since this area is an HSA to be protected, he does not want to see any development in the vicinity because of the potential contamination of the territory and Lake Julian. It should be noted that the entire portion of trapline FG08/CH08 included in the Study Area is in a Protected Area, including Lake Julian, and therefore the alignment option that encroaches on the Protected Area will not be retained.

FG09/CH09: HSAs were identified in the northern half of the trapline, including Roggan Lake.
The Tallyman, however, supports a road that would allow youth and elders easier access to some areas north of the trapline, such as the Roggan Lake HSA.

FG10/CH10: The alignment impacts several activity areas including a fishing HSA, a caribou area, a fishing area, and passes near goose hunting areas ( $750 \mathrm{~m}, 2 \mathrm{~km}$, and 4 km away). Therefore, users suggest that the road be built on FG09/CH09, which is west of their main activity area around Pamigamachi Lake.

FG11/CH11: A variant of the proposed alignment runs close to a HSA (fishing area). The Tallyman felt that to avoid this HSA, the road alignment should ideally pass at the western end of the trapline, which corresponds to the proposed alignment.

FG12/CH12: The main activity area for these land users (HSA) is located in the middle of the study corridor. Their main camp is located on the north shore of the lake along which the easternmost study alternative for the road is located. This lake, called Kapîstewkubaw in Cree (where there is foam on the water), is known to contain many fish and has been identified as a highly valued area. Hunting activities include bear, moose, ptarmigan, goose, fishing, and blueberry picking. Two burial sites have been identified on the shores of this lake. For all these reasons, the central variant should be preferred.

Two lake trout spawning areas have also been identified in rapids around this same lake and the two eastern alternatives of the alignment pass directly over these spawning grounds.

## WHAPMAGOOSTUI

In Whapmagoostui, only one Tallyman has identified an HSA that must be protected. This HSA is located on trapline GW04 approximately 10 km west of the proposed alignment. It should be noted that the road and rail alignment is located outside the trapline.

### 6.2.5 ASSESSMENT OF THE ISSUE OF INCREASED ACCESS TO THE TERRITORY AND THE COMMUNITY

## POSITIVE ASPECTS

According to the users interviewed, the main positive aspects related to the proposed road relate to easier access to the territory.
According to some of them, the proposed road could indeed facilitate access to certain camps or activity zones, and young people could more easily pursue traditional activities, especially those that are practiced outside the winter season and that require the use of snowmobiles. One user noted that air travel is not always optimal for accessing the territory and can also be very expensive.

Others note that climate change is affecting snowmobile travel in the area and feel that a road could make winter and spring hunting activities, which are sometimes cut short due to ice cover conditions, safer and more sustainable.

Specifically for the community of Whapmagoostui, the main positive aspect of the road is the reduction in the cost of materials, food and other goods. The road would also provide easier access to activities areas in the south.

For many of the users interviewed, the positive aspect of the railroad would be to allow for the transportation of passengers in addition to cargo.

## RAISED CONCERNS

The users interviewed raised more concerns than positive points regarding the proposed road and railway. Some fear that the opening of the territory and the opening of Whapmagoostui will lead to major changes on the territory, the dynamics of the region and the Cree lifestyle. One of them specifies that the territory must be respected and preserved for future generations and the Cree lifestyle.

The vast majority of users interviewed are concerned that pollution from spills or other contamination will impact water bodies and wildlife that are not currently being polluted. Some are particularly concerned about beavers or fish species.

Some users also express strong concerns about mining activities that may occur with the opening of the territory, because they create adverse effects on the environment and users. Others are concerned that loading trains could disperse pollution or contaminants related to mining activities in particular.

The loss of tranquility for both wildlife and traditional activities is the main impact anticipated for some users. Noise or vibrations could have a significant impact on wildlife such as beavers, birds, fish and bears, which could then flee or change their behaviour, thus affecting traditional activities such as hunting. However, one Tallyman believes that animals will adapt to the noise and vibration associated with the railroad. There is also concern that new land or rail access could disrupt caribou habitat, or that caribou could use the new routes for migration and be hit by a train or vehicles.

According to several people met, the arrival of "other" users would increase the pressure on wildlife and plant resources in certain sensitive areas and along the new roads. It could also lead to an increase in theft in the camps. There is also concern that more non-native camps could be built along the proposed road, or that a new community could be established near Whapmagoostui. Littering along the road and overhunting or disrespectful hunting are also feared.

For the community of Whapmagoostui more specifically, concerns were raised regarding a possible increase in drug and alcohol trafficking. Finally, the fear that accessibility to the North in case of conflict or war would make the community more vulnerable was expressed.

## EXPECTATIONS

The main expectations for the road and rail are that the cost of living in Whapmagoostui (materials, equipment, food and other goods) will be reduced. Also, for many users, the railroad should provide passenger service.

Some users interviewed suggested mitigation measures that could support improved access to the territory, either through the development or improvement of secondary roads to the camps or a boat launch.

One user would like the road to be accessible in winter as well, and some feel that a checkpoint should be put in place to reduce the risk of drug and alcohol trafficking in the community and to ensure that drivers are not intoxicated.

### 6.2.6 LAND USE BY JAMESIANS

The presentation of La Grande Alliance's proposed infrastructures to the population of Radisson gathered 17 people (citizens, counsellors, and employees of the municipality). The comments, concerns and suggestions arising from this presentation are of a socio-economic nature (See Technical Note 5).
All the participants in the presentation of the La Grande Alliance studies (P1-2-3) to the representatives of Radisson emphasized the importance of the road passing close to Radisson and, to a lesser extent, the train, knowing that the rail alignment will have to follow the road alignment.

However, as mentioned in the section 6.1.4, a tourism stakeholder feels that it would be advantageous for the train and harbour to be multi-use. Tourisme Baie-James, which is trying to offer travel packages, could take advantage of passenger transportation with the train and fill a void left by the reduced supply of bus transportation and the few vehicles available for rent. She believes that the viability of the proposed infrastructures depends on the train stopping in Chapais and making the connection between the Abitibi and Chibougamau. The intention would be to develop sustainable tourism.

The participants in the engagement activities in Matagami and Chibougamau do not have any concerns regarding the use of the territory in relation to the road (phase II) and rail (phase III) corridor extending from La Grande to Whapmagoostui/Kuujjuarapik.

### 6.3 SA2 - HARBOUR IN WHAPMAGOOSTUI/KUUJJUARAPIK

### 6.3.1 CREE TRAPLINES INVOLVED

A single Study Area (SA2) has been designed to include both the proposed harbour at Whapmagoostui/Kuujjuarapik and the road and rail extension between La Grande and Whapmagoostui/Kuujjuarapik. However, the proposed harbour area involves more directly the following coastal traplines:

- GW01, GW03, GW04, GW05 and GW22 ${ }^{27}$

Also, indirectly the following Whapmagoostui traplines that are inland:

- GW02, GW06 and GW20

It should be noted that Inuit communities were not involved at this stage as this remains a Cree initiative that may not be extended beyond this study. However, it is strongly recommended that, if any study components overlapping Inuit territory were to be pursued, engagement with Inuit communities be initiated immediately in subsequent steps.

### 6.3.2 DATA AND ISSUES BY TRAPLINE

The meetings with the users made it possible to document the use of the territory to best consider the activity zones and areas of interest defined by the Crees, as well as their comments, concerns and suggestions. The following section presents the results of these meetings, by trapline, in relation to the proposed harbour only.

[^17]Figure 6-1 presents, by colour, the different options studied for the proposed harbour construction. The people interviewed were able to examine these different options and their comments refer to them.

## HIGHLIGHTS

- Many people were not aware of La Grande Alliance's proposed infrastructures until they were invited to the meeting.
- The bay near the community is used extensively for hunting, fishing, and recreational activities by community members. Many camps are used along the shoreline (HSA).
- Two users see economic opportunities related to tourism development.
- Climate change is causing landslides and soil instability that can be hazardous when building infrastructure.
- The construction of the harbour would impact wildlife, including fish and birds.
- The majority of tallymen interviewed feel that the harbour should not be built facing the community or to the south of it, at the mouth of the river, in particular because of the many activities that take place therein. The northernmost option (green zone on figure 6-1) seems the most appropriate for most of them, although goose hunting is practised in this area by several community members.

TECHNICAL NOTE 3 - LAND USE


Figure 6-1
Proposed Harbour Location

## TRAPLINE GW01

The Tallyman indicates that there are many camps along the shoreline, owned by Crees and Inuit. The area is particularly popular in the fall, and users may be affected if work is conducted at that time.

The Tallyman points out that due to climate change, camp sites must be moved away from the shoreline since the ice cover is no longer thick enough. In addition, the ground is unstable and there are always increasing landslides and subsidence. He reminds us that these phenomena must be taken into consideration in the construction of infrastructures, for the safety of all.

He indicated that the proposed infrastructure should not be built near the community (yellow and blue sections) because of the activities that take place there and the best option, in his opinion, would be the most northern (green) section.

## TRAPLINE GW02

The Tallyman, whose land is away from the bay, does not engage in marine activities and does not own a boat. However, he feels that the best option would be the northernmost section (green), and that the options near the community and to the south (yellow and red) would be the worst since the water level is low there.

## TRAPLINE GW03

The Tallyman goes to the bay with his family and friends.
In terms of developing economic opportunities such as the creation of a business that would offer touristic boat trips, the Tallyman believes that the harbour could be beneficial to the community.

He feels that the construction of a harbour could affect the avifauna (birds, ducks, geese). The best options, according to him, are those to the north of the community (the blue and the green). The yellow option, in front of the community, is not desirable because the area is used by many families, as is the red option further south, where there is an abundance of fish.

## TRAPLINE GW04

The Tallyman uses a canoe for his activities along the shore and at sea (hunting, fishing, and other outings). He feels that a summer harbour would be preferable to a year-round harbour that would affect hunting activities along the coast, since users cross the Great Whale River by snowmobile and if a channel were to remain open during the winter, it would compromise traditional activities.
On the other hand, he feels that the construction of the harbour could disturb birds, fish and even caribou, which have recently tended to migrate along the coast rather than inland.

The Tallyman feels that the harbour should not be built facing the community or to the south of it, since many members use these areas and hunt at the mouth of the river. It would be preferable for the harbour to be located away from the village; the option to the north (the green one) would be the most optimal, followed by the blue one, in his opinion.

## TRAPLINE GW05

The Tallyman is particularly concerned about melting permafrost which can lead to ground instability and result in hazards for infrastructure construction.

The use of an icebreaker would have a negative impact on community members (Cree and Inuit), who use several snowmobile trails along the bay. In addition, there are already many boats in the summer, and the harbour could
increase traffic in the bay. An annually operating harbour would impact the air, vegetation, and animals, including partridges and hares. Thus, he does not see any positive effects associated with the construction of a port. The anticipated negative effects are noise, dust, and pollution, including the risk of spills that could affect wildlife, including migratory birds and fish.
The Tallyman believes that the harbour should not be built in the northern section (green) since many activities take place there. The best option, according to him, would be the one at the mouth of the Great Whale River (red), although this option would also imply significant impacts on marine wildlife. The second most desirable option would be the one located north of the community (blue). He indicated that whales used to come near the mouth of the Great Whale River, but they no longer do so because of the noise.

## TRAPLINE GW06

According to the Tallyman, whose land is away from the bay, the worst option for building a harbour is the area south of the community (red), since the waves are strong at the mouth of the Great Whale River and many activities are practiced there in winter (hunting and sliding for children). The most northern option (green) seems the most adequate according to him and there are few waves.

## TRAPLINE GW20

The Tallyman, whose land is located away from the bay, frequents the coast for goose hunting activities by canoe. He is concerned that the construction of a harbour would restrict rights or access to the coast and activity areas for users. This could restrict hunting on the coast for community members. Harbour construction could also impact marine mammals (seal, beluga) and fish (cod).

The Tallyman believes that the harbour should not be built near the community (yellow option), nor in the northern section (green), since these areas are heavily used for goose hunting in spring and fall. The northern part of the community (blue option) is also used for various activities by all members. According to him, the best option remains the south of the community (red option), and if a bridge were built over the Great Whale River, it would facilitate access to his land.
He indicates that if a harbour is built and this allows the development of a touristic pole, this domain should be exploited by the Crees.

## TRAPLINE GW22

The Tallyman, his brother, as well as several members of the community use this trapline, which is located on along the bay, a few kilometers north of Whapmagoostui and Kuujjuarapik. The users fish, trap beaver, and hunt (notably geese, caribou, partridge and black bear).

For the Tallyman, it is difficult at this stage to anticipate the impacts of the proposed infrastructure. However, he believes that the worst option for the construction of a harbour is the one in front of the community (yellow), and the best one would be the northernmost one (green), followed by the option north of the community (blue).

### 6.3.3 COMMENTS FROM CREE COMMUNITY MEMBERS WITHIN THE framework of other engagement activities of la grande ALLIANCE

Comments from other community members who have been consulted as part of La Grande Alliance proposed infrastructures are considered in Technical Note 5 - Community Impacts.

### 6.3.4 HIGHLY SENSITIVE AREAS

Although none of the coastal areas proposed for the development of the harbour were specifically designated as HSAs by the users interviewed, many felt that the worst-case scenario would be to build the harbour in the coastal areas in front of or near the community, since many residents, both Cree and Inuit, have camps and hunt and fish in the area.

### 6.3.5 ASSESSMENT OF THE INCREASED ACCESS ISSUE

The issue of increased access for the community is addressed in Section 6.2.5, as part of the road and rail extension.

### 6.4 SA3 - ROUTE 167 EXTENSION - RENARD MINE - TRANSTAIGA ROAD

### 6.4.1 CREE TRAPLINES CONCERNED

The Route 167 Extension Study Area (Phase II, Study Area 3 (SA3)) extends along a 100 km wide corridor bounded by the end of Route 167 and traplines M11 and M16 to the south, and the Trans-Taiga Road to the north. It concerns the traplines of two Cree communities, namely:

- Mistissini: M01, M01A, M03, M04, M10, M11, M12, M13, M16, M17A and M23;
- Chisasibi: FG26/CH26.


### 6.4.2 DATA AND ISSUES BY TRAPLINE

The meetings with the users allowed to document the use of the territory with the objective of avoiding as much as possible the activity areas and the areas of interest defined by the Crees (see Technical Note 11 - Roads). The concept of Highly Sensitive Areas (HSAs) represents areas identified by land users for whom the impacts of any proposed infrastructure raise significant issues (see section 3). In the context of this study, the use of the term HSA is limited to areas free of previous development, in this case between the northern boundary of Route 167 and the Trans-Taiga Road. Where areas are considered to be highly sensitive in proximity to existing infrastructure, other terms are used, such as Valued Area or Sensitive Area, for example.) The following section presents the results of these meetings, grouped by community, in relation to the study corridor and the proposed alignment.

## HIGHLIGHTS

- At the time of the first round of interviews, no alignment was proposed to the land users interviewed, because it was intended to be defined as a result of their input.
- Numerous activities and camps have been identified along the existing road to the Renard mine.
- A total of 34 Cree camps, namely 17 old camps, 13 main camps, three planned camps, two other camps (not categorized) and one secondary camp were identified in the Study Area.
- The construction of two camps was planned about 5 km from the proposed route.
- Users are generally supportive of the proposed infrastructures, particularly because of the ease of access to their territory that the road would provide, although there are some concerns regarding opening the territory.
- Other key issues raised: Presence of caribou (woodland and migratory), moose habitat and hunting, navigation routes and snowmobile trails.


## MISTISSINI

## TRAPLINE M01

Eight families use the trapline, some at all times of the year, and others specifically for goose and moose hunting seasons. The users hunt and fish, but do not trap, unlike their fathers.

In relation to climate change, the users interviewed noted that the water bodies are freezing later and melting faster, from December to April instead of November to May. This prevents some users from reaching their hunting areas by snowmobile. The roads (Trans-Taiga and Brisay South), from which snowmobile trails depart, have facilitated access to the land.

Users see positively the road extension because it would cut travel time in half (from 16 hours to 8 hours drive) as well as reducing the cost of getting to the land. Better access to the trapline would also allow users to build camps in other areas of their land. Currently, some of their camps are located along the Trans-Taiga Road, on a nearby trapline, and in the eastern area of the trapline. While this proposed access may result in the presence of other unwanted users, it would also reduce tensions with trapline users of the traplines crossed by Trans-Taiga Road who are seeing users of traplines not yet accessible by the road, move in.

One of the proposed alignment alternatives, which is the one preferred by users, crosses the trapline M01 for about ten kilometres and does not encroach on any activity or sensitive area identified. No activities have been identified in the corridor under study.

## TRAPLINE M01A

About forty users frequent this trapline. They hunt geese, moose, fish, trap (beaver, marten) and harvest (cranberries). They note a decrease in the beaver population, which they associate with the increase in the wolf population, which varies according to the caribou migration.

Numerous activities and highly sensitive areas (HSA) are listed on the trapline. The Tallyman suggested an alignment to avoid a HSA from the west. However, the suggested alignment deviates even further from this HSA by passing to the east of it and does not touch any other HSA. In fact, the Tallyman was very satisfied with the proposed alignment, which he considers safe.

The proposed alignment:

- crosses a navigation route but the Tallyman does not see any problem with this.
- crosses a moose hunting area and passes close to a second one.

Users are positive about the road extension because it would reduce travel time (actually 16 hours) and would also benefit younger people. They suggest installing signs along the road at the boundaries of the trapline to indicate which trapline is crossed to avoid poaching. The Tallyman would like to be informed of the activities of other users on his trapline; he is particularly concerned about the safety of hunters who are not familiar with the territory.
The Tallyman wishes to be involved in the study and the employment opportunities that may arise, particularly for archaeological studies. He also indicated that disagreements related to the boundaries of the traplines must be resolved in order to ease tensions related, in particular, to obtaining contracts or compensation. Changes to the land boundaries following the La Grande Complex have led to tensions and misunderstandings between families, and he is concerned that new tensions will arise in connection with La Grande Alliance proposed infrastructures.

## TRAPLINE M03

Two brothers share the title of Tallyman of this land, which is accessible by the Trans-Taiga Road. Due to the cost and difficulty of access to the land, few extended family members use the land. Prior to the construction of the Trans-Taiga Road, the southern portion of the trapline was more heavily used. Since the road construction, activities have developed on the north side. Users go there mainly in the fall and winter.

Users indicated that there are good populations of marten, muskrat, partridge and hare, probably due to the fact that they have moved westward since a forest fire that occured about 10 years ago, particularly in the Study Area. On the other hand, there are fewer beavers, which may be related to the higher number of wolves than before. Wolves follow caribou, so their presence depends on the migratory pattern of caribou, which varies over the decades. As for woodland caribou, they are found in several places on the land, and users do not hunt them. On the other hand, the moose population has been increasing over the last 15 years, especially in the eastern part of the trapline where the vegetation has regenerated following a forest fire.

The corridor under study touches a small portion of land that is used for hunting (migratory caribou, bear, moose) and fishing. The suggested alignment is approximately 35 km from these activities.

The tallymen indicate that the road extension would allow them to access their traplines more easily and that it could also promote the presence of young people on the territory. They could also reoccupy certain parts of the land that have not been used for 20 years. One of the tallymen sees development opportunities such as the management of an outfitter. Thus, they are in favour of the proposed road extension. They indicate that they are in favour of sharing the territory's food resources with those who feed on them but would like access to their land to be built with gates that would allow for better control of non-Native activities on the land, particularly during construction work.

## TRAPLINE M04

The trapline is mainly used in spring and winter. It can be accessed by plane or helicopter. The users' main camp is located in the corridor under study. They hunt goose, moose and caribou (woodland), and fish for walleye. Users note that there are fewer migratory caribou on their land than in the past and consequently fewer wolves.

The alignment does not encroach on any user-identified activities or features on this land. However, two very sensitive areas have been identified, corresponding to main activity areas and located more than 15 km from the proposed alignment.

Users indicate that the road extension would enable them to access their traplines more often and at other times of the year. Travel would be less expensive, and the elders would also be able to access their camps more easily. With this access, they would also be able to better monitor their camps which are sometimes subject to theft. They report that non-native hunters arrive by snowmobile or plane from Schefferville, Manicouagan and Lac Saint-Jean.

Users expect to benefit from the economic opportunities (jobs) of the road construction if it crosses their land.

## TRAPLINE M10

Three tallymen and their families, or approximately 25 people, frequent the trapline along the western boundary of the Study Area. They mainly fish, hunt moose and trap marten. Users have noted that the moose population has been growing for the past 3 years, although since the road construction to the mine, moose hunting is sometimes disturbed in March by the presence of non-native snowmobilers on the territory. Also, they observe more lynx that have probably moved away from the mine due to the noise and vibrations from blasting. As for the users, they hunt earlier than before, in January-February instead of March, because of the changed snow and ice cover (later freeze-up and earlier melt); they also have to be more careful.

No activity is listed in the Study Area, but nearly 15 woodland caribou are observed there each year. The proposed alignment is located about 15 km from this area and the trapline.

The road extension could provide better access to the northeast section of the trapline. However, this may result in pollution (dirt, toxic spills) in the water bodies that drain onto their land. Users are already concerned about pollution from the mine and the existing road.

## TRAPLINE M11

The trapline is frequented by family members of the two tallymen. The road to the mine that was built on their land did facilitate their access, and several of the main camps are therefore located along this road. Several hunting (moose and goose), fishing and trapping activities are also held along the road. These activities also take place elsewhere on the trapline, which has good moose habitat. Users note that there is less time to travel on the ice cover and that travel becomes more dangerous. The weather is warmer in the summer as well, and users have noticed algae on rocks, dying vegetation and fewer mosquitoes.

The construction of a camp nearly 5 km east of the alignment is being considered by users, on a valued, formerly used site.

The proposed alignment:

- crosses several kilometres of moose habitat and a large trapping area;
- crosses a snowmobile trail and a historic and valued navigation route;
- runs along two large HSAs to be protected for fishing.

The users note different impacts of the road construction on their land. They find advantages related to the opening of the territory and accessibility, but also negative aspects, such as the increase in material theft. They also indicate that the brook trout population has decreased in the water bodies near the road due to the vibration caused by the traffic. The proposed road extension could impact fishing near the alignment. More dust and sand would also affect hunting and trapping activities. Users are also concerned about soil contamination from exhaust fumes, drilling and blasting (from rain runoff).

The road extension could also impact the migration cycle of caribou. However, the users are in favour of the road extension and propose an alignment that has been considered in the proposed alignment. It should be noted that the southern alternative, which passed over lot M11, was eliminated.

## TRAPLINE M12

Since the road to the mine was built, users have easier access to their traplines (use of a snowmobile from the road). They note that the woodland caribou stay in winter to the south of the trapline because the snow cover is often thinner there, which makes their food more accessible. Three herds of 30 individuals were observed in the winter of 2021-2022 (outside the Study Area). However, migratory caribou have shifted their migration route away from the territory and consequently there are fewer wolves.

The users interviewed feel that the road will have no impact on their use of the territory since it will not pass over their trapline, which is located southeast of the Study Area.

## TRAPLINE M13

Only a very small portion of the trapline, located nearly 70 km east of the alignment, touches the Study Area. The users interviewed are not concerned about the road extension, which is far from their land. Their concerns are rather related to mining development and the water pollution that may result from it.

## TRAPLINE M16

The land is used mainly in the spring and winter by the families of the main users, four brothers and their uncle. The road to the mine, as well as various snowmobile trails, cross this land and many activities are listed, such as goose hunting in the spring, beaver trapping in the fall and moose hunting in the winter. Fishing, caribou and bear hunting are also practiced, as well as berry and mushroom picking. Users note that there has been no passage of migratory caribou on their trapline since the 1990s. However, there are various goof areas for woodland caribou in summer, particularly in the Study Area and near the southern option of the alignment.

Users do not expect the alignment to go through their traplines (the southern variant that ran through M16 was ruled out), but they support the proposed infrastructure because it creates jobs and economic opportunities. They expect that any contamination from the proposed infrastructure will be addressed immediately.

## TRAPLINE M23

Four members of an extended family share the responsibility of Tallyman. Their activities include hunting (goose, moose, bear), beaver trapping, fishing and blueberry picking. They access their land by snowmobile from Route 167 or by air (plane or helicopter). The presence of the road to the mine has not resulted in an increased presence of nonnative users. However, they point out that the activities of the workers can frighten wildlife.

The southern option of the road runs 4 km from the trapline and activity areas (moose hunting and fishing), but this option was not retained.

The users support the proposed infrastructure because it can generate employment opportunities. They indicate, however, that good communication is essential between the proponent and the users of the territory before the beginning of the work to maximize employment opportunities and reduce impacts on land use.

TRAPLINES OUTSIDE THE STUDY AREA: M02A, M06 AND M07
Trapline M02A: The Tallyman sees the road as an asset if it facilitates his access to his camp, which he currently reaches from the Trans-Taiga Road.

Trapline M06: The users interviewed support the road extension but have expressed certain concerns regarding the opening of the territory and the growing presence of non-Natives. They would like to have access to their land from the future section of road, but gates should allow the control or prevent access to unwanted visitors. They fear territorial appropriation by non-Native people and the claiming of the territory by the Innu.

Trapline M07: According to the main users, the trapline is seldom used because of the high access costs (4 hours by snowmobile from the road to the mine or $\$ 4,000$ by plane). The road extension could facilitate their access. They would also like a secondary access to their trapline; this would encourage members of the families concerned to visit the territory.

## CHISASIBI

## TRAPLINE FG26/CH26

The Tallyman often stays on the land as he is a full-time hunter-trapper. Several other family members frequent the trapline, primarily in the spring, fall, during vacations, and for family time. He reports that migratory caribou no longer pass through the territory as of 2018-2019, and that there are no woodland caribou; instead, they occupy the west side of the trapline. Some lakes and rivers, such as Polaris Lake, are not used for fishing due to mercury contamination from the upstream reservoir.

The road alignment comes close to a lake valued for fishing.
The Tallyman feels that the proposed road is not interesting for them since they access the land via the Trans-Taiga Road, but he understands that this proposed road represents a benefit for users of other lands. He would like to preserve the trapline for future generations and is concerned that the road will bring more people on the trapline.

He suggested compensatory measures such as the development of access to hunting sites if the proposed infrastructures proceeds. Since global warming is disrupting their snowmobile travel during the goose hunt, he would like to see a road built to facilitate access.

He expects to be informed about the rest of the proposed infrastructures.

### 6.4.3 COMMENTS FROM CREE COMMUNITY MEMBERS WITHIN THE FRAMEWORK OF OTHER ENGAGEMENT ACTIVITIES OF LA GRANDE ALLIANCE

Comments from other community members who have been consulted as part of La Grande Alliance proposed infrastructures are considered in Technical Note 5 - Community Impacts.

### 6.4.4 HIGHLY SENSITIVE AREAS (HSA)

It was crucial to take into account the Highly Sensitive Areas (HSAs) identified by users during the interviews in order to develop the suggested alignment. Thus, the proposed alignment avoids as much as possible the HSAs identified during the initial interviews. The alignment does not cross any of the HSA, but it does pass along or near three HSAs that are valued fishing areas that require protection. The alignment also passes within approximately one kilometre of a large activity area valued for its resources and historical use of the area. The other HSAs are located over 4.5 km from the proposed alignment.

During validation, the HSAs near or touching the alignment were defined more precisely with the users.

## MISTISSINI

M01: One of the proposed alignment options, which is the one preferred by users, crosses trapline M01 for about 10 km and does not encroach on any activity or sensitive area. No activity has been identified in the corridor under study.

M01A: Numerous activities and highly sensitive areas are listed on the trapline. A suggested alignment was made by the Tallyman to avoid a highly sensitive area (HSA) to the west, but the suggested alignment deviates even further from this HSA by passing to the east of it and does not touch any other HSA. In fact, the Tallyman was very satisfied with the proposed alignment, which he considers safe.

M04: The alignment does not encroach any activity or element identified by users. However, two very sensitive areas have been identified; they correspond to main activity areas and are located more than 15 km from the proposed alignment.
M11: The construction of a future camp nearly 5 km east of the alignment is being considered by users, on a valued, formerly used site.

The proposed alignment crosses several kilometres of moose habitat and a large trapline, crosses a snowmobile trail and a historic and valued navigation route, and borders two large HSAs that need to be protected for fishing, particularly in the context of the opening of the territory.

## CHISASIBI

FG26/CH26: The road alignment runs close to a lake valued for fishing.
The Tallyman feels that the proposed road is not interesting for them since they access the land via Trans-Taiga road, but he understands that this proposed road represents a benefit for users of other traplines. He would like to preserve the trapline for future generations and is concerned that the road will bring more people onto the trapline.

He suggested compensatory measures such as the development of access to hunting sites if the proposed infrastructures goes forward. Since global warming is disrupting their snowmobile travel during the goose hunt, he would like to see a road built to facilitate access.

### 6.4.5 ASSESSMENT OF THE ISSUE OF INCREASED ACCESS TO THE TERRITORY FOR THE CREE

## POSITIVE ASPECTS

The users interviewed, who would have easier access to their traplines because of the road extension, support the proposed infrastructures.

For some people, namely users of trapline M01, M01A, M03, M04, 0M6 and M07, travel time and costs could be significantly reduced. A 16 -hour trip on Trans-Taiga Road could be reduced to 8 hours on Route 167, or an expensive airplane or helicopter trip could be undertaken by road. Some would like to see secondary access to their trapline. They point out that easier access to the trapline would allow them to access it more often and at different times of the year.

This would reduce the need for long trips, which are often difficult to accommodate employment, health, family, or schooling obligations, and would allow some members to travel to the territory or return more frequently. This could increase the practice of traditional activities. In addition, better access to the trapline would facilitate the transmission of traditional knowledge since it would allow young people and elders to visit the territory more easily or more often, as mentioned by various users. It would also allow for better monitoring of the camps, which are sometimes subject to theft.

In addition, users of traplines M001, M3, and M10 have indicated that some of the more difficult to access areas could be reinvested, and that camps could be built in other areas, particularly along the future road. This would also help reduce pressure on certain areas where many users are concentrated.

On the other hand, many users have indicated that in recent years, climate change has resulted in shorter travel times in winter for safe snowmobile travel. A road extension, as well as secondary accesses that could be developed, would remedy this necessary reduction in activity periods in early winter and spring, by making travel and activities safer.

Finally, users envision that a proposed road could create economic opportunities both in terms of employment during construction and in the development of longer-term opportunities, such as the creation of an outfitter.

## CONCERNS RAISED BY LAND USERS

Among the people interviewed for whom the alignment passes on or very close to their traplines, only the Tallyman of the Chisasibi trapline (FG26/CH26), on which the planned road would join Trans-Taiga Road, feels that the proposed infrastructures will not benefit them. In fact, Trans-Taiga Road crosses his entire trapline and is the most direct way to access it from Chisasibi. The Tallyman indicates that he wishes to preserve the territory for future generations and is concerned that the extension of Route 167 will draw more people onto the trapline. However, the road construction would allow Mistissini users with camps on trapline FG26/CH26, along the Trans-Taiga, to relocate their camp to their own traplines.

Other users, although they support the study components, also have concerns about the increased presence of visitors (e.g., non-native hunters) that the proposed infrastructures could generate. Some suggest installing signs along the road to indicate which trapline is crossed to avoid poaching. Others would like to see gates installed in front of secondary accesses to their camps or activity areas to limit pressure on the wildlife resource or theft of equipment. Some users also want control over non-Native activities in the land, especially during construction work (e.g., like the Weh-Sees Indohoun system during the work at Eastmain 1). A Tallyman (M01A) also expressed concern about the safety of hunters who are not familiar with the territory. He would like to be informed of the activities carried out on his trapline.

On the other hand, some users are concerned about pollution (dust, dirt, toxic spills) in the water bodies that could be caused by the road and traffic. Some users indicate that they are already concerned about pollution from the mine and the existing road. Others are also concerned about soil contamination from exhaust, drilling and blasting. Also, some users indicate that the vibrations caused by the traffic have impacted the brook trout population, which has suffered a decrease in the water bodies near the road. They are concerned that the road extension will impact other valued fishing areas near the alignment.

Finally, it was mentioned that the additional dust and sand could affect wildlife and therefore hunting and trapping activities. In addition, the road extension could impact the migration cycle of caribou.

## EXPECTATIONS

The increased access to the territory through the extension of Route 167 is viewed positively by most of the users interviewed, although some fears are expressed.

The users have expressed their expectations to best benefit from this proposed infrastructure. Thus, an irreproachable environmental management of the proposed infrastructure must be carried out to ensure the protection of the waterways, the wildlife, and by the same token the culture, identity, and lifestyle of the Crees. Traditional food is of major importance to the Crees on several levels (economic, cultural, and social cohesion), and they are particularly numerous on the territory during goose and moose hunting periods. Fishing and spawning sites must also be protected.

Some users expect the road to facilitate their access to the territory while mitigating the disturbances related to climate change (less safe snowmobile travel). Some users would like access to their camps or activity sites to be provided, but without being disturbed by other users or visitors. To maintain a certain control over their camps, their trapline and its wildlife resources, they propose that gates and signs be installed and wish to be informed of activities on the territory. They also want to be kept informed of the proposed infrastructures development to anticipate the changes that these would bring to their use of the territory.

### 6.4.6 JAMESIAN LAND USE

During engagement activities conducted to date in Radisson and Matagami, no comments regarding the extension of Route 167 were made in relation to land use. The comments mainly concerned the Phase I proposed infrastructures and the engagement process with the various stakeholders concerned.

In Chibougamau, the members of the municipal council recalled the importance of working with the Crees to coordinate their respective interests. One of the members mentioned that the extension of Route 167 was one of the priorities for the Municipality, and another recalled the issue of economic diversification of the Protected Areas with the development of recreational and tourism activities in harmony with the protection of wildlife and flora. Other comments were mainly related to maximizing economic benefits and are discussed in Technical Note 5 - Other Community Impacts.

## 7 SERVITUDES AND TITLES

The identification of servitudes and titles was conducted using available data from the following stakeholders:

- Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCFP) for Protected Areas and Outfitters :
- The Protected Areas are listed in the Quebec Register of Protected Areas database (available on the MELCFP website) and recognized therefore by the Quebec Government. It should be noted that some protected areas are qualified as "proposed" (as opposed to "existing"), meaning that they have a temporary status where summary works are still necessary before being awarded a permanent status. In all cases, the Natural Heritage Conservation Act (NHCA) applies. It is also important to consider that the lands in the domain that are included in a territory designated as a protected area under the NHCA remain under the authority of the Minister who holds it, in this case the Ministère des Ressources naturelles et des Forêts (MRNF);
- Information on Outfitters is sensitive, and therefore for the purposes of this study their identification and characterization are limited to their geographic locations, without reference to the owners involved or the exact operating boundaries.
- The Ministère des Ressources naturelles et des Forêts (MRNF) for leases (land rights), mining claims and the land regime (Category IA, IB and II lands) under the JBNQA;
- The La Grande Alliance Geomatics Portal for the census of Cree camps (camps per se and camp areas) and Inuit camps, as identified by the Crees met during the La Grande Alliance interviews. It should be noted that some of the information on camps could not be validated by their users and is therefore indicated in a preliminary manner.
- The maritime land claim from the Nunavik Inuit Land Claims Agreement (NILCA) (Makivik 2021).

The following sections ( 7.1 to 7.4 ), along with the maps 9 to 12 , summarize the highlights of the servitudes and titles applicable in the Study Areas. The review takes into account the nature of the servitudes and titles as well as their locations in relation to the proposed transportation infrastructure corridors (roads and railroads), with particular reference to the kilometre points of the Billy-Diamond Highway. Where applicable, situations where these servitudes and titles overlap with the corridors under study are identified in order to prevent potential conflicts of use and to assist in the decision-making process.

### 7.1 SA1 - RAILWAY ALONG THE BILLY-DIAMOND HIGHWAY RUPERT - LA GRANDE

This Study Area includes 3 areas designated as Category II lands, all located about 6.5 km west of the BillyDiamond Highway (see Figures 7-1 \& 7-2). As a reminder, the Cree traplines located in this Study Area are described above in the section 6.1.1.

## PROTECTED AREAS

The Study Area includes five Protected Areas, three existing and two proposed, located within the Waskaganish, Eastmain and Wemindji communities' territories. These Protected Areas are identified below from south to north and with reference to kilometre points on the Billy-Diamond Highway:

- The existing Waskaganish Protected Area Land Reserve, which is in close proximity ( 0.45 km ) to the proposed rail alignment;
- The proposed Waskaganish Biodiversity Reserve, which would be crossed by the two rail alignment alternatives and the Billy-Diamond Road (km 260 to 266);
- The existing Coldwater Juneshew-Sibi Biodiversity Reserve, located on both sides of the Eastmain Road (0.5 km on each side) and 5.5 km west of the proposed rail alignment (Billy-Diamond Highway and Eastmain Road intersection, km 350);
- The existing Namewaakamiishtikw-Piskuchitishu-Siipii Protected Area Land Reserve, whose limits are located near the rail line ( km 424 to 452).
- The proposed Paakumshumwaau-Maatuskaau Biodiversity Reserve, located on both sides ( 0.5 km on each side) of the Billy-Diamond Highway and along the road to Wemindji. This reserve, which is divided into several areas, runs along the railway line for approximately 70 km ( km 458 to 528). The limits of this reserve runs closely (less than 100 metres) to the 2 options of the railway alignment on some locations.

In addition to these protected areas, the study area includes in its northeastern section the Turjusuq National Park whose delimitations run alongside the Hudson bay shoreline. The Tursujuq National Park lies across the marine extension of SA2. Since this is not an area where any proposed infrastructure construction is foreseen, there is few mentions of it in the current study.

## LEASES (LAND RIGHTS)

A total of 85 leases were identified, the majority of which (45) are located in the northern quarter of the Study Area, approximately between Wemindji Road (km 518) and Chisasibi Road (km 600). The most numerous vocations associated with these leases are for vacation purposes (40), municipal purposes (14), shelter (10), tower and/or telecommunication equipment (8), commercial purposes without lodging (4), and for forest conservation and protection purposes (1).

Most of the leases identified are located well away from the study rail alignments (main and alternative alignments). However, there are several resort leases located near the alignments along the segment of the Billy-Diamond Highway (km 550 to 554).

## OUTFITTERS

Two (2) outfitters were identified in the Study Area:

- One non-exclusive outfitter operates on the Robert-Bourassa Reservoir located at the northeast end of the Study Area. This outfitter operates east of the Billy-Diamond Highway, approximately along km 568 to 608;
- A second outfitter without exclusive rights operates along the Rupert River within the limits of Category II lands, about 6.4 km from the rail line, near kilometre 258 of the Billy-Diamond Highway.


## MINING CLAIMS

A total of 8,914 mining claims have been identified in the Study Area. Certain "clusters" of claims (i.e., claims held by the same company) are directly crossed by the proposed rail corridor:

- Harfang Exploration Inc (97337), between km 298 and 320;
- Brunswick Exploration Inc. (100682), between km 328 and 336;
- Several contiguous clusters of various holders, including 9219-8845 Quebec Inc, QcX Gold Corp (100602), Azimut Exploration Inc (2003), Zimtu Capital Corp (86141), Midland Exploration Inc (82741), occupy the centre of the Study Area between km 362 and 458;
- Harfang Exploration Inc. (97337), between km 502 and 522;
- Northern Superior Resources Inc. (81897), between km 524 and 540.


## CREE CAMPS

The Study Area includes a total of 182 Cree camps, namely 93 main camps, 67 old camps, 18 secondary camps, 3 planned camps and one (1) cultural camp. Several camps are located in close proximity ( $+/-1.5 \mathrm{~km}$ ) to the proposed rail alignments (main and alternative), such as the following concentrations along certain segments of the BillyDiamond Highway:

- Km 278 to 284: 3 camps
- Km 424-434: 6 camps
- Km 460-470: 16 camps
- Km 548-556: 6 camps
- Km 560-570: 17 camps
- Km 580-584: 3 camps

In addition, there are three concentrations of camps centred on lakes located near the rail lines between km 282 and 296 of the Billy-Diamond Highway. These areas are identified for traditional camping purposes. The nearest of these areas is approximately 500 metres from the Billy-Diamond Highway. A fourth Cree camp area is located at the western edge of the Study Area near Old Factory Lake.

In summary, the Study Area for the Km 257 - La Grande - Rail Corridor includes five Protected Areas (three existing and two proposed), 85 leases, including 40 resort leases, two outfitters, numerous mining claims and several Cree camps ${ }^{28}$. The proposed rail line encroaches or is in immediate vicinity with some of these titles and servitudes, and consequently attention should be given to potential issues of cohabitation of uses.

28 Note that the use of the latter is detailed in section 6.


Figure 7-1 Railway Corridor km 257 - La Grande (Phase 2)


Figure $7-2 \quad$ Railway Corridor
CREE DEVELOPMENT CORPORATION (CDC)
LA GRANDE ALLIANCE
PRE-FEASIBLLITY STUDY - PHASES II \& II - TRANSPORTATION INFRASTRUCTURE

### 7.2 SA2 - ROAD \& RAIL EXTENSION - LA GRANDE WHAPMAGOOSTUI/KUUJJUARAPIK

The Study Area is crossed, in its central part, by a vast area designated as Category II land (see Figure 7-3). Further north, approaching the Cree village of Whapmagoostui and the Inuit village of Kuujjurapapik, the Study Area is characterized by a group of Category IA, IB and II lands. As a reminder, the Cree traplines located in this Study Area are described above in the section 6.2.1.

## PROTECTED AREAS

Two (2) Territorial Reserves for Protected Area Purposes are located in the Study Area, within the Chisasibi and Whapmagoostui communities' territories:

- To the south, the Rivière-Kanaawpscow-et-Lac-Kukamaw reserve is composed of three distinct areas. One of these areas is located approximately 3 km west of the proposed access road to the communities of Whapmagoostui and Kuujjuarapik (main section). The 2 other areas of the reserve are located east of the proposed access road, the closest area being approximately 5 km from the road.
- In the centre of the Study Area, the Lac-Burton-Rivière-Roggan-et-la-Pointe-Louis-XIV reserve - whose vast territory extends to James Bay and Hudson Bay - is crossed by a segment of approximately 45 km of the main section of the proposed access road to the communities of Whapmagoostui and Kuujjuarapik. However, an alternative route bypasses the entire Protected Area Reserve, the shortest distance between the Protected Area Reserve and this option being 0.14 km .


## LEASES (LAND RIGHTS)

The data show 25 leases, most of which are for commercial (nine), primary residence (six), vacation (four), industrial (two), telecommunication tower (three) and for industrial or mining (one) purposes. The vast majority of leases are located in the southern part of the Study Area, in the vicinity of Radisson and on the south side of the La Grande River. No leases were identified near the proposed access road to the communities of Whapmagoostui and Kuujjuarapik.

## OUTFITTER

The only outfitter located in the Study Area has the Robert-Bourrassa Reservoir (LG 2) and a section of La Grande River as its operating area. The area of activity of the outfitter (without exclusive rights) is crossed by the proposed road option for access to the communities of Whapmagoostui and Kuujjuarapik.

As mentioned above (see Section 7.1), the activity area of this outfitter is also located within the Study Area dedicated to the proposed rail corridor between km 257 and Trans-Taiga Road.

## MINING CLAIMS

A total of five mining claims, assigned to Hydro-Québec ${ }^{29}$, are identified in the southern part of the Study Area, near Radisson and on the south side of the La Grande River. The proposed access road to the communities of Whapmagoostui and Kuujjuarapik crosses one claim and runs close $(0.15 \mathrm{~km})$ to another claim.

[^18]
## CREE CAMPS

The Study Area includes a total of 47 Cree camps, i.e., 28 main camps, 10 old camps, seven secondary camps, one planned camp ( 4 km from the road alignment) as well as one cultural camp. The latter, which focuses on traditional activities for young people, is located directly along the proposed road in the southern part of the Study Area near the Robert-Bourrassa Reservoir (LG 2). A main camp is located approximately 500 metres from the proposed alternative \#2 for the road alignment.
In addition, three groups of camps have been identified in the Study Area by the Crees. First, a large camp area with many cabins is located all along the Hudson Bay, north of Whapmagoostui / Kuujjuarapik. The south of this area is relatively close ( 0.4 km ) to the proposed road. The area counts many Cree camps and non-Cree camps, notably Inuit camps. The other two camp areas are located at the western end of the Study Area in the vicinity of Hudson Bay. Further south, a planned camp location is close to the proposed road alignment.

In summary, in addition to the presence of many camps, the Study Area for the La Grande - Whapmagoostui / Kuujjurapapik Road and Rail Corridor (Phases II and III) includes two Territorial Reserves for Protected Areas, 25 leases, most of which are for commercial purposes and primary residences, one outfitter and very few mining claims. The southern part of the Study Area, near Radisson and the Robert-Bourassa Reservoir, has more issues with regard to the cohabitation of uses, given the concentration and diversity of servitudes and titles that are found there. In this respect, section 6.1.2 of the present Technical Note 3 addresses cree camps' characteristics more in details whereas sections 6.1.4 and 6.2.6 (as well as Technical Note 5) deal with Radisson's participants' concerns during engagement activities. However, more extensive engagement activities will have to be carried out with leaseholders in order to better identify the potential issues and define mitigation measures where appropriate.


Figure 7-3 Road and Railway Corridor La Grande - Whapmagoostui/Kuujjuarapik (Phases 2 \& 3) and Harbour Whapmagoostui/Kuujjuarapik

### 7.3 WHAPMAGOOSTUI / KUUJJUARAPIK HARBOUR

This section of the Study Area refers to the Hudson Bay shoreline within the area of influence of the proposed harbour (see Figure 7-4).

The maritime land claim covered by the Nunavik Inuit Cree Land Claim Agreement (NILCA) is identified in the Whapmagoostui / Kuujjurapapik Study Area $^{30}$ (see section 4). It corresponds to a marine band approximately 50 km wide from the shores of Hudson Bay. Also in the Study Area, a Protected Area representing an ecological interest zone runs along the entire coast of Hudson Bay over a width of about 10 km in the maritime zone. The Hudson Bay shore also counts many Cree and non-Cree camps, notably Inuit camps (see section 7.2).

### 7.4 SA3 - ROUTE 167 EXTENSION - RENARD MINE - TRANSTAIGA ROAD

This Study Area does not contain any Category IA, IB or II lands. The Cree traplines in this area are described above in Section 6.4.1.

## PROTECTED AREAS

Three Protected Areas are located within the Study Area, within the Mistissini and Chisasibi communities' territories. In the southern part of the Study Area, approximately 8 km west of the road corridor is the Pipunishiwin Saahkamiishtiku Protected Area Reserve, while approximately 22 km east of the corridor is a proposed Swallow Biodiversity Reserve. At the northern end of the Study Area, near the junction of the proposed road corridor and the Trans-Taiga Road, is the third land reserve for Protected Area purposes, named Aawiitakuch, whose boundaries closely border the road corridor (from about 200 metres to 3 km ) over a distance of about 25 km . In general, the location of the Protected Areas in relation to the proposed road corridor is an issue of cohabitation of uses to be considered.

## LEASES (LAND RIGHTS)

An amount of 21 leases were identified in the Study Area. More than half of them (11 leases) are located in the southern part of the Study Area, along the existing road network providing access to the Renard mine and to the mining claims attributed to Stornoway Diamonds (Canada) Inc (98935). Most of these 11 leases (eight) are for industrial purposes, but some are also for commercial purposes, telecommunication tower, waste disposal and tailings disposal.

The remaining leases are scattered throughout the Study Area, generally quite distant from existing roads and the proposed Route 167 corridor, except for two leases located near the Trans-Taiga Road, which were allocated for non-exclusive outfitting accommodations and wind measurement equipment or meteorological instruments.

## OUTFITTERS

Two non-exclusive outfitters operate in the Study Area. One operates in the north-central portion of the Study Area and is crossed by the proposed Route 167 corridor near a river inlet (Lac de la Pointe). The other outfitter operates in the northwestern end of the Study Area, where it has a camp along Trans-Taiga Road (km 382).

[^19]
## MINING CLAIMS

A total of 3,280 mining claims have been identified in the Study Area. Some claim "clusters" - i.e., contiguous claims held by the same company - directly occupy locations crossed by the road corridor, namely from south to north:

- Stornoway Diamonds (Canada) Inc (98935)
- Osisko James Bay SENC (96214)
- Midland Exploration Inc (82741), established on a variant of the road alignment


## CREE CAMPS

The Study Area includes a total of 34 Cree camps, namely 17 old camps, 13 main camps, three planned camps, 2 other camps (non-categorised) and 1 secondary camp. The three proposed camps are located in the northern part of the Study Area and are relatively close ( $5-6 \mathrm{~km}$ ) to the proposed road alignment. Further south, a planned camp area is located approximately 4.5 km east of the proposed road alignment, slightly north of the Renard Mine and associated to Stornoway Diamonds (Canada) Inc. mining claims (98935). There are no Cree camps located directly on this proposed alignment or in its immediate vicinity.

In summary, the Route 167 - Trans-Taiga Corridor Study Area (Phase II) includes 3 Protected Areas, a few leases, mainly related to the Stornoway mine, 2 outfitters and several mining claims. The use of Cree camps is discussed in section 6.


Figure 7-4
Corridor Road 167 - Renard Mine - Trans-Taiga Road (Phase 2)

## 8 OTHER CONSIDERATIONS: CLIMATE CHANGE

One of the questions raised during the land use interviews was whether users had observed phenomena associated with climate change, its impact on land use and adaptation to it, if any. The following are the highlights that emerged on this issue:

- Ice cover on water bodies tends to form later in the fall and melt early in the spring, shortening the winter hunting and spring goose hunting seasons. Some have shifted their activities so that they do not have to cross streams by snowmobiles in the spring, others have built new snowmobile or ATV trails in safer locations or have simply shortened their hunting season. Some are also moving their hunting activities earlier in time (to January instead of March) to have safer conditions. And others say they travel less on the trapline or must travel by helicopter.
- Many users believe that the development of proposed roads or secondary accesses, particularly along the Bay, could address some of the effects of climate change on the ice and snow cover by making travel and activities safer.
- The issue of frozen rivers has also resulted in shifting caribou migration routes. Caribou have tended to move less to the south in the last decade.
- Users also associate climate change with the arrival of moose further north, as well as the sighting of new species such as pelicans, vultures and a swan on the coast and more eagles (which scare away geese) further north. In addition, pigeons and eagles are now being seen in the Whapmagoostui area. Polar bears and silver and arctic foxes have been seen in the Wemindji area, which is further south of their usual range. Black bears and deer have also been seen at a latitude where they were not previously seen. Other animals are becoming rarer, such as porcupines, which used to be much more numerous.
- It has been suggested that wolves are more numerous, taking advantage of climate change that results in thinner snow cover and makes it easier for them to predate on moose and caribou. With changes in caribou migration routes, wolves are following the caribou herds, so there are more wolves in some areas where they were not previously seen, and fewer in areas where caribou no longer migrate.
- Many also note that geese are now flying at night or not landing in specific areas, making hunting more difficult. In Whapmagoostui, a tallyman also indicated that eelgrass is not growing as much and therefore there are not as many snow geese. Eelgrass is also being eaten by caribou that are now migrating along the bay, which also contributes to less eelgrass being available for geese.
- One person indicated that fish are also affected by rising water temperatures. This can change the location or timing of spawning. He has seen walleye eggs suspended when they normally stay on the bottom. New fish species are also appearing in some areas. Speckled trout is a new species observed by users in the Whapmagoostui territory, and salmon by fishermen in Wemindji and Chisasibi.
- New plant species have also been observed (such as the appearance of pine trees and more birch trees on a land of Wemindji) and vegetation is now growing in new areas or is growing less in others. These changes in vegetation affect the food sources of animals, including moose, which can no longer feed solely on their usual diet (willows in particular) and therefore feed on anything they find, including vegetation contaminated by pollution, dust, etc. It is also associated with the fact that beavers are less fat due to this lack of food. This would have an indirect impact on the health of the consumers of these animals, especially since some users who do not have the traditional knowledge to be able to discern healthy game from sick game, consume contaminated meat or fish.
- The drop in water level of some small bodies of water was observed, sometimes making fishing more difficult.
- Various users from Whapmagoostui, but also from Chisasibi and from Wemindji, have noted that the soil, constituted of clay or sand is very unstable and could, under the effects of climate change, present some risks during construction of the infrastructures. Some users from Whapmagoostui observe more frequent landslide and land subsidence. Some say that camps, or even the whole village of Whapmagoostui should be relocated.
- More forest fires are observed, resulting in the absence of wildlife for a period of time in the affected area, and thus the reduction of activities.
- Each year, the seasonal cycles are different. The snow quantity and the ice quality are variable from one year to the next. There are significant variations, and the weather is now unpredictable. Users have indicated that they can no longer rely on traditional knowledge, such as cloud observation, to predict the weather.

In conclusion, users associate several changes in the species observed in the territory and their abundance with climate change. These changes indirectly affect users' hunting, fishing and trapping activities in terms of the species available and the quality of the food harvested. However, the most generalized impact of climate change that affects users' activities more directly is the change in ice cover, which makes travel on the territory more complex, and which modifies or reduces both the hunting periods and areas.

## 9 RECOMMENDATIONS

This section outlines the recommendations for the pursuit of the studies of La Grande Alliance proposed infrastructures, in the feasibility phase or at the impact study stage. The recommendations focus on the Cree engagement and participation process, which aims to define in a collaborative manner the best infrastructure alignments to be recommended, by meeting technical, environmental, economic, and human needs, considering the information provided by the Crees.

- Maintain and strengthen the role of the CIOs with the addition of training on tools for their work in communicating with the populations of their communities and their work in recording the gathered information, in direct collaboration with the consultant, in this case the Registry that has been created to log comments and concerns from land users and community-members.
- Maintain the role of the liaison officer as a support to the CIO network and a tangible link to ongoing studies.
- Maintain involvement of local assistants, who also act as interpreters, should continue. This contribution to the work of the CIO and the liaison officer also fosters the bond of trust with the interviewees.
- Encourage involvement of cultural and Cree land use specialists (anthropologists) for the interviews, in team with the CIOs and local assistants/interpreters, is also recommended, according to the modus operandi recommended during the interviews conducted with land users.
- After the first analyses of the land use data, hold a group interview per community, gathering all the users interviewed and showing the different alignment options retained, in order to discuss these different options jointly rather than individually. The CIO and members of the Band Council should also attend this meeting.
- Keep informed Cree land users about the development of studies and activities on the territory. It is recommended that the CIO define with the users of the territory the way in which they wish to be informed (e.g., meetings, calls, emails, radio or other).
- Develop a list of individuals interested in being involved in the studies, monitoring and inventories required for the proposed infrastructures, through or with the assistance of the CIOs, with priority given to users of the traplines concerned, where applicable.
- Consult land users again at the impact study stage to study the proposed alignment in greater detail and define mitigation or enhancement possibilities and measures. These measures will have to be defined in collaboration with the tallymen and the communities concerned.
- Hold a workshop on the positive and negative aspects of the presence of infrastructure in relation to the economic opportunities that could be generated in each community.
- Continue the analysis of the HSAs in future studies to increase the level of land use data through more specific meetings on the subject, especially considering that this category was new for the Cree land users. The existence of a proposed route, and its alternative(s), which could be accompanied by a detailed level of information on potential impacts, should, in our opinion, promote a better understanding of the issues by Cree land users and improve their sharing of knowledge of the territory.
- Develop discussions with various stakeholders in order to reconcile the expectations and possibilities related to the proposed Grand Alliance infrastructures. In this regard, a system should be put in place to refer people interested in taking training or creating a business for the purposes of the services required under the project (see Technical Note 5).
- Devote further attention to the tensions between users of the territory that could be caused or exacerbated by the implementation of these proposed infrastructures as well as the economic opportunities that are linked to them.
- Consider the proposed alignments in light of additional information obtained during the validation interviews that were conducted after the development of the initial alignment proposals (see TN17 for details).
- Organize meetings regrouping the trapline users and decision makers of various communities together.
- Engage with the Inuit, to further analyze the use of the territory under study (documentation, issues and concerns) for the proposed harbour and the road \& railway extension between La Grande and Whapmagoostui/Kuujjuaraapik.


## 10 CONCLUSIONS

## CONCLUSION ON ENGAGEMENT ACTIVITIES AND THE ROLE OF CIOS

The engagement activities undertaken with Cree land users and other Cree stakeholders during the Pre-Feasibility and Feasibility studies for Phases II and III of the La Grande Alliance is an innovation compared to the usual standards. This approach took the form of interviews with the land users, conducted by a team composed of an anthropologist, a Cree assistant and the CIO, through the use of land use maps that did not present any proposed alignments for the projected transportation infrastructures. In other words, the land use data was collected before the road, rail and harbour engineering teams proposed an alignment to consider this data in defining an alignment proposal.

The role of the CIOs was essential in this study so that the Cree users of the territory could have their say about the proposed infrastructures on their traplines. During all phases of the project (from pre-feasibility to implementation), the continuity of exchanges between the CIO and the Cree users of the territory is essential and must continue. These exchanges, when they can improve or influence the studies in progress, will have to be transmitted to the project proponents or to the liaison officer, as the case may be, so that they can be taken into account. The CIO may determine with the proponent how data or concerns from land users will be transmitted. The use of a registry for comments, information, and concerns to be recorded is recommended in this regard. However, it is recommended that the CIOs be given closer support in the use of this register so that they can take greater ownership of this tool.

CONCLUSION ON HIGHLY SENSITIVE AREAS (HSA)
As mentioned previously, consideration of the Highly Sensitive Areas (HSAs) identified by users during the interviews was crucial in developing the suggested alignments. Thus, these alignments avoid, as much as possible, the HSAs defined during the interviews. In the validation stage, the HSAs near or into the alignments are further defined with users to assess the extent of impact that users could experience or tolerate, and to define alternative alignment options where appropriate.

Identifying the HSAs as early as possible in the studies allowed them to be incorporated into the subsequent corridor design, which avoids them where possible. However, it is important to note that the level of information shared by the Cree land users regarding the HSA was more detailed once an initial alignment, and its variant(s) in some cases, was presented to them, i.e., during the validation phase. It was also easier to discuss with them possible mitigation measures when they wished at this stage of the studies. It is understood that, in the case of impacts that can be effectively mitigated, this would occur in the later phases of the project in close collaboration with the user of the territory concerned.

Considering these interviews specific to the HSAs, and to land use more broadly, it seems appropriate to propose two impact tolerance thresholds for the different HSAs as follows:

- Low-impact tolerance: the HSA is very important and cannot be replaced, which means that the proposed infrastructure does not pass anywhere near the HSA.
- Moderate impact tolerance: The HSA is of high importance and may be difficult to replace without significant mitigation.

On the other hand, it seems inappropriate to us to consider a third threshold that would provide for a high impact tolerance, allowing for an HSA identified as such to be replaced with appropriate mitigation planning. This is the case for the rest of the territory under Categories II and III.

The various criteria for these three categories were developed in collaboration with the CIOs based on data collected during the land use interviews in order to determine the impacts according to the above categorization.

## CONCLUSION ON LAND AND COMMUNITIES INCREASED ACCESS ISSUES

Increased access to the territory is an important element and a vector of change for the users of the territory, perceived both positively and negatively.

In fact, the creation of roads or trails creates new travel routes on the territory, used by vehicle or snowmobile. This facilitates access to the territory, to activity areas and resources, and leads to the exploitation of new sectors. The opening of the territory can therefore facilitate the transmission of knowledge and culture, access to traditional food, and can allow fewer mobile people to continue to visit the territory. The development of a proposed road may also allow land users to avoid certain areas where the ice cover has become less safe due to climate change. The construction of roads may also result in a reduction in the cost of access to the land (more direct or less expensive than by air). Quicker access to the land may also mean more frequent and shorter visits and encourage the presence of children or parents on the land, facilitating travel that might otherwise be constrained by school schedules or employment or health obligations.
As such, the extension of Route 167 is anticipated with enthousiasm by many of the users interviewed. The road extension and the construction of the railroad from La Grande to Whapmagoostui/Kuujjuarapik, however, reveal more concerns from those interviewed, although the road is still expected, mainly for the reduction of the cost of living in the community.

Those who express fears about the opening of the territory, either by road or rail, refer to safety in the camps or on the territory (inexperienced hunters, theft, aggression), to the lack of respect for the environment that could lead to pressure on the resource and alteration of the environment (waste, wastefulness, overfishing and overhunting), and to the lack of respect for Cree values and culture (respect for animals, sustainable harvesting, activity periods). In addition, there are concerns about drug and alcohol trafficking through the new access. It should be noted that health and social impacts are addressed in Technical Note 5 - Other Community Impacts.

In fact, the creation of accesses allows a greater number of non-Cree people to come to the territory, whether for hunting, fishing or harvesting activities, or for the exploitation of mineral or forest resources. In this regard, the pollution of a healthy environment that is necessary for the continuation of the Cree lifestyle and culture, is particularly apprehended in relation to the construction and operation of the infrastructures themselves, as well as to the mining development that they may entail. For this reason, most Crees met during the engagement activities expect to be consulted, listened to and involved in development projects on their traplines, with a view to managing the territory in the best possible way with due regard for Cree values and identity.

## CONCLUSION ON LAND USE

Finally, as shown in this Technical Note, the various Study Areas are used mainly by the Crees, who engage in several activities, travel by various means and stay for various lengths of time. As the La Grande Alliance studies progressed (phases II and III), the alignments were modified so that they would best respect the constraints identified and located by the Cree users of the territory during the engagement activities. Thus, the proposed alignments at the end of the study may not correspond to those presented at the validation interviews with the land users.

In fact, engagement activities and eventually formal consultations must continue in subsequent phases of the project in order to remain in line with the activities and expectations of the Cree users of the territory. In addition, engagement activities will also have to be held or continued with the other Cree stakeholders, the Jamesians, as well as the Inuit. The search for titles and servitudes revealed several stakeholders, such as vacationers and some outfitter owners, who should also be considered for future projects.

Technical Note 17 specifically presents the constraints and recommendations of land users and other stakeholders regarding alignments for the proposed infrastructures.

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## APPENDIX

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## CREE LAND USERS

Appendix A - Summary of Cree land users' interviews

| TRAPLINE | DATE INTERVIEW | DATE - <br> VALIDATION | NAMES OF INTERVIEWEES/STATUS |
| :---: | :---: | :---: | :---: |
| Nemaska |  |  |  |
| R17 | Nov. 18, 2021 | - | William Wapachee, former tallyman |
| Mistissini |  |  |  |
| M01 (x2) | Nov. 18, 2021 <br> Nov. 18, 2021 | Sept. 2022 | Samuel Rabbitskin, tallyman Noreen Moar, Samuel Rabbitskin's wife Matthew Rabbitskin, tallyman Paul Rabbitskin, tallyman |
| M01 A | Nov. 19, 2021 | Sept. 2022 | Clarence Shecapio, tallyman John Henry Shecapio, tallyman's brother |
| M02 A | Nov. 18, 2021 | - | Rene Neeposh, tallyman |
| M03 | Nov. 3, 2021 | - | Leslie Mianscum, tallyman and main land user Michael Mianscum, tallyman |
| M04 | March 16, 2022 | Nov. 22, 2022 | Charlie Jimikin, tallyman <br> Mary-Jane Coon-Come Jimikin, Charlie Jimikin's wife Jimmy-Paul Coon-Come, Charlie Jimikin's son |
| M06 | Nov. 4, 2021 | Sept. 2022 | Willie Loon, tallyman Maggie Loon, tallyman's wife Sydney Loon, tallyman's son Johnny Loon, tallyman's son |
| M07 | Nov. 3, 2021 | - | John Ottereyes, tallyman <br> Harriet Ottereyes, tallyman's mother Willie Longchap, tallyman's cousin Wilfer Longchap, Willie Longchap's son |
| M10 | Nov. 4, 2021 | Sept. 2022 | William Swallow, tallyman <br> Walter Swallow, tallyman <br> Andrew Swallow-Neeposh, tallyman and Walter Swallow's son |
| M11 | Dec. 2, 2021 | Nov. 22, 2022 | Emmerson Swallow, tallyman Sydney Swallow, tallyman Gordon Swallow, trapline user |
| M12 | March 17, 2022 | - | Alex Brien, tallyman 1 Nathan Brien, tallyman 2 and Alex Brien's nephew |
| M13 | March 16, 2022 | - | Steven Wapachee, tallyman Kevin Wapachee, tallyman's brother |
| M16 | March 15, 2022 | Nov. 22, 2022 | Norman Matoush, tallyman 1 Johnny Matoush, tallyman 3 Henri Matoush, tallyman 4 |
| M23 | March 25, 2022 | April 2023 | John Brien, tallyman Kenny Brien, tallyman Jonah Brien, tallyman, and Kenny Brien's son Raymond Brien, tallyman |
| Chisasibi |  |  |  |
| FG01/CH01 | Dec. $1^{\text {st }}, 2021$ | August 2022 | Eric House, tallyman (CH01 - FG01) <br> Karen Napash, tallyman's wife (CH01) <br> Kevin House, tallyman's cousin (CH01) <br> Harry House, tallyman's cousin (CH01) |
| FG02/CH02 | Nov. 30, 2021 | - | John Rednose, tallyman (CH02-FG02) |


| TRAPLINE | DATE INTERVIEW | DATE - <br> VALIDATION | NAMES OF INTERVIEWEES/STATUS |
| :---: | :---: | :---: | :---: |
| FG03/CH03 | Apr. 29, 2022 | August 2022 | Walter Rupert, tallyman Andrew Rupert, tallyman's father James Rupert, tallyman's cousin Keith Rupert, tallyman's cousin Ronnie Rupert, tallyman's cousin Leslie Rupert, tallyman's cousin |
| FG05/CH05 | Dec. 3, 2021 | - | John Lameboy, George Lameboy's nephew Sydney Chewanish, George Lameboy's cousin *George Lameboy is the tallyman. He was unavailable for the interview. |
| FG06/CH06 | Dec. 3, 2021 |  | Elmer Cookish, tallyman (CH06 - FG06) <br> Noah Chakabash, tallyman's cousin (CH06-FG06) <br> Paul Chakabash, tallyman's cousin (CH06 - FG06) |
| FG07/CH07 | March 31, 2022 | August 2022 | Reggie Scipio, tallyman <br> Freddie Scipio, tallyman's uncle, and previous tallyman <br> Julian Snowboy, land user |
| FG08/CH08 | April 4, 2023 |  | Paul Bullfrog, maîre de trappage |
| FG09/CH09 | Dec. $1^{\text {st }}, 2021$ | August 2022 | Steven NineO'clock, tallyman |
| FG10/CH10 | March 30, 2022 | August 2022 | William Shem, tallyman Thomas Shem, tallyman's brother Harry Shem, tallyman's brother |
| FG11/CH11 | Nov. 30, 2021 | August 2022 | William Pepabano, tallyman (CH11 - FG11) Richard Pepabano, tallyman's father and formal tallyman (CH11 - FG11) |
| FG12/CH12 | Aug. 25, 2022 | - | Robbie Matthew, tallyman Randy Matthew, tallyman's son |
| FG26/CH26 | March 29, 2022 | - | George Lot Bearskin, tallyman Marjorie Bearskin, tallyman's wife |
| VC01/CH33 | Dec. 2, 2021 | - | Samuel Tapiatic, tallyman (CH32 - FG32) Sarah Tapiactic, tallyman's wife (CH32 - FG32) |
| VC02/CH34 | March 31, 2022 | - | Emile House, tallyman (CH34 - VCO2) <br> Paul House, tallyman's uncle (CH34 - VC02) Louis House, tallyman's cousin (CH34 - VC02) Ross House, tallyman's cousin (CH34 - VC02) Christopher House, tallyman's cousin (CH34 VC02) <br> J.-Henry House, tallyman's cousin (CH34 - VC02) |
| VC03/CH35 | March 30, 2022 | - | Reginald Sam, tallyman David Sam, tallyman's uncle John R. Sam, tallyman's cousin Clayton Sam, tallyman's son Elmer Sam, tallyman's son |
| VC04/CH36 | Dec. 2, 2021 | August 2022 | Samuel Cox, tallyman |
| VC05/CH37 | March 30, 2022 | - | Adrian Chiskamish, tallyman (CH37 - VC05) Claude Matches, land user and previous tallyman's nephew (CH37 - VC05) <br> Matthew Chiskamish, land user and tallyman's cousin (CH37 - VC05) |
| VC06/CH38 | Nov. 30, 2021 | - | Jimmy Kanatewat, tallyman |


| TRAPLINE | DATE - <br> INTERVIEW |  | DATE - <br> VALIDATION | NAMES OF INTERVIEWEES/STATUS |
| :---: | :---: | :---: | :---: | :---: |
| Waskaganish | Nov. 17, 2021 | Sept. 2022 | Henry Erless, tallyman <br> Rephane Erless, tallyman's grandson |  |
| R01A | June 22, 2022 | - | Danny Whiskeychan, tallyman |  |


| TRAPLINE | DATE - <br> INTERVIEW | DATE - <br> VALIDATION | NAMES OF INTERVIEWEES/STATUS |
| :---: | :---: | :---: | :---: |
| Wemindji | June 21st, 2022 | August 2022 | Sinclair Mistacheesick, tallyman <br> Irene Mistacheesick, tallyman's wife |
| VC12 | June 22, 2022 | August 2022 | Leonard Asquabaneskum, tallyman |
| VC13 | June 24, 2022 | August 2022 | Henry Steward, tallyman |
| VC14 | June 20, 2022 | August 2022 | John Moses, tallyman <br> Henry Atsynia, tallyman's uncle |
| VC16 | Aug. 16, 2022 | Sept. 2022 | Bruce Hughboy, tallyman |
| VC17 | June 22,2022 | August 2022 | Roy Matches, tallyman <br> Allan Matches, tallyman's brother <br> Norman Matches, tallyman's brother |
| VC19 | June 23, 2022 | August 2022 | Vern Gilpin, tallyman <br> Albert Gilpin, tallyman's brother <br> Ronnie Gilpin, tallyman's brother |
| VC23 | June 23, 2022 | August 2022 | Lindy Georgekish, tallyman <br> Denis Georgekish, tallyman's brother <br> Doreen Georgekish, tallyman's mother <br> Morse Tomatuck, land user |

Source: Optional

## APPENDIX



CREE STAKEHOLDERS

Appendix B - Summary of Cree stakeholders' engagement activities

| STAKEHOLDERS \& ENGAGEMENT ACTIVITY | DATE INTERVIEW | NAMES OF INTERVIEWEES/STATUS |
| :---: | :---: | :---: |
| Regional Level |  |  |
| COTA <br> Focus Groups | March 7 and April 13, 2022 | Robin McGinley, Executive Director Anderson Jolly, President \& Nemaska Representative Irene Otter, Executive Committee \& Waswanipi Representative Louise B. Saganash, Elders Committee Representative |
| Economic Development Officers (EDOs) Focus Group | July 20, 2022 | David Neeposh, Eeyou Economic Group, General Director Elvis Weapenicappo, Eastmain EDO, Eeyou Economic Group Vice Prsdt Harris Happyjack, Eeyou Economic Group, Youth Business Advisor William Paddy, Oujé-Bougoumou EDO Drayden Mistacheesick, Wemindji EDO <br> Malvin Wesley, Business development manager, Waskaganish <br> Andrew Coon, Coordinator of Economic development, Mistissin) Marlene Sam Dixon, Waswanipi EDO <br> Randall Black, Eeyou Economic Group, Business Loan Councillor Sydney Orr, Whapmagoostui EDO, President for Eeyou Economic Group |
| Nemaska |  |  |
| Tallyman \& Land Users Focus Group | $\begin{gathered} \text { November 18- } \\ 19,2022 \end{gathered}$ | n. d. |
| Mistissini |  |  |
| Cree Trappers Association (CTA) Focus Group | Nov. 3, 2021 | Stanley Mianscum, local Administer Andrew Loon, local CTA member Willie K. Gunner, local CTA member |
| Elders Focus Group | Oct. 21, 2022 | Harry Mianscum Bella M. Mianscum Bella Moses Petawabano Katheleen Wooten Jimmy Macleod Mary Macleod Thomas Coon |
| Chisasibi |  |  |
| Elders Council Cree Café | March 14 and 15, 2022 | Jimmy R. Fireman, Coordinator Elders Program Robbie Matthew George C. Bearskin Charlie Pepabano William Fireman Mina Fireman Elizabeth Louttit |
| Cree Women of Eeyou Istchee Association (CWEIA) <br> Focus Group | unknown | Sherri-Ann Louttit Mina Bearskin-Fireman Chief Daisy House Deputy Chief Paula Napash Nathasha Bates Mabel Bearskin |
| Chief and Council Roundtable discussion | $\begin{gathered} \text { October 11, } \\ 2022 \end{gathered}$ | Chief Daisy House <br> George L. Pachano, Councillor Jody House, Councillor <br> William Chisakamish, Councillor <br> Roger Orr, Councillor <br> Louise Etapp Neeposh, Councillor |


|  <br> ENGAGEMENT <br> ACTIVITY | DATE - <br> INTERVIEW |  | NAMES OF INTERVIEWEES/STATUS |
| :---: | :---: | :---: | :---: |

Source: Optional

## APPENDIX

## JAMESIAN

 STAKEHOLDERSAppendix C - Summary of Jamesian stakeholders' engagement activities

| STAKEHOLDERS | DATE INTERVIEW | NAMES OF INTERVIEWEES/STATUS |
| :---: | :---: | :---: |
| Matagami |  |  |
| Municipality of Matagami | $\begin{gathered} \text { January 21, } \\ 2022 \end{gathered}$ | Daniel Cliche, Director General, Municipality of Matagami |
| Public Information and Consultation Session | $\begin{gathered} \text { February 9, } \\ 2022 \end{gathered}$ | Daniel Cliche, Director General, Municipality of Matagami <br> René Dubé, Mayor, Municipality of Matagami <br> Martin Filion, municipal councillor <br> Marie-Claude Brousseau, Director General, ARBJ <br> Josée Roy, treasurer, SADC Matagami <br> Réal Dubé, municipal councillor <br> Denis Lord, Journalist, La Sentinelle <br> Denis Audette, Strategic Advisor for Eeyou Istchee James Bay and Nunavik, ministère des Transports du Québec (MTQ) Citizens (2), Municipality of Matagami |
| Chapais |  |  |
| Public Information and Consultation Session | May 25, 2022 | Isabelle Lessard, Mayor, Municipality of Chapais <br> Stéphanie Houde, Strategic development assistant and Project manager, Municipality of Chapais Citizens (24), Municipality of Chapais |
| Public Information and Consultation Session socioeconomic stakeholders | May 26, 2022 | Isabelle Lessard, Mayor, Municipality of Chapais <br> Stéphanie Houde, Strategic development assistant and Project manager, Municipality of Chapais <br> Simon Blanchet, President, Opémisca Lake residents' association Steeve Boissoneault, President, Cavan Lake residents' association Isabelle Milord, Director General, Tourisme Baie-James Intern, Tourisme Baie-James <br> Régis Simard, Director General, Table jamésienne de concertation minière |
| Radisson |  |  |
| Locality of Radisson <br> - elected <br> representatives | March 9, 2022 | Annabelle Larouche, Director General, locality of Radisson Sébastien Lebrun, President, locality of Radisson Hugo Bondu, Director, Fire Department, locality of Radisson Aurèle Gravel, locality councillor Judy Boissonneault, locality councillor |
| Public Information and Consultation Session | June 1 ${ }^{\text {st }}, 2022$ | Annabelle Larouche, Director General, locality of Radisson Sébastien Lebrun, President, locality of Radisson Annie Juteau, municipal officer, locality of Radisson Judy Boissonneault, locality councillor Suzanne Pelletier, locality councillor Manon Provencher, locality councillor Citizens (11), locality of Radisson |
| Chibougamau |  |  |
| Municipality of Chibougamau elected representatives | January 25, 2022 | Manon Cyr, Mayor, Municipality of Chibougamau <br> Alain Landry, Director General, Municipality of Chibougamau Claude Girard, municipal councillor, Municipality of Chibougamau Lyne Choquette, economic development, Municipality of Chibougamau Jonathan Mattson, municipal councillor, Municipality of Chibougamau Stéphane Hudon, municipal councillor, Municipality of Chibougamau Alain Poirier, municipal councillor, Municipality of Chibougamau Luc Michaud, municipal councillor, Municipality of Chibougamau Nichèle Compartino, Communication councillor, Municipality of Chibougamau |


| STAKEHOLDERS | DATE - <br> INTERVIEW | NAMES OF INTERVIEWEES/STATUS |
| :---: | :---: | :---: |
| Public Information <br> and Consultation <br> Session | Sept. 27, 2022 | Manon Cyr, Mayor, Municipality of Chibougamau <br> Nichèle Compartino, Communication councillor, Municipality of <br> Chibougamau, and Director, Development Chibougamau <br> Nadia Duval, Project manager, Développement Chibougamau <br> Citizens, (13), Municipality of Chibougamau <br> Citizens (2), Municipality of Chapais |

[^20]
[^0]:    ${ }^{1}$ In addition to the land users, Cree and Jamesian stakeholders have also been met; please refer to appendices for detailed list.

[^1]:    ${ }^{2}$ Territories that have received specific recognition while awaiting legal protected status to be assigned to them. Their priority objective is the conservation of nature (MELCFP, 2022).

[^2]:    ${ }^{1}$ In addition to the land users, Cree and Jamesian stakeholders have also been met; please refer to appendices for detailed list.

[^3]:    2 Eeyou (plurial Eeyouch) is the name used by the Eeyouch-Crees to design themselves, even if the term Cree is also used. The term Cree was chosen in this text for an easier reading. The Eeyouch is the generic term from the coastal dialect that includes the Eenouch, which is from the inland dialect.
    3 It must be noted that since January 2014, the toponym Eeyou Istchee James Bay replaced Baie-James for the designation of this region (see section 2.1.2).
    4 Washaw Sibi Eeyou Association was also included in the study and among the CIOs as they have interests within the study area.
    5 A distinction is made between the inland Crees and the coastal Crees. The latter are established or inhabit inland areas, while the former is found along James Bay Coast.

[^4]:    6 Refer to the report on the market study undertaken as part of La Grande Alliance Projects (VEI, 2022) for further information on this subject.
    7 The program was renamed in 2019 as the Economic Security Program, although the acronym ISP is still used.
    8 No initial assessments of this nature were done when the complex was built.
    9 Tallymen are designated representatives of traplines, essentially family hunting territories, and the foremost stewards of their family lands. Tallymen are formally recognized by the JBNQA and are generally regarded as being among the people who know the territory and its resources best.

[^5]:    10 In 2019, the Eastmain-1 Reservoir was renamed the Paix des Braves Reservoir, in commemoration of the historical Agreement concluded in 2002 between the Cree Nation Government and the Quebec Government, when Bernard Landry was Prime Minister. The Eastmain-1 Dam and the Eastmain-1-A Powerhouses have also been renamed Bernard-Landry (HQ, 2019).

    11 This follow-up is part of an environmental follow-up implemented by Hydro-Québec as part of the Eastmain-1-A-SarcelleRupert Project. This program's time span is from 2007 to 2023 and is aimed to do a follow-up of the natural and human environment affected by the infrastructures built.

[^6]:    ${ }^{12}$ For an easier reading of the text, the Cree community members met, who use the territory, are called "land users".

[^7]:    13 The trapline boundaries on these maps were taken from the database provided by CTA (2005). When tallymen disagreed with these boundaries, they were invited to retrace them on the map, although it was communicated that neither WSP nor the CDC had any authority to officially recognize any such modifications.

[^8]:    14 For further information on this topic, the reader can refer to the Follow-up Study on Cree Land Use - Eastmain-SarcelleRupert Complex (Consortium Genivar-Waska, 2020a) and to the Follow-up Study on Navigation conditions on the Rupert River - Eastmain-Sarcelle-Rupert Complex (Consortium Genivar-Waska, 2020b).

[^9]:    17 For further information on this topic, the reader can refer to the Follow-up Study on Cree Land Use - Eastmain-SarcelleRupert Complex (Consortium Genivar-Waska, 2020a) and to the Follow-up Study on Navigation conditions on the Rupert River - Eastmain-Sarcelle-Rupert Complex (Consortium Genivar-Waska, 2020b).

[^10]:    18 For further information on this topic, the reader can refer to the Follow-up Study on Cree Land Use - Eastmain-SarcelleRupert Complex (Consortium Genivar-Waska, 2020a).
    19 Forest fire occurred in 2013 and then again in 2014.

[^11]:    ${ }^{20}$ For more information on this subject, the reader may refer to the Suivi sur l'utilisation du territoire par les Cris - Complexe Eastmain-Sarcelle-Rupert (Consortium Genivar-Waska, 2020a).

[^12]:    21 However, the Tallyman of trapline VC06/CH08 had a phone call with the CIO for Chisasibi and told him notably about a zone to protect (see Section 6).

[^13]:    22 According to the Tallyman, the trapline numbers were reversed on the maps and in the CTA database. His trapline on the edge of the bay is GW22, not GW21.

[^14]:    23 At the time of the interviews, the road option from La Grande-1 to the north of La Grande River was not under consideration and is partially outside the SA2. This option crosses trapline FG01/CH01. However, users were consulted on this subject during the validation round (see TN17).

[^15]:    24 According to the Tallyman, the trapline numbers were reversed on the maps and in the TAC database. His trapline on the edge of the bay is GW22, not GW21.

[^16]:    25 At the time of the interviews, the road option from La Grande-1 to the north of La Grande was not under consideration and is partially outside the SA2. This option crosses trapline FG01/CH01. However, users were consulted on this subject during the validation round (see TN17).

    26 At the time of the interviews, the road option from La Grande-1 to the north of La Grande was not under consideration and is partially outside the SA2. This option crosses trapline FG02/CH02. However, users were consulted on this subject during the validation round (see TN17).

[^17]:    27 According to the Tallyman, the trapline numbers were reversed on the maps and in the CTA database. His trapline along the bay is GW22, not GW21.

[^18]:    ${ }^{29}$ One of these claims (\#403644002) is designated jointly to Hydro-Québec and the Société de Développement de la Baie-James.

[^19]:    30 Source: Data from the NILCA with respect to the Nunavik Marine Region

[^20]:    Source: Optional

