



ENGINEERING CONSULTING SERVICES

Transportation Infrastructure Program Feasibility Study, Phase I Cree Land Use Study - Mistissini Technical Report



Consultant Reference: LGA-1-MI-S-SCL-RT-0001-00
2024-03-27



Stantec | DESFOR | SYSTRA

with subconsultant



Document History and Status

Revision	00
Date	2024-03-27
Prepared by	MHC, EC, DL
Reviewed by	JM
Approved by	AC
Comments	Final

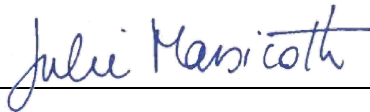
Approvals

Prepared by:



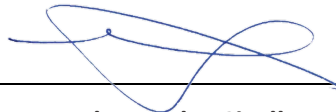
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Document Identification

Transportation Infrastructure
Program Feasibility Study, Phase I
CREE LAND USE STUDY - MISTISSINI
TECHNICAL REPORT

Consultant Reference:
LGA-1-MI-S-SCL-RT-0001-00
2024-03-27

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1. INTRODUCTION

1.1 LA GRANDE ALLIANCE

La Grande Alliance (LGA) program is a plan to protect, connect and develop the Eeyou-Istchee Baie-James territory. It includes a study of a transport development that encompasses a renewal of existing Cree Community roads, the implementation of a north-south link Matagami to the James-Bay area and finally, a deep-sea port. It materialized in 2018 when the Grand Council of the Cree (GCC) and the Gouvernement du Québec (GQ) signed a memorandum of understanding for the study. The study has involved the Cree First Nations communities from the beginning of the initiative to ensure community engagement, and respect for the traditional way of life and values. The study is overseen by the Cree Development Corporation (CDC) on behalf of the Cree Nation Government (CNG).

The Cree Development Corporation (CDC), on behalf of the GCC/CNG and the GQ, has been mandated to oversee the study. In turn, they have assigned Vision Eeyou Istchee (VEI), a consortium formed by STANTEC, DESFOR and SYSTRA, to carry out a Feasibility Study on the technical, socio-environmental and economic components in Phase I of the LGA infrastructure program, covering years 1-5 from the beginning of construction. The CDC appointed WSP to perform a pre-feasibility study of Phases II-III of the program (covering years 6-15 and subsequently years 16-30).

Phase I of LGA includes:

- Upgrades to the access roads between the Billy-Diamond Highway (BDH) and the Cree communities of Waskaganish, Eastmain and Wemindji.
- Upgrade to the access road between the Route du Nord (RDN) and the Cree community of Nemaska.
- Construction of a new secondary access road to Mistissini via the RDN.
- A railway line following, as much as possible, the Billy-Diamond Highway between the town of Matagami and KM257 (Rupert River bridge) of the Highway.
- A return to service for the railway line between Grevet (Lebel-sur-Quévillon) and Chapais (approximate distance of 225 km).
- Trans-shipment areas along the Billy-Diamond Highway and the Grevet-Chapais railway corridors, specifically one located at KM257.

Among the tasks to achieve the stated objectives of the Feasibility Study for Phase I — Infrastructure, a socio-environmental feasibility study was conducted. This study included a Cree Land Use Study among the communities potentially impacted by the proposed infrastructures, including Mistissini.

1.2 SOCIO-ENVIRONMENTAL FEASIBILITY STUDY

Development projects cannot be carried out without bringing changes in the environment and to the social environment. The James Bay and Northern Québec Agreement (JBNQA) was established in 1975 to ensure, among other things, that development in the Cree territory is carried out taking into account the protection of the environment and the maintenance of land use by Cree communities for the practice of their traditional activities. The JBNQA also provides a pathway for Cree in the decision-making as part of the environmental assessment process under Chapter 22 of the Agreement.

This Environmental and Social Feasibility Study is an important tool to guide future developers wishing to carry out the Phase 1 of LGA. It is an innovative approach that plans to document, upstream of design by future proponents,

the expectations and concerns of affected Cree communities, identify key potential land use conflicts and propose solutions (avoid, mitigate, offset), anticipate key potential impacts and recommend mitigation measures.

The CDC made it clear from the beginning of the LGA process that they wanted local community involvement, and environmental and social criteria evaluated at the same level as technical and financial criteria in the infrastructure design and planning. To meet these principles, VEI did the following:

- Organised internal bi-weekly meetings and direct exchanges between colleagues to share relevant land use and environmental information with the other study teams as it was collected;
- Used an online database (interactive ArcGIS map) to make land use, environmental and technical data accessible to targeted team members:
- Organized a workshop, bringing together tallymen and engineers, to review the potential Billy-Diamond Highway (BDH) railway alignment, and identify main issues;
- Accommodated the tallymen's recommendations as much as possible.
- Encouraged team members to communicate with the Cree Liaison Officers (CIOs) and have ad-hoc discussions with them.
- Prioritised Cree workers and companies in the organization of field campaigns.
- Invited tallymen and land users to meet the field crews and to participate in fieldwork.
- Reviewed and included information shared by the following organizations:
 - Cree Nation Government (Land Use Planning Commission, including the Protected Areas Working Group and Environment Department);
 - Aanischaaukamikw Cree Cultural Institute;
 - Cree Outfitting and Tourism Association;
 - Cree companies, Cree communities, and the CIOs.

1.3 CREE LAND USE STUDY

As part of the socio-environmental study, the mandate included a Cree land use study which covered each proposed infrastructure's study area. The Cree land use study's main goal is to document the land and resources use in the study areas, so as to better identify and understand potential risks, conflicts and opportunities related to the transportation infrastructures under study. More specific objectives of this research include:

- Collect traditional knowledge regarding the area to inform and improve the design of the potential infrastructures.
- Identify valued sites and sensitive areas to be protected from potential development.
- Gather concerns and recommendations in relation to the proposed infrastructure, as well as concerning the LGA process in general.
- Assess preliminary potential impacts from the construction and operation of the infrastructures.

- Identify any potential cumulative effects from previous project impacts as well as in light of the potential infrastructures.
- Propose solutions to potential conflicts and alternate options.

It is important to keep in mind the following limitations regarding this component of the study:

- Novelty of the Grande Alliance study and approach for land users for whom this consists of the first contact regarding the infrastructure components under study;
- Relatively short time allotted to conduct the interviews and the study;
- Difficulty to obtain data from past studies or projects (e.g. sites of special interest to the Cree identified during forestry management exercise, as per the Paix des Braves);
- Difficulty to reach and meet all the potentially affected land users;
- Reluctance from certain land users to participate in the study because they do not want their participation to be interpreted as consent to the proposed infrastructure or to LGA;
- Reluctance from certain land users to share specific information about their activities;
- “Consultation fatigue” of certain land users who have shared their knowledge repeatedly;
- Potential loss of precision due to translation (Cree-English/English-Cree).

It should be seen as a first general picture of the land and resources use in the study areas, to be completed in future stages of the process, rather than a complete list of land use features and recommendations. Indeed, it should be noted that the approach adopted by the LGA team is very innovative in engaging land users and community members from the start of the planning process, before the final infrastructure design. If some of the proposed infrastructure works go ahead, engagement with community members will continue and data will be refined.

The present report presents the results of the Cree Land Use Study conducted in the community of Mistissini.

2. METHODOLOGY

The approach and methodology adopted for the Cree land use study, as well as the consent forms and interview grid were reviewed by and discussed with the CIOs.

2.1 STUDY AREAS

The study areas encompassed in the community of Mistissini are as follows (see Map 1):

- Route du Nord: one km buffer zone on either side of the road's centerline and it extends from the start of the road, in Chibougamau, to its connection with the BDH, around km 275 of the BDH.
- Second access road to Mistissini: one km buffer zone on either side of the proposed alignments and it extends from the start of the potential road, west of the village, on the other side of the lake, to its connection with the Route du Nord (total length between 42 and 45 km).

During the interviews with tallymen and land users, if land use activities or features were reported outside the study areas, they were noted as well.

The table below indicates the traplines in Mistissini potentially touched by each infrastructure.

Table 1 Traplines in Mistissini Potentially Touched by LGA Phase 1 Infrastructures

Infrastructure	Number of traplines	Trapline Intersected
Route du Nord	12	M33
		M38
		M38A
		M39
		M40
		M41
		M45A
		M49A
		M49B
		M49C
		M56
		M57/O57
Second Access Road to Mistissini	4	M45
		M45A
		M49C
		M50

2.2 DATA ACQUISITION AND PROCESSING

2.2.1 Literature review

At the beginning of the study, a review of existing information was conducted. General search by key words was carried out as well as search in specific databases, including:

- Hydro-Québec projects that were subject to an environmental impact assessment (Cherloc);
- Projects evaluated by the COMEX;
- Québec environmental assessment registries (MELCCFP and Bureau des audiences publiques sur l'environnement);
- Canadian impact assessment registry (Government of Canada).

More than 200 documents, concerning at least 40 projects achieved between 1977 and 2021, were consulted. This literature review allowed to collect information about known valued sites and sensitive elements, mainly along the Rupert River on Waskaganish and Nemaska territories. Some information regarding Cree land use near the communities of Waswanipi and Nemaska was also available. However, the literature review also revealed that little information is available for several sectors under study, including:

- Around the community of Wemindji and along the access road;
- Along the Billy Diamond Highway between Matagami and Waskaganish;
- Along the Grevet-Chapais roadbed, except for Lake Opawica area;
- Along the Eastmain access road.

2.2.2 Land user interviews

At the beginning of the study, traplines that could potentially be touched by the proposed works and infrastructures were identified. The VEI team then asked each CIO to validate the identity of each trapline's tallyman and to identify other land users or knowledge holders who should be invited to participate in the Cree land use study. In collaboration with the CIOs, VEI organized information sessions for tallymen and land users in each community potentially affected by LGA Phase 1 infrastructures (eight communities). Tallymen were invited to bring their family members and land users with them. General information on LGA as well as more specific information about Phase 1 studies and the infrastructures that could potentially go through the local traplines were presented and discussed with the attendees.

Sometime after the information session, the tallymen were invited to an individual land use interview in which their family members and land users were also welcomed to participate. The interviews were semi-structured, with open-ended questions, and were conducted mostly in Cree by one of VEI's Cree Liaison Officers and VEI's anthropologist. Large paper maps were used to locate land use features and information shared by the participants. Prior to starting the interview, the participants were asked if they had questions about LGA, and information about LGA and specific infrastructures was presented to those who had not assisted to the information session. The interview questions touched upon the following themes:

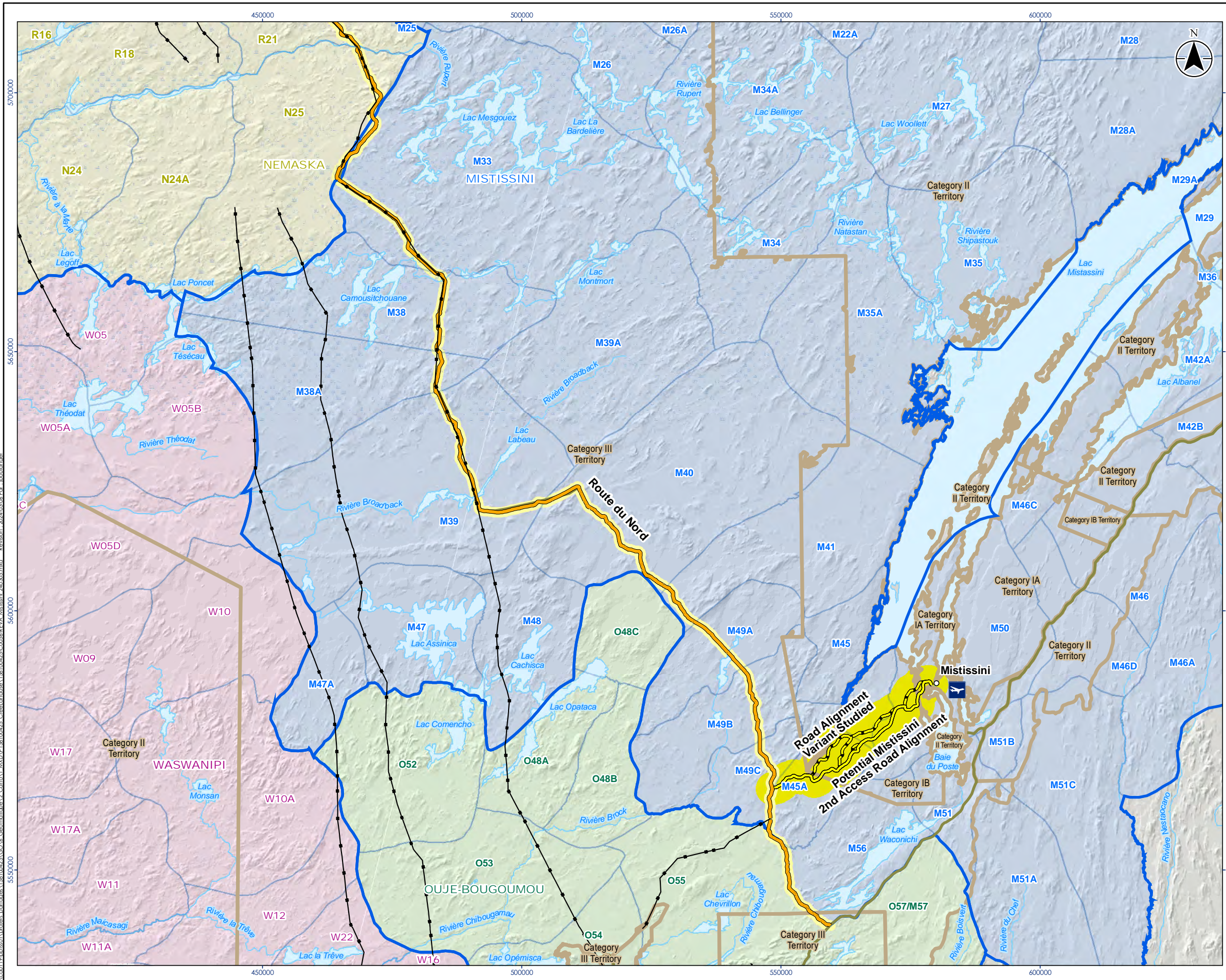
- Description of land use activities and features
 - Harvesting activities (hunting, fishing, trapping, and berries, plants and wood gathering);
 - Habitations sites (camp, cabin, seasonal campsite, tent frame, camping area, house, store, old trading post, old campsite and other building);

- Trails and travelways (ATV/snowmobile trails, forestry roads, path, boat landing and portages);
- Social and cultural sites (community, gathering, knowledge transfer, historical, archeological, ceremonial, burial or sacred site, picnic area, landmark).
- Environmental information concerning the study areas (traditional ecological knowledge)
 - Wildlife:
 - Species present in the study area, quantity, quality, and potential issues.
 - Trails and migration routes, with special attention to roads and alignments crossings.
 - Calving/kidding areas.
 - Other areas used by moose or caribou.
 - Beaver lodges/ponds.
 - Goose hunting ponds.
 - Fish:
 - Species present in the study area, quantity, quality, and potential issues.
 - Presence of fish, and species, in each watercourse along the alignments.
 - Spawning and rearing areas.
 - Water Resources
 - Wetlands, bogs, swamp areas
 - Invasive species and changes observed in the last 25 years.
- Condition of the existing infrastructures
- Potential effects and recommendations.

Once the interviews notes were compiled, the information collected was integrated into a GIS database specifically created for Phase 1 feasibility study, so it could be shared with the technical and the archaeological teams (note that access was limited to a small number of people).

Validation interviews were organized with the study participants, so they can review the data collected, verify its accuracy, and add precisions if required. The georeferenced database was also used during the validation process, to make sure the land use information was properly located. The interview notes were also read with the participants to validate the accuracy and clarify some information, if needed. The validation process also offered the land users an opportunity to share additional data or express additional concerns and recommendations.

It is important to note that some of the information collected is not presented in this report or is mentioned with very few details to preserve confidentiality and respect its sensitive nature. However, it will be provided to the CDC along with relevant non-disclosure agreements.

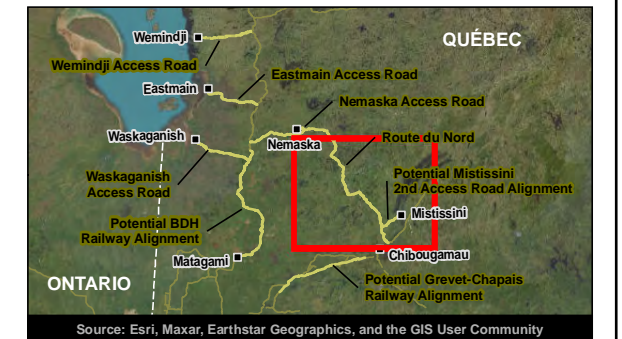


Map No. 1
 Title Cree Land Use Study Areas in Mistissini

Client/Project
 Cree Development Corporation
 La Grande Alliance – Feasibility Study
 Phase 1

Project Location 158100425-C0056 REVA
 Eeyou Istchee, Québec Prepared by Johanne Boulanger on 2024-03-06
 Verified by Marie-Hélène Côté on 2024-03-06
 Independent Review by Julie Massicotte on 2024-03-06

- Human Environment Components**
- Cree Village
 - Locality
 - ✈ Airport
 - ▭ Category I, II or III Territory
 - Power Line
- Study Component**
- Route du Nord
 - Potential Mistissini 2nd Access Road
 - Road Alignment Variant Studied
 - Study Area – 1 km Buffer on Each Side of the Route du Nord
 - Study Area – 5 km Buffer on Each Side of the Mistissini 2nd Access Road
- Trapline Limit and Community Name**
- ▭ Trapline Limit
 - ▭ Mistissini
 - ▭ Nemaska
 - ▭ Ouje-Bougoumou
 - ▭ Waswanipi
- Hydrography**
- ▭ Body of Water
 - Watercourse
- Wetland**
- ▭ Potential Wetland
- Road Network**
- Road Network



Notes

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Geotechnical Investigation: Stantec, 2023
3. Road Network: Adresses Québec, 2021
4. Hydrography: GRHQ, 2017
5. Orthoimagery: ESRI-World Imagery, 2017

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 (At original document size of 11x17)

3. COMMUNITY PROFILE

Mistissini is an inland community located on the shore of Lake Mistassini, on the north shore of Baie du Poste, and can be accessed by the highway Route 167 and then following the Main Road on approximately 15 km. From 1802, several trading posts were established on Mistissini's traditional territory. The outlet of Lake Mistassini accommodated a post which was moved in 1835 in the current Baie du Poste (HQ, 2007). The community of Mistissini is in full expansion following, among other things, the signing of the Paix des Braves Agreement in 2002 (HQ, 2008). Mistissini's territory is divided into 76 traplines covering 117,844 km² (CMEB, 2022). As of August 2022, the Cree Nation of Mistissini had a total registered population of 4,190, with 3,807 members living on reserve, 252 living off reserve, and 131 living on other reserves or Crown land (CIRNAC, 2022).

The LGA Phase 1 infrastructures located on Mistissini territory are:

- The southern and central portions of the Route du Nord;
- The entire alignment of the potential second access road to Mistissini.

3.1 ATO PARK

The creation of Albanel-Témiscamie-Otish (ATO) Park is the result of a partnership between the Cree Nation of Mistissini (CNM) and the Government of Québec. ATO Park is located entirely on Cree traditional territory. As part of the ATO Working Group, CNM representatives will ensure that ATO Park's planning, management, and long-term operational sustainability reflect Cree values, knowledge, and expectations.

The Mistissini homeland covers roughly 127,700 km², of which 11,000 km² has been allotted to ATO Park. The territory as a whole is a magnificent and undisturbed wilderness, defined by the vast expanse of its natural landscapes and waterways and the rich biological diversity of its northern boreal forest and wildlife. The Cree have occupied the Mistissini homeland since time immemorial and continue to make active and respectful use of the land in every season of the year. The homeland, where culture and nature thrive in harmonious balance, is the foundation upon which the Cree can build a sustainable future.

3.2 ISSUES AND VISION

In 2017, the Eeyou Planning Commission undertook a consultation process with Mistissini community members. The results are presented in the "Report on Community Input on Land Use Planning Goals" (EPC, 2017) and included information on the community's values, issues and vision for the future. Some of it is summarized below:

Lake Mistissini remains relatively intact and offers many opportunities to practice traditional activities. Also, it plays an important role in the history and culture of the community with historic gathering, hunting and fishing places as well as travel routes to many more remote locations on the Cree territory.

Issues that Mistissini faces:

- Forestry
- Declining Cree occupation
- Declining transmission of Cree culture and language
- Lack of control over development and its impacts
- Access
- Non-Cree occupation

Elements of a Mistissini vision for the future:

- Environmental protection
- Integrate land users into decision-making
- More support for transmission of Cree knowledge
- Recognition of Cree governance
- Preparing the next generation for Cree governance
- Access

4. RESULTS

The interviews provided a general idea of the land use taking place along the Route du Nord, the second access road in Mistissini and in the surrounding areas, rather than a complete picture. The number of land users of the study areas, the frequency of their visits and quantity of resources harvested were not estimated since it was not in the scope of the Cree land use study carried out as part of the LGA Phase 1 Feasibility Study. It is worth noting that such an estimation exercise would be a big undertaking since various community members use the lands in proximity to their community's access road.

The land and resources in the study areas are used not only by the tallymen, their family members and land users, but also by other Cree land users. Additionally, various non-Cree activities were reported along the BDH. Since the BDH provides easy access to the territory, recreative anglers and hunters, as well as cottage owners and tourists also frequent the study area.

While being relatively recent on the territory, modern roads are widely used by the Cree population. In terms of transportation routes, they have overtaken rivers. The Route du Nord is not only important to connect with other communities and with “the south”, but also to facilitate land use and harvesting activities, and access to the southeastern part of Eeyou Istchee Baie-James, and potentially to the Saguenay-Lac-Saint-Jean region, by members of other Cree communities. The fact that most land users do not live from the land anymore and occupy paid jobs partly explains the growth in importance of modern roads, as they provide faster access. Major changes in important rivers' hydrology and ice cover, following hydroelectric development in the last decades or due to climate change, also contributed to the increase in use of modern roads. Since it is now more dangerous, complicated, or sometimes impossible to navigate on some watercourses as well as to travel by snowmobile, roads offer interesting alternate options.

Members and leadership of the Cree Nation of Mistissini had identified the need for a second access road leading to their community a couple of years ago. Indeed, it could increase public safety as it would provide an evacuation route if the only access to Mistissini is not practicable or blocked due to a natural disaster (forest fire, flooding). Additionally, it would facilitate access to that part of Mistissini's territory where residential development, operation of a borrow pit and forestry activities are considered by the CNM.

4.1 CREE LAND USE

The Route du Nord is a 407-kilometer, gravel road connecting Route 167 in Chibougamau to the Billy-Diamond Highway. The road has opened access to the Nemaska community and the forestry industry. It is crossing 22 traplines across the territory of four Cree communities (Mistissini, Nemaska, Oujé-Bougoumou and Waskaganish). RND crosses 12 traplines in Mistissini (see Table 1, section 2.1). Between August 29 and September 2, 2022, VEI conducted land use interviews with a total of 17 participants which included the tallymen/tallywomen of 11 traplines in Mistissini intersected by the RDN and family members and land user. CEI was not able to meet with the tallyman of trapline M49B.

The second access road to Mistissini is crossing four traplines across the territory of Mistissini. On August 30 and 31, 2022, VEI conducted land use interviews with a total of five participants which included the tallymen of the four Mistissini traplines intersected by the second access road to Mistissini and a family member.

4.1.1 Trapline M33

The LGA Phase 1 infrastructure located on trapline M33 is the Route du Nord.

The tallyman of M33 trapline shared during the interview the location of four Cree camps within the study area. The camp he mainly uses is located at km 221 along the Route du Nord and is composed of 18 or 19 cabins. The three others are old camps. The tallyman's family used to stay in tent frames near km 212 of the RDN, but they are not in use anymore.

The participant identified three locations of moose yards. Moose are present along the RDN from km 177 to 180 and between km 184 and 200. He also indicated a spawning ground for lake trout, walleye, and pike, and another one for walleye and whitefish.

The tallyman hunts geese at several locations along the road, and specified five particular goose hunting areas. He also reported harvesting marten and lynx between km 189 and km 195. Caribou were very present on trapline M33 during the years 2003 to 2005. Until 2012, tallyman and land users used to see them, but not after that. Their migratory route moves around.

Finally, a boat ramp to access the Rupert River is located near km 220. According to the tallyman, the access path leading to this boat landing is very busy.

4.1.2 Trapline M38

The LGA Phase 1 infrastructure located on trapline M38 is the Route du Nord.

The tallyman of trapline M38 reported during the interview the locations of his main camp and of a camp used by a family member. The tallyman's main camp is composed of nine or ten (10) cabins and located approximately at km 177 of the RDN, near the watercourse. A land user also has a cabin there. A family member of the tallyman has his camp on the other side of the watercourse. They fish lake trout at this location but go hunting to another place which has a better access. The tallyman also collects drinking water at the creek near this camp area.

The tallyman goes fishing to three areas within the study area. He does trout fishing and collects springwater at the lake on the east side of the road, near km 161. He also does walleye fishing at the lake on the west side of the road, between km 169 and 176.

Two snowmobile trails start from the RDN and lead to harvesting locations. One trail starts near km 177 and can be seen on Niskamoon's maps since it was a Niskamoon project. The other starts near km 176 and leads to several lakes on the east side of the road, up to km 172.

4.1.3 Trapline M38A

The LGA Phase 1 infrastructure located on trapline M38A is the Route du Nord.

During the Cree land use interview, the tallyman shared four locations of Cree camps within the study area. His main camp is located by the RDN, around km 159. On the other side of the road, a friend of the tallyman's family has a camp by the lake. The third camp, near km 154 of the RDN, is composed of two cabins and is used by the tallyman's first cousin.

The tallyman also shared the location of three burial sites within the study area, but on trapline M38.

4.1.4 Trapline M39

The LGA Phase 1 infrastructure located on trapline M39 is the Route du Nord.

The tallyman of trapline M39 and a family member reported during the interview the location of his main camp and of two camps used by family members. The camp he mainly goes to is located near km 131, by the Broadback River shore, and is somewhat away from the road to avoid the noise as well as the transmission line which makes a lot of noise too when it is raining. On the other side of the road is located the family camp, an extension to the main camp. The tallyman's nephew also has a camp on the east side of km 141 at the shore of the lake.

There is beaver activity all along the road. The beavers clog the culverts, but most of the time, the MTQ undoes the dam before there is any damage. Some people kill beavers on trapline M39 or they see a trap and take the beaver, then they can escape by the forestry road at km 148 of the RDN.

There is a network of forestry roads on trapline M39, leading south to Waswanipi or Oujé-Bougoumou. Other than the two forestry roads used to access the camps, near km 140 and 148, the shorter ones are more of a disturbance to their harvesting activities as they are used by "day hunters": "Some people even take the beaver from the trap.". There is bear all over the trapline since it is a blueberry country. The area is the location of an old forest fire, so they can get blueberries almost everywhere. There are fishing areas all over the water system. There is moose all over the trapline but no known collision on the RDN. All along the road there are lynx, foxes, rabbits, and ptarmigans. Also, they have observed wolves and caribou tracks. Recently they saw deer.

4.1.5 Trapline M40

The LGA Phase 1 infrastructure located on trapline M40 is the Route du Nord.

During the Cree land use interview, the tallyman shared six locations of Cree camps within the study area. His main camp, around km 100 of the RDN, is composed of approximatively ten (10) cabins, on both sides of the road, and is used by the tallyman's family and extended family (several uncles and cousins). The tallyman's father had his camp there for a long time. There is an access, and the forestry company improves it sometimes. Also, there is a goose hunting area. The tallyman and land user trap marten because "they chew their stuff" that is stored there. The other camps mentioned during the interview are used by the tallyman's family or during hunting activities:

- Main hunting camp before the RDN was constructed, located by lake Frotet
- Their neighbours' camp composed of 5 or 6 cabins and an access
- Extended family camp

There is beaver in almost every creek; they move around the territory. All the same fish species are found in the various lakes on the trapline because they are all connected.

The family's main hunting and fishing locations were in the Lake Frotet area, but following the construction of the RDN, they changed their harvesting locations.

Since there has been a forest fire 5 or 10 years ago which affected the trapline, there were lots of berries in the old burnt area, but now trees start to grow again and there are less berries.

The tallyman and the other land users do not hunt small game, but they see ptarmigan, partridge, and rabbits all along the RDN.

4.1.6 Trapline M41

The LGA Phase 1 infrastructure located on trapline M41 is the Route du Nord.

The tallywoman of trapline M41 and some family members reported during the interview the location of three camps used by family members. One of those camps is located around km 78 of the RDN, near the access path to the “Blueberries Hill”, a berry picking area. The three other camps are located near km 81. One of them is a camp composed of four cabins where the tallywoman and her family do ceremonies, and the two others are used by the family.

All along the RDN and the forestry roads, there are lots of blueberries that they can gather. There are also a lot of beavers, and “Native poachers” kill them. Additionally, the tallywoman identified several moose yards within the study area and a spawning area for brook trout.

Before 2002, the tallywoman and land users used to see a lot of caribou in the area. There is still woodland caribou on trapline M41 nowadays, not far from the study area. The family established a protected area where they hang: “It is not marked, but it is protected by the government apparently.” In spring, the tallywoman and land users see woodland caribou and moose close to their camp. If they harvest caribou, it is only one or two and it is for food. They dry the meat, and it is really good. The reason why they do not see migratory caribou anymore is that the Rupert River is never frozen since the diversion; the caribou cannot cross. They go along the coast now.

4.1.7 Trapslines M45 and M45A

The LGA Phase 1 infrastructure located on trapslines M45 and M45A is the second access road to Mitissini. The Route du Nord is also crossing trapline M45A. However, no information was shared during the interview by the tallyman related to the Route du Nord.

The tallymen of trapslines M45 and M45A reported a camp used by the family for hunting activities within the study area. A camp located north of Option 2 of the alignment, approximately 7 km from the potential junction with the RDN, is mainly used by one of the tallymen. A portage could be intersected by the proposed second access road in this area. A SEPAQ outfitting camp is established in the southern part of the study area.

The tallymen mentioned beaver activity in a waterbody along Option 1 and at the crossing of Option 1 and Option 2. One of the tallymen pointed out a goose pond in a swamp located south of Option 2. Additionally, he mentioned collecting his drinking water in a lake in the southern part of the study area, near the potential junction with the RDN.

Pénicouane Bay, especially the area around the “Y”, is a valued site for the tallymen who consider it a sacred site. This is where they grew up, as well as their parents, and where their hunting stories are. Tallymen remember observing and trapping muskrat and beaver along the Pénicouane Bay. A portage and a very old grave of an unknown person were also reported in the area. According to the participants, there may be archeological potential, as there were markings from when their parents were hunting. Both tallymen and land users use the area around that river (Pénicouane Bay); they go out every first Friday of June and only return after Labour Day, “once the tourists are gone”. Therefore, they would like that area to be protected from development instead of building facilities for a borrow pit, for example.

Tallymen used to observe and trap muskrat and beaver around the lakes located near the potential junction with the RDN.

Both tallymen go fishing for trout in a lake near Option 2 of the second access road alignment.

4.1.8 Trapline M49A

The LGA Phase 1 infrastructure located on trapline M49A is the Route du Nord.

The tallywomen of trapline M49A shared during the interview the locations of three camps used by family members. The primary tallywoman mainly goes to a camp located at km 62 of the RDN and composed of 9 cabins. That camp is also used by her husband, her brothers and some friends. A family member plans to build a camp on the other side of the road. In that area of the RDN, a lot of people stop to have a view of the landscape and to walk. People even use their private toilet. According to the tallywomen, more halts (rest stops), like the Broadback halt, should be developed and more restrooms should be built along the road.

The participants indicated that there is beaver all over the trapline, but no caribou observed. People trap beaver on trapline M49A, but the tallywomen do not really bother because there are plenty of them. A goose hunting area around km 62 of the RDN, on its west side, was mentioned.

A fishing area where the CNM sends people (non-native and tourists) was reported around km 66 of the RDN, and a spawning area for walleye was identified at another location.

The tallywomen and the land users bring their garbage near km 99 of the RDN for garbage collection. They also go near this place to collect fresh water that they use as their drinking water. They get drinking water at Lake Villebois too.

Berries are found all along the forestry road.

An access used by 4-wheeler and truck is located at km 63 of the RDN. They have asked Barrette-Chapais if they could fix the forestry road that they use to access the camps because it is muddy when it rains and during spring. However, Barrette-Chapais replied that they will not do it because it is too close to river. There is also an access going down to the lake from km 67. That road is good because it goes to an outfitting camp.

4.1.9 Trapline M49C

The LGA Phase 1 infrastructure located on trapline M49C the Route du Nord and the second access road to Mitissini.

The tallyman of trapline M49C reported during the interview that the camp he mainly goes to is located around km 38.5 of the RDN. He hunts goose in the bay north of the camp. He also goes fishing for pike and sucker in the area.

Additionally, the participant shared the location of two old camps, one around km 39 and the other near the crossing of the proposed second access to Mistissini with the RDN, at km 34. Also near the proposed crossing, there is an area used primarily for forestry activities.

The tallyman mentioned beaver activity areas in proximity to the RDN, at km 36 and around km 38, and indicated that he traps beaver at various locations on his trapline. Him and other land users hunt bear near km 36. All along the road, they hunt ptarmigan, lynx, and rabbit.

4.1.10 Trapline M50

The LGA Phase 1 infrastructure located on trapline M50 is the second access road to Mitissini.

The tallyman of trapline M50 and a family member indicated that there is no camp yet in that part of the study area. They mentioned the presence of land users from the community in the southern part of trapline M50. Therefore, they are more likely to go to the northern part of their trapline, which is outside the study area, to conduct harvesting activities. They do not have much control on what happens on that part (southern and around the village) of the trapline, so they conduct less activities in that part.

4.1.11 Trapline M56

The LGA Phase 1 infrastructure located on trapline M56 is the Route du Nord.

During the Cree land use interview, the tallyman and family members shared that the RDN is located south of their territory and that area is mostly used by other land users instead of family members. All the family members' camps are located northeast of the RDN, which is also their main hunting area. However, they reported several activities around Lake Winsch, at km 4 of the RDN, among which is fishing for lake trout, pike and whitefish. The tallyman indicated the presence of a camp belonging to an Oujé-Bougoumou land user as well as a boat landing to access Nibiischii fishing camp at Lake Waconichi.

A moose corridor and the location of caribous tracks were pointed out in proximity to the RDN.

4.1.12 Trapline M57

The LGA Phase 1 infrastructure located on trapline M57 is the Route du Nord.

Trapline M57 is the southernmost of the RDN study area. Since Route 167 Nord acts as the trapline's western boundary and the RDN's km 0 is at the intersection with Route 167 nord, only a small portion of trapline M57 falls in the study area.

The tallyman of trapline M57 reported beaver activity at the creeks near the crossing of RDN with Route 167 Nord. He indicated the presence of moose, bears, lynx and foxes all along the 167 Nord Road. The tallyman does not hunt bears in the study area, but elsewhere. The tallyman does not go fishing in the area because there are bigger lakes on the eastern side of his trapline. He does not pick berry in or nearby the study area. The participant harvested geese at the crossing of the RDN and Route 167 N. There is no goose blind, but he saw some geese when he was driving, on the way to his cabin, and hunted them. There is also an old camp composed of tent frames at the crossing of those roads.

Forestry companies built the accesses on the eastern side of the RDN which the tallyman and land users use as trails.

4.2 COMMENTS, CONCERNS AND RECOMMENDATIONS

4.2.1 Route du Nord

The Cree land use study participants shared a wealth of information regarding the Route du Nord. Their comments, concerns and recommendations concerning its potential upgrade and paving are presented in the table below:

Table 2 Comments, Concerns and Recommendations – Route du Nord

Alignment / Conception
<ul style="list-style-type: none"> • Several recommended paving the RDN because there are safety issues with dust problem, especially on warm days without wind. • A tallyman mentioned that the asphalt used on the Oujé-Bougoumou access road is hard on tires. • The material used for the foundations of the Route du Nord expands during the winter. • Transport trucks get stuck near km 193 due to a steep slope after a curve. The area around km 82 of Route du Nord is called “the Swing” because trucks must go fast in that section to go up the hill. • The ditches at km 34 to 38 are high and the road is curvy. • For safety issues, a tallyman and land users would like the road to be enlarged from km 16 to km 17 of Route du Nord because there is only one lane. • A tallyman recommends developing a ramp with a “give way” at the intersection of RDN and Route 167. • Dangerous stretches or curves were identified: km 108, km 176.
Operation and Maintenance
<ul style="list-style-type: none"> • No calcium is used along some section of the Route du Nord. All the RDN gets icy. Participant would like if calcium could be put all along the Route du Nord and especially near camps. Participant indicated that it is better to use a mix of sand and salt to de-ice it during the winter. • Add anti-dust at main camp at km 38 of Route du Nord. • Almost flooding or flooding area by the beaver dam at the creek near km 92, km 189, km 193, km 201, km 215 to 216, between 112 to 114 and 220 to 221 of Route du Nord. • At the stop at KM 62, people go to the toilet, but no toilet paper is provided so they use the tallywoman tissues. Could be nice to provide enough. Also, it could be nice to have a parking and proper facilities. • In early spring, when there is still ice in the culverts, the water can rise because ice is blocking the pipe, so the tallyman goes with a generator, heat a “hot rod”, thaw the ice, and unblock the culverts. • The vegetation should be slashed at the access of main camp to improve the view.
Safety
<ul style="list-style-type: none"> • There has been fatal accidents around km 156 and km 161. • Small parking and dangerous shoulder to park at the boat ramps at KM 100 and near KM 99 of Route du Nord. • The Route du Nord is more dangerous during summer with the presence of loggers’ trucks. When you follow a logger’s truck, there is a lot of dust: “it is dangerous because we cannot see anything, and we cannot pass them”.

Signage

- Add signage near camp for Cree camp and/or to reduce speed along the Route du Nord (km 38, km 220-221).
- Participant recommends adding warning signs at the crossing (intersection) of Route du Nord and Route 167 Nord to make it more visible.
- KM 80 (off map) dangerous area without signage and metal guard rails.

Others

- A participant mentioned: "If you upgrade the Route du Nord, upgrade all the accesses to our camps".
- Would like a parking for future camp.
- In the area of a Cree camp located near km 81 and at km 220-221 of the Route du Nord (off map) the access to the camp should be improve (by adding MG20, for example).
- Beside two forestry road located near KM 128 and at KM 148 of Route du Nord, the other smaller forestry roads are a disturbance to the tallyman family hunting activities.
- Moose yard is in the Moblan lithium mine study area and due to a lot of disturbance, there are less moose than before.
- Part of the Route du Nord has been fixed and resurfaced 5 years ago.
- Participants indicated having some issues with the Barrette-Chapais forestry company:
 - They do not maintain the roads;
 - They leave exploited areas in bad condition;
 - They do not fulfil their commitments to the tallymen;
 - The consultation they do is not "meaningful", it is only a procedure;
 - The species planted for reforestation are not those that were present, but those for their commercial purposes. J. Blacksmith commented: "I don't know why they plant jack pine. We don't use jack pine over here. It is nothing to us. Yes, it grows fast, but the wood we need is black spruce.";
 - They are told that they cannot cut wood on their trapline".
- Do not touch the esker near KM 139 of Route du Nord.
- "Use caution when working in proximity to Broadback River crossing as it is an important fishing area".
- Concern about the water quality during the construction, for the animals.

4.2.2 Second Access Road to Mistissini

The Cree land use study participants shared information regarding a potential 2nd access road to Mistissini and made interesting recommendations for its development. They appreciated that the Team came to Mistissini and listened to them, so they can voice their opinions: “The others, like forestry or even the Council, do not really consult the tallymen and listen to their opinions.”. Comments, concerns and recommendations from study participants are presented in the table below:

Table 3 Comments, Concerns and Recommendations – 2nd Access Road to Mistissini

Alignment / Conception
<ul style="list-style-type: none"> • Option 2 (the red one on VEI map) is better because the road is already in use and the alignment stays on one trapline. • The alignment should use the old winter road that was converted into a forestry road at km 6 of the RDN. • The alignment should be as straight as possible. • An variant to Option 2 of the alignment was proposed.
Borrow Pits and Quarries
<ul style="list-style-type: none"> • There is a potential gravel pit close to variant 1 of Option 1. The potential road should facilitate access to borrow pits.
Others
<ul style="list-style-type: none"> • The Pénicouane Bay area should be protected from development instead of building facilities for a borrow pit, for example. • Offer construction and maintenance contracts to tallymen and their family members. • When the community builds something on a trapline, they should compensate the tallymen and land users like the forestry companies or the mines offer.

5. REFERENCES

- CIRNAC - Crown-Indigenous Relations and Northern Affairs Canada. 2022. Registered population – Cree Nation of Mistissini. Online. https://fnp-ppn.aadnc-aandc.gc.ca/fnp/Main/Search/FNRegPopulation.aspx?BAND_NUMBER=75&lang=eng
- CMEB - Cree Mineral Exploration Board. 2022. Geotrapline Maps. Online. <http://www.cmeb.org/index.php/maps>
- EPC - Eeyou Planning Commission. 2017. Cree Nation Land Use Planning Values, Issues and Vision, Report on community input on land use planning goals - Mistissini. Eeyou Planning Commission. 18 p.
- HQ - Hydro-Québec. 2007. Alimentation de la communauté crie de Mistissini. Poste à 161-25 kV et ligne de raccordement à 161 kV -Étude de potentiel archéologique. Hydro-Québec TransÉnergie. 57 p.

