

REGIONAL PORTRAIT OF EEYOU ISTCHEE



BC2

INTER-NATION COLLABORATION

NORTHERN INDIGENOUS SOUTHERN

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ACORONYMS

AFR: ADAPTED FORESTRY REGIME

CNG: CREE NATION GOVERNMENT

COMEV: ENVIRONNEMENTAL AND SOCIAL IMPACT EVALUATING COMMITEE (COMITÉ D'ÉVALUATION DES RÉPERCUSSIONS SUR L'ENVIRONNEMENT ET LE MILIEU SOCIAL)

COMEX: ENVIRONMENTAL AND SOCIAL IMPACT REVIEW COMMITTEE

COTA: CREE OUTFITTING AND TOURISM ASSOCIATION

CRRNTBJ: BAIE-JAMES NATURAL RESOURCES REGIONAL COMMISSION (COMMISSION RÉGIONALE SUR LES RESSOURCES NATURELLES ET LE TERRITOIRE DE LA BAIE-JAMES)

CRÉ : REGIONAL CONFERENCE OF ELECTED OFFICIALS (CONFÉRENCE RÉGIONALE DES ÉLUS)

CTA : CREE TRAPPERS ASSOCIATION

EFE: EXCEPTIONAL FOREST ECOSYSTEM

EIJBRG: EEYOU ISTCHEE JAMES BAIE REGIONAL GOVERNMENT

EIBJT: EEYOU ISTCHEE BAIE-JAMES TRAVAIL

EIT: EEYOU ISTCHEE TOURISM

EMR: EEYOU MARINE REGION

EPC: EEYOU PLANNING COMMISSION

ESIA: ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

GCC (EI): GRAND COUNCIL OF THE CREES (EEYOU ISTCHEE)

HFTCC: HUNTING, FISHING AND TRAPPING COORDINATING COMMITTEE

IDDPNQL: QUÉBEC AND LABRADOR FIRST NATIONS SUSTAINABLE DEVELOPMENT INSTITUTE (INSTITUT DE DÉVELOPPEMENT DURABLE DES PREMIÈRES NATIONS DU QUÉBEC ET DU LABRADOR)

IUCN: INTERNATIONAL UNION FOR CONSERVATION OF NATURE

JBACE: JAMES BAY ADVISORY COMMITTEE ON THE ENVIRONMENT

JBNQA: JAMES BAY AND NORTHERN QUÉBEC AGREEMENT (1975)

LEMV : ENDANGERED OR VULNERABLE SPECIES ACT (LOI SUR LES ESPÈCES MENACÉES OU VULNÉRABLES)

LQE: ENVIRONMENT ACT (LOI SUR LA QUALITÉ DE L'ENVIRONNEMENT)

MERN: MINISTRY OF ENERGY, AND NATURAL RESOURCES (MINISTÈRE DE L'ÉNERGIE ET DES RESSOURCES NATURELLES)

MFFP: MINISTRY OF FORESTS, WILDLIFE, AND PARKS (MINISTÈRE DE LA FORÊT, DE LA FAUNE ET DES PARCS)

MSSS: MINISTRY OF HEALTH, AND SOCIAL SERVICES (MINISTÈRE DE LA SANTÉ ET DES SERVICES SOCIAUX)

MTQ: MINISTRY OF TRANSPORTATION OF QUÉBEC (MINISTÈRE DES TRANSPORTS DU QUÉBEC)

MRC: REGIONAL COUNTY MUNICIPALITY (MUNICIPALITÉ RÉGIONALE DE COMTÉ)

NHCA : NATURAL HERITAGE CONSERVATION ACT

PAFIO: INTEGRATED OPERATIONAL FOREST DEVELOPMENT PLAN (PLAN D'AMÉNAGEMENT FORESTIER INTÉGRÉ OPÉRATIONNEL)

PAFIT: TACTICAL INTEGRATED FOREST MANAGEMENT PLAN (PLAN D'AMÉNAGEMENT FORESTIER INTÉGRÉ TACTIQUE)

ISQ : QUÉBEC STATISTICS INSTITUTE (INSTITUT DE LA STATISTIQUE DU QUÉBEC)

RLRUP: REGIONAL LAND AND RESOURCE USE PLAN

RTA: REGIONAL TOURISM ASSOCIATION

SAD: REGIONAL LAND DEVELOPMENT PLAN (SCHÉMA D'AMÉNAGEMENT ET DE DÉVELOPPEMENT)

SARA: SPECIES AT RISK ACT

TGIRT: LOCAL INTEGRATED LAND AND RESOURCE MANAGEMENT PANELS (TABLE DE GESTION INTÉGRÉE DES RESSOURCES ET DU TERRITOIRE)

TRPPAS: TERRITORIES RESERVED FOR THE PURPOSES OF PROTECTED AREAS





Intro-duction



INTRODUCTION

BACKGROUND CONTEXT

Several agreements have enabled the Cree Nations of Eeyou Istchee to gain powers with regard to planning and management of land and resource use. Significant agreements for these matters include *the Agreement on Governance in the Eeyou Istchee James Bay Territory between the Crees of Eeyou Istchee and the gouvernement du Québec (or "Cree-Québec Governance Agreement", 2012) and the Act respecting the Cree Nation Government.*

In order to help carry out some of its new planning powers and responsibilities on Category II lands, the Cree Nation Government (CNG) established the Eeyou Planning Commission (EPC). One of the mandates given to the EPC is the preparation of a Regional Land and Resource Use Plan (RLRUP) for Category II lands.

The following regional portrait is the first step towards the development of this RLRUP. In fact, it contains the insights needed to understand the different dynamics at play within the territory and how they interact and influence each other. Project Action Plan section of this document presents steps to move forward with the creation of the RLRUP.

PURPOSE

This document aims to consolidate the studies, reports, and data that are available for evaluating the land and resource uses of Eeyou Istchee, including conservation and ensure they are up to date as of the year 2021. This report also intends to further reflect on the usefulness, for the CNG, of acquiring certain regional powers in the field of land use planning, still under the terms of the *Cree-Québec Governance Agreement*.

DISCLAIMER

BENEFICIARY RIGHTS

Nothing contained in this document can be construed to limit the rights of a Beneficiary under any of the agreements dealing with such rights.

WASHAW SIBI

Washaw Sibi is considered the 10th Cree community of Eeyou Istchee. However specific information on Washaw Sibi has not been included in this background report, as Category I and II lands for this community have not been made official at the time of the writing of the report.

MOCREEBEC

MoCreebec is considered the 11th Cree community of Eeyou Istchee. However, since the community is located within the province of Ontario, specific information on MoCreebec has not been included in this background report.

PREVIOUSLY STARTED WORK

CREE LAND USE MAPPING WORK

The CNG collaborates with Cree First Nations and land users both in collecting Cree land use information for various projects related to forestry, wildlife, protected areas and others, and in applying that information to different land management decision-making processes.

Currently, a large-scale project is underway to systematically collect, update and complete Cree land use information across the territory for land use planning purposes, in order to better understand which areas, and kinds of areas, Crees use and value and why. This information will be used to support decision-making in various land use planning processes.

VISION FOR LAND AND RESOURCE USE PLANNING

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Based on a consultation process with every community of Eeyou Istchee, the EPC has developed a vision for land and resource use planning. This document provides the local vision for the long-term development of the Region building on the priorities that were identified regarding social progress, cultural and environmental preservation and a sustainable economy (EPC, 2020). It serves as the foundation for this regional portrait.







Figure 1 | Eeyou Istchee's Territory



1 EEYOU ISTCHEE

1.1 TERRITORY

Eeyou Istchee means "The People's Land" in the Cree language. This territory is the homeland of the East James Bay Cree or Eeyou/Eeenou. Located between the 48th and 56th parallels, it covers over 400,000 km² across Boreal and Taiga ecozones and is characterized by an abundance of waterbodies, landscapes, and wildlife.

Most of Eeyou Istchee is located within the Canadian province of Québec, specifically within the provincial administrative region of Nord-du-Québec. To the west, it includes the lands on the eastern shore of James Bay and the south-eastern shore of Hudson Bay — known as the Eeyou Marine Region (EMR) — as well as the lakes and rivers that drain into them. The Cree Lands also extend south and east within the administrative regions of Abitibi-Témiscamingue and Saguenay-Lac-Saint-Jean respectively, and and north to the Nastapoka River and Lake Minto areas within the administrative region of Kativik.

There are 11 Cree First Nations, 18,000 people and over 300 traditional family hunting and trapping grounds in the territory. There are nine communities incorporated into *the James Bay and Northern Québec Agreement (JBNQA)*. These are Mistissini, Ouje-Bougoumou, Waswanipi, Nemaska, Waskaganish, Eastmain, Wemindji, Chisasibi and Whapmagoostui. The Cree First Nation of Washaw Sibi is in the process of being established and will eventually become part of the *JBNQA*. The members of the First Nation of MoCreebec live on the Ontario side of James Bay and "maintain a unique affiliation with the other Eeyou First Nations" (CNG, 2020a). The communities are connected by roads and served by an airport, except for Whapmagoostui which can only be accessed by airplane or boat.

The territory of Eeyou Istchee is divided into family hunting grounds, or traplines, which Crees use to pursue and preserve game populations. Each trapline has a Cree tallyman, whose main role is to oversee the preservation and management of natural and wildlife resources. The tallymen oversees the activities of land users – mainly Cree land users and their families – in such a way as to ensure the safety of those land users and the vitality of the wildlife and other species they harvest.

1.2 SOME EXAMPLES OF THE RELATIONSHIP TO THE LAND IN CREE CULTURE

Cree culture is deeply rooted in the land, in the knowledge of it and the traditional activities on it that have sustained the Cree people for generations, and also in the landscapes themselves. So fundamental is this connection that Eevou sometimes describe it as umbilical; even now when people live in houses in sedentary communities for most of the year, many still regard the land as home.

Perhaps the most obvious expression of Cree culture is the harvesting activities and all that accompany them. Crees are active in all parts of Eeyou Istchee hunting, fishing, trapping and gathering a wide range of species including big game, small game, waterfowl, many fish species, berries, medicinal plants, craft wood, firewood, and more. These activities are guided by longstanding knowledge and traditions regarding not only where animals or other species can be found but how they are managed, harvested, and shared within the community. The degree of Cree engagement with these activities is most obvious during goose and moose break, when many Crees leave the communities to go out on the land to hunt and enjoy the Cree way of life.

Other outward expressions of Cree culture include Walking Out Ceremonies, in which communities come together to celebrate a Cree baby's first steps on the land, and the annual gatherings held by several Cree communities at locations such as the Waswanipi Old Post, Nemaska's Old Post, Wemindji's Old Factory or Chisasibi's Fort George. At these gatherings Crees hold different events and activities celebrating cultural activities and just enjoy living together in a way that is more traditional than in the communities. Another noted annual event is Smokey Hill in Waskaganish, where community members and often visitors participate in net fishing on the Rupert River.

In addition to Cree hunting, fishing and trapping and annual gathering, communities and a plethora of Cree organizations routinely run programs or hold events to pass on Cree knowledge and culture. These include but are not limited to workshops and classes on beading, preparing moosehide, making moss bags, making snowshoes, and learning the Cree language.

Beyond this, there is a vibrant community of Crees engaging in crafts and arts celebrating Cree culture, for example the Cree Native Arts and Crafts Association, and prolific Cree painters, beaders, graphic designers and fashion designers finding new and innovative ways to honour their culture.

Ultimately, Cree people practice their culture and express their cultural identity in myriad ways that can include hunting, fishing, trapping, and building traditional lodging. They also work within - and for the empowerment of – Cree institutions, and as podcasters, map makers, video game designers, app developers, and so much more. The fundamental connection with the land and the values embedded in that connection have always shaped, and will continue to shape, Cree life, culture and identity into the future.









1.3 A BRIEF OVERVIEW OF THE SETTLEMENT DEVELOPMENT

The Crees have occupied the entirety of Eeyou Istchee since time immemorial. Though it remains only partial and incomplete, the archaeological record documents this occupation as far back as 4500 years ago, showing evidence of settlements along the rivers and different landscape features of the region. The Cree lived a subsistence lifestyle for much of their history until the 17th century, harvesting mainly fish, small and large game, selected plants, berries and marine mammals, eggs, and more. Typically, Crees would spend winters in small family groups spread out across the landscape, which would congregate in the summer on productive fishing sites. Families would work together to assess the fish and game populations, planning the locations of their yearly activities carefully to maximize those populations and avoid potentially deadly overharvesting of key species.

In the early 17th century, Cree lands became prized areas for the fur trade. The abundance of game, especially beavers, resulted in Eeyou Istchee becoming highly attractive to European markets, which were increasingly interested in the fur trade. With the fur trade flourishing, thanks to the skills of Cree hunters and trappers, the British and the Hudson's Bay Company established a first trading post in 1668. This post was named Fort Charles and was established where the Cree Nation of Waskaganish is currently located (Desmarais & Lamarre, 2009). Over the ensuing decades and through the next couple of centuries, a series of posts were established through James and Hudson Bay and inland, to allow fur trading companies better access to Cree furs.

At the beginning of the 18th century, the first Catholic and Anglican missionaries settled in the James Bay area around the posts. They opened schools, started to offer medical services, and brought the syllabic alphabet to the Cree communities. Gradually, some Crees began spending more time in and around where the trading posts were located, taking advantage of the resources and employment offered there.

In the 1920's, many communities started to face the impacts of intensive trapping, as Cree and non-Cree trapping activities resulted in the crash of the beaver population - an important financial and food resource for Crees. This resulted, tragically, in episodes of starvation for Crees in the 1930s and 1940s, which caused a number of deaths.

To address the crisis with the beaver population, in 1932 a beaver reserve was established in Rupert House. The Crees did not trap in the reserve, allowing the beaver population to grow. The success of this reserve led to its being replicated in other areas of the region, with Cree tallymen being assigned the task of applying the trapping regulations and monitoring system associated with the reserves. While the tallyman role may not have originated with the beaver reserves, it has continued much beyond these, as tallymen still today play an important role in managing and monitoring harvesting activities on the traplines.

Figure 2 | James Bay Beaver Reserves, 1948

to protect their ancestral lands.



Source: HBC Archives, 1930

The early-mid twentieth century also saw an emerging interest in the mineral resources of Eevou Istchee, and the foundation of resource-based towns of Chibougamau and Matagami around the first mines in the region. The opening of these first mines and the towns that grew up around them, combined with the beginnings of the encroachment of the forestry industry into the region and the closing of several trading posts, led to the displacement of the Crees of Ouje-Bougoumou and of Waswanipi. Subject to the Indian Act, and drawn into the resulting government services, the Cree population became more sedentary, holding few powers or legal tools

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Figure 3 | The Impact of Hydroelectric Development on Eeyou Istchee

HYDROELECTRIC DEVELOPMENT AND THE JBNQA

In 1970, the Government of Québec announced what they referred to as the "project of the century" – the James Bay Hydroelectric Development Project, without informing the Crees whose lands would be submerged by the resulting hydroelectric reservoirs.

Joining forces with the Inuit of Northern Québec, the Cree communities responded to the proposed project by protesting the impacts of the project upon their lands and way of life. Following long negotiations and a court battle with the Québec Government, both the provincial and federal governments finally recognized Cree and Inuit claim to the territory.

Signed in 1975, the JBNQA was the foundation on which Crees concluded more than 80 subsequent agreements with regard to self-governance of communities and territory (La Grande Alliance, n.d.b). It gave the Cree and the Inuit of Northern Québec political, legal, administrative and economic tools in order to make decisions on their territory, most notably through Sections 22 and 24. Section 22 established an environmental and social impact assessment process that was a groundbreaking accomplishment at the time, within an environmental and social protection regime built, among other things, upon "the protection of the Cree people, their economies and the wildlife resources upon which they depend" (JBNQA, Section 22.2.2e). Section 24 of the JBNQA established a hunting, trapping and fishing regime for the entire territory of the JBNQA (including Inuit and later Naskapi lands) that recognizes the Cree right to harvest, and gives Crees powers over the administration of the outfitting industry. This agreement was the first modern treaty in Canada and a powerful tool that changed the lives of the Crees of Eeyou Istchee.

The hydroelectric development that spurred the negotiations and signature of the James Bay and Northern Québec Agreement also resulted in widespread and massive impacts on Cree lands, with major river diversion and the flooding of almost 2,815 square kilometres of land. Their effects on Eeyou Istchee's biodiversity and on the Cree communities have been substantial and difficult.



THE FORESTRY INDUSTRY AND CHAPTER 3 OF THE AGREEMENT CONCERNING A NEW RELATIONSHIP BETWEEN LE GOUVERNEMENT DU QUÉBEC AND THE CREES OF QUÉBEC – "PAIX DES BRAVES" (2002)

Most of the Cree communities of Eeyou Istchee are in the boreal forest, which is not only the world's largest forest, but is also central to Canada's economy. Canada's boreal forest represents around 270 million hectares of land occupied by timber and non-timber products (Government of Canada, 2021a). The forestry industry has been present in Eeyou Istchee's forests since at least the 1950's and 60's. As forestry technology evolved, exploitation shifted from a winter activity with minimal machinery to a year-round activity with heavy machinery. The forestry road network grew to include tens of thousands of kilometres of roads, allowing the exploitation of over 70,000 km2 of forestry development and more than 2 million cubic metres of wood harvested every year on average (CNG, 2014b).

The impacts of forestry on Crees were profoundly negative. While providing little to no employment to Crees, forestry razed huge sections of traplines, depriving species important to Crees of their habitat. This severely compromised the ability of Cree hunters, trappers, and families from impacted traplines to pursue the Cree way of life.

By the year 2000, there were still many disputes over the lack of consultation and Cree participation in decision-making regarding forestry, mining and hydroelectric activities in Eeyou Istchee (Parent, 2021). The Grand Council pursued legal action against the government of Québec, which ultimately resulted in the negotiation of *the Agreement concerning a New Relationship between le gouvernement du Québec and the Crees of Québec or "Paix des Braves" (2002).*

The *Paix des Braves* is another instrumental agreement for the Cree Nations. It put forth a nation-to-nation relationship between the Crees and Québec to achieve a cooperative partnership in the development of the region, and reinforced the authority of the Crees. Among other subjects, the *Paix des Braves* established the *Adapted Forestry Regime (AFR)* in Chapter 3 whose objectives are "to provide a greater consideration for the Cree traditional way of life and sustainable development" (CNG, n.d.b). It also dealt with hydroelectric projects in Chapter 4, namely to achieve an agreement for the development of Eastmain-1 et Eastmain-1-A/Rupert and mining projects in Chapter 5. Some considerations of these chapters will be discussed throughout this document.





GOVERNANCE 2

ADMINISTRATIVE ENTITIES 2.1

Eeyou Istchee is organized into different administrative units that were created as a result of the agreements and treaties that have been negotiated with the governments of Canada and Québec since 1975.

LAND REGIME

The founding treaty, the JBNQA, instituted a land regime consisting of three categories: Category I, Category II and Category III lands. Each category is either under federal or provincial jurisdiction, which means that the laws of the respective jurisdictions apply.

Category I lands are further divided into Category IA and Category IB. Category IA lands are of federal jurisdiction, where each Cree First Nation council has full authority of self-governance. These councils are composed of an elected Chief, Deputy Chief and Councillors.

Category IB, Category II and Category III lands are of provincial jurisdiction. On Category IB lands, First Nations have governance authority through the creation of corporations.

Category II lands are public lands where the CNG has certain governance powers. The elected Chief and one elected representative of each Cree First Nation sits on the Board of Directors of the Grand Council of the Crees and the Council of the CNG. The Grand Council of the Crees (Eeyou Istchee) and the CNG have the same governing structure and are operated as one organization. From among their members, one Grand Chief and one Deputy Chief are elected as leaders.

Category III lands are public lands where the Eeyou Istchee James Bay Regional Government (EIJBRG) has certain governance powers. The council of the EIJBRG is made up of 11 Cree representatives appointed from among elected members, and 11 Jamésian representatives. The representatives of the Crees are designated by the Crees from among their elected officers. The representatives of the Jamésians are designated by the Ministry of Municipal Affairs and Territorial Administration (Ministère des Affaires Municipales, des Régions et de l'Occupation du Territoire) from among the members of the municipal councils and the residents of the territory. The Chairperson of the EIJBRG alternates every two years between the Grand Chief of the CNG and a Jamésian representative.

Figure 4 | Administrative Division



REGIONAL PORTRAIT OF EEYOU ISTCHEE

EEYOU ISTCHEE NORTH OF THE 55TH PARALLEL

The northern portion of Eeyou Istchee, above the 55th parallel, is located within the administrative sub-region know as the Kativik Region. Here, the Cree First Nation of Whapmagoostui and the CNG have administrative jurisdiction over Category I lands, and the Kativik Regional Government has administrative jurisdiction over Category II and III lands.

THE EMR

The EMR is a distinct administrative entity that was created in 2010 with the signing of another modern-day treaty, *the Agreement between the Crees of Eeyou Istchee and Her Majesty the Queen in right of Canada concerning the Eeyou Marine Region (2010) or the "Cree Offshore Agreement".* Jurisdiction is shared between the Crees of Eeyou Istchee, the Inuit of Nunavik, and the governments of Canada and Nunavut.







2.2 ADMINISTRATIVE ENTITIES AND THEIR LAND **USE PLANNING POWERS**

Category IA Lands

First Nations have full authority to develop land and resource uses in their respective Category IA lands, although some provisions from the province's Environment Act (LQE) apply. Following the Agreement on Cree Nation Governance between the Crees of Eeyou Istchee and the Government of Canada (2017) or "Cree Canada Governance Agreement" the CNG has the power to make certain laws that apply to all Category IA lands equally.

Category IB and III Lands

The respective governments that have jurisdiction on Category IB and III lands are designated as local municipalities as defined in Québec's City and Towns Act, which means that they have the same powers as other municipalities in the province, namely with regards to land planning.

EMR

Land use planning in the EMR is managed through the Eeyou Marine Region Planning Commission (EMRPC) with Cree (2), Nunavut (1) and Canada (1) representatives. Per the Cree Offshore Agreement, the mandate of the EMRPC is to "develop planning policies, priorities and objectives for the EMR, including the development and implementation of a land use plan " (EMRPC, n.d.).

The responsibilities of the EMRPC include:

- > Establishing policies, objectives, and goals for the EMR
- > Documenting the current uses of the area
- > Developing a land use plan to guide and directing resource use and development in the EMR
- > Implementing the land use plan
- > Determining whether development projects conform to the land use plan
- > Monitoring development projects to ensure their conformity with the land use plan

CATEGORY II LANDS

On Category II lands, the CNG "may affirm its jurisdiction, on all or part of Category II lands, with respect to any field of jurisdiction assigned by an Act to a local municipality or a regional county municipality". Indeed, larger powers are granted to the CNG through the agreements, namely enabling powers that are normally granted to regional entities (or regional county municipalities) rather than local municipal entities elsewhere in the province. These powers must however be affirmed by the CNG.

As a municipality, the CNG could have the power to develop a land use plan and by-laws concerning zoning, permits and certificates, and allotments. As a regional county municipality, the CNG could develop a Regional Land Development Plan (SAD), which is a tool that other regional entities within the province are using to control development. The CNG may also exercise the powers of a Regional Conference of Elected Officials (CRÉ) and develop a RLRUP. In contrast with municipal by-laws and SADs, this tool is more strategic in nature and focuses on management strategies, without being accompanied by mechanisms to enforce norms regarding development.

Following the Cree Canada Governance Agreement, the CNG also has the power to develop any laws it deems necessary for the management of its territory, which could include laws that might target land and resource use planning as well as control mechanisms, and which might be better suited to the reality of the Region than the provincial tools that currently exist.

The EPC

The EPC was established by the CNG as the organization responsible for land use planning of Category II lands. Its mandate is to build a vision of land use planning for the region in collaboration with stakeholders, and to develop a draft RLRUP. It is made up of 10 commissioners who represent each Cree community and a land use planning team.

EPC Mandates

Although the EPC has a specific mandate in relation to the preparation of the draft RLRUP for Category II lands, it shall also fulfill other mandates related to land and resource use planning, including the following:



> Building a collective vision for land and resource use for Eevou Istchee

> Working collaboratively with regional planning partners such as the Cree First Nations, the Eeyou Istchee Bay James Regional Government and the EMR Boards, in order to harmonize the various land use plans so that they reflect the collective vision and aspirations of the Crees

> Providing recommendations to the CNG, upon request, or on its own initiative, on any matter arising out of its land and resource use planning responsibilities and mandates.

2.3 OTHER ENTITIES

Per the JBNQA, various entities contribute to the management of Eeyou Istchee. These actors can contribute to the development of the territory, notably in terms of land and resource use.

Currently, the only mechanisms that exist to influence the development of projects in the region are advisory committees that provide recommendations on certain subjects. Yet, on Category II lands, no Cree regulations exist to control development, nor processes to evaluate projects that do not fall under a specific committee.

Across Category I & II Lands

The School Board and Health and Social Services Board manage services within their respective mandates in Category I and II lands. They are also in charge of their development projects and can use land parcels for buildings necessary to conduct services.

Across Category I, II & III Lands

Projects with Impacts on the Environment

Environment committees assess the impacts of development projects and by-laws on the environment. Several types of projects are subject to these committees through to the mechanism that arise from the JBNQA and embedded in the LQE.

An Advisory Committee on the Environment (JBACE) is the official and preferential forum established by the JBNQA to oversee its environmental and social protection regime. To do so, the JBACE analyzes issues that may affect the environment or the communities in the territory, advises the governments concerning the formulation of policies, laws and regulations, and facilitates dialogue among stakeholders.

Projects not automatically exempt from the Environmental and Social Impact Assessment Process (ESIA) are subject to an assessment by the Environmental and Social Impact Evaluating Committee (COMEV). This committee analyzes the files and makes recommendations to the responsible Administrator (regional, provincial, federal) on whether or not a project is subject to an ESIA and Review procedure provided in Chapter 22 of the JBNQA. For projects that need to go through these assessment and review procedures, the scope of the review is outlined by the COMEV.

A Review Committee or a Review Panel created under Chapter 22 of the JBNQA analyzes the ESIA and makes recommendations to the responsible administrator on the environmental and social acceptability of the project. The **COMEX** is the committee responsible for any project under provincialjurisdiction, and the **COFEX-South** is responsible for projects under any federal jurisdiction. These entities also conduct public hearings and consultation mechanisms to hear the views of local governments, Crees, and other affected populations on development projects. These Committees also carry out ongoing follow-up on project authorizations and conditions.

Hunting, Fishing and Trapping Related Projects

The Hunting, Fishing and Trapping Coordinating Committee (HFTCC) is an advisory committee to governments for projects and by-laws related to trapping, hunting and fishing as well as wildlife management. It also has the responsibility to review, manage, supervise, and regulate the Hunting, Fishing and Trapping regime established under the JBNQA. It has the power to limit the harvesting of certain species or make other management decisions regarding the harvesting regime. The HFTCC has vastly contributed to the adoption of the Cree Hunting Law. A Wildlife Management and Conservation Unit also contributes to projects that concern wildlife with a mission to protect resources and safeguard Cree rights and interests, and conducts various research projects and analyses.

Economic Development Projects

The Cree Development Corporation is responsible for the economic and community development of Eeyou Istchee, and targets the development of a Cree economy. The corporation is responsible for supporting economic development, namely through the creation and diversification of economic opportunities and by making Crees active partners with Québec in the development of the region.

The Cree Outfitting and Tourism Association (COTA) provides support and tools to Cree outfitting and tourism projects and plays a major role in the development of the tourism industry of Eeyou Istchee.

The Cree Trapper's Association (CTA) offers various support to the trappers of Eeyou Istchee and works to safeguard the traditional system of Cree traplines. It contributes to the mapping and management of traplines, training of land users, management of firearms, research studies, wildlife assessment, etc.

The Cree Native Arts and Crafts Association contributes to the Cree arts and crafts industry by developing and coordinating programs, providing marketing services, and facilitating required materials.







Current Plans, Strategies, Policies and Projects Related to Land Planning

The Northern Action Plan 2020-2023 or Northern Plan (Plan Nord)

The Northern Action Plan 2020-2023 or Northern Plan (Plan Nord) intends to manage the protection and the development of the territory north of the 49th parallel. The plan targets nine domains:

- > Energy
- > Corporate social responsibility
- > Local services and social infrastructure
- > Manpower and training
- > Promising economic activity sectors
- > Promotion of the territory and its culture
- > Telecommunications
- > The environment and biodiversity
- > Transportation

(The Société du Plan Nord, 2020)



Cree Vision of Plan Nord, 2011

This document presents the Cree position on territorial governance. It also highlights certain issues regarding the Northern Acton Plan 2020-2023 and the themes of environment, protected areas, health and social impacts, and economic development. It then explains the Cree vision of this plan with respect to each domain it covers (Cree Nations of Eeyou Istchee, 2011, 2011).

Grande Alliance, Ongoing Since 2018

La Grande Alliance is a "Memorandum of Understanding to plan and execute a 30-year infrastructure program" (La Grande Alliance, n.d.-a). This program is intended to facilitate the transportation of people and goods. Ultimately, it aims to increase the value of natural resources by lowering their transportation costs (La Grande Alliance, n.d.-a).

Regional Cree Conservation Strategy, 2015

In 2015, a Cree Regional Conservation Strategy was developed by the Eeyou Protected Areas Committee, made up of representatives from all 10 Cree communities, the Cree Trappers Association (CTA), Cree Nation Youth Council, and the CNG. This strategy is intended for both the terrestrial and marine regions of Eeyou Istchee to "ensure respect for Cree rights and protect Cree lands, waters and resources for today and tomorrow" (CNG, 2015, p. 2).

EPC Consultations Report

In early 2018, the EPC developed and distributed community-level reports summarizing each community's values, issues, and visions with regards to land and resources planning. This consultation report combines the key insights of these community-level reports to inform the EPC's approach to land use planning (EPC, 2018).

EPC Vision for Land and Resource Use Planning, 2020

This document translates the consultation reports into a unified Cree vision for land and resource use in Eeyou Istchee. It's purpose is to provide "clarity, transparency, and to serve as the foundation for the development of grounded and coherent documents regarding lands and resources planning with regard to the priorities of the communities (EPC, 2020)".



KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

LAND PLANNING ACTION ITEMS

- EIJBRG).

- Explore the possibility of developing a structure that can be shared with the EMRPC, which includes sharing staff.

• The EPC is one of few forums for communities to collaborate at regional scale on a technical level. It can gather information and foster stakeholder relationships related to the development of the territory. Since each community is represented by a Commissioner of the EPC, the Commissionners can play a key role in ensuring that planning efforts are progress with the collaboration of, and with consensus between, communities.

• A central component of EPC's mandate is to produce a draft Regional Land and Resource Use Plan. The details regarding the implementation of this plan, including roles and responsibilities for implementation need to be developed.

• On Category III lands, the EIJBRG has similar authority to that of the CNG. Since Category II and Category III lands are comparable, issues related to land and resource use are complementary between these territories. It is therefore important to achieve a uniformity in terms of land management between the CNG and the EIJBRG.

• Achieve a comprehensive understanding of the scope of the territorial planning powers that arise from agreements, using a legal team and strategic planning.

• Define the mandate of the EPC for once the regional plan is completed. The mandate should be planned in phases: (1) develop a plan (the current main mandate), (2) request required powers, (3) develop mechanisms to implement, monitor and enforce planning, (4) implement the plan, (5) position the EPC, the CNG and the Cree First Nations at the centre of relationships with stakeholders (including the

- Develop planning tools to analyze and control land and resource use as well as development projects.
- Develop mechanisms to implement and enforce planning tools.



SOCIODEMOGRAPHIC PROFILE 3

This section outlines the demographic and socio-economic trends for Eeyou Istchee. This analysis is important in order to illustrate the social and economic conditions that characterize the region. It presents some key insights concerning population growth, housing, education, and employment. A more detailed portrait of those sociodemographic considerations is presented in the Communities and Category II Lands section of this document.

POPULATION GROWTH 3.1

POPULATION CHANGE (2001 TO 2016)

- > In 2016, the total population of Eeyou Istchee communities was 17,141.
- > This is an increase of 36% between 2001 and 2016.
- > As an indication, for the same period, the Nord-du-Québec region increased by 16% and the province of Québec by 13%.
- > The communities in Eeyou Istchee with the highest growth rates are Waswanipi, Eastmain, and Chisasibi with increases of 39.5%, 41.3% and 40.5% respectively.



Figure 7 | Population Growth from 2001 to 2036

POPULATION PROJECTIONS

- > According to the population evolution estimates produced by the Québec Statistics Institute (ISQ), the total population of the Eevou Istchee communities should continue to grow strongly in the coming years and reach 2,721 inhabitants in 2036, an increase of more than 25%.
- > This increase is much higher than the growth expected for Norddu-Québec and the province of Québec, which should see relative increases of 13.9% and 12.0%.
- > Amongst all the Eeyou Istchee communities, Eastmain and Whapmagoostui are expected to experience the highest growth with increases of 46.2% and 39.0% respectively.
- > The communities of Waskaganish and Wemindji are the only ones to experience growth of less than 20%, with respective growth projections of 12.2% and 15.3%.

DISTRIBUTION OF THE POPULATION BY AGE GROUP

- > The evolution of the distribution of the population by age group between 2006 and 2016 reveals a decrease in the relative weight of the 0 to 14 and 15 to 29 age groups for all of the Eeyou Istchee communities. This same trend is remarkable for the Nord-du-Québec region and for the province of Québec.
- > The relative weight of the 30 to 64 age group has increased slightly for the Eeyou Istchee communities, while it has decreased for the Norddu-Québec region and for the province.
- > As in the rest of the province, the 65 and over age group has increased significantly in Eeyou Istchee communities, going from a relative weight of 5% in 2006 to 8% in 2016. It should be noted, however, that the 65 and over age group represents 24% of the population of the province of Québec, 16 more percentage points than in Eeyou Istchee

- - those aged 65 and over.

Figure 8 | Age Composition in 2006, 2011, and 2016





> Individual community analysis reveals the following:

- All communities have experienced a decrease in the relative weight of the 0-14-year-old age category.

- All communities experienced an increase in the relative weight of

- Only the communities of Whapmagoostui and Ouje-Bougoumou experienced an increase in the relative weight of the 15- to 29-yearolds, the remaining communities all experienced increases in the relative weight of this age group.

- The variation in the relative weight of 30- to 64-year-olds is more variable across the communities of Eeyou Istchee.

3.2 HOUSING

NUMBER OF HOUSEHOLDS

- > Eeyou Istchee communities experienced a 24% increase in the number of households between 2006 and 2016. This increase is greater than those in the rest of Nord-du-Québec (15%) and the province of Québec (11%) as a whole.
- > The communities of Mistissini, Eastmain, and Ouje-Bougoumou have experienced the highest growth with increases of 32%, 33% and 32% respectively.
- > The community of Whapmagoostui experienced the lowest growth with an increase in the number of households of only 8%. This is the only community that experienced a growth in the number of households that was lower than the provincial average.



Figure 10 | Households in 2006, 2011, and 2016



REGIONAL PORTRAIT OF EEYOU ISTCHEE



AVERAGE SIZE OF HOUSEHOLDS

- > The average size of households is significantly higher for the communities of Eeyou Istchee (4.3 persons per household) than for Nord-du-Québec (3.2) or for the province of Québec (2.3). This creates overcrowding issues.
- > It should also be noted that the average household size has been decreasing for Eeyou Istchee and for Nord-du-Québec since 2006.



Figure 11 | Average Size of Households in 2006, 2011, and 2016

PERCENTAGE OF HOUSING IN NEED OF MAJOR REPAIRS

- > The percentage of housing in need of major repairs in Eeyou Istchee communities is 37%. Put another way, more than one out of three dwellings require major repairs.
- > In comparison, 20% of the dwellings in Nord-du-Québec are in this same state and only 6% of the dwellings in Québec require major repairs.
- > Note also that the percentage of housing in need of major repairs in Eeyou Istchee communities increased between 2006 and 2016, going from 30% to 37%.
- > Only the communities of Eastmain and Ouje-Bougoumou saw a decrease in the percentage of housing in need of major repairs.
- > The community of Whapmagoostui had the highest percentage of housing in need of major repairs (48%) in 2016. This is an 86% change from their percentage in 2006.

Figure 12 | Percentage (%) of Housing in Need of Major Repairs in 2016



2006 to 2016

Waswanipi Waskaganish Whapmagoostui Ouje-Bougoumou ALL COMMUNITIES Nord-du-Québec





Figure 13 | Variation (%) of Housing in Need of Major Repairs from

3.3 EDUCATION

HIGHEST CERTIFICATE, DIPLOMA OR DEGREE FOR THE POPULATION AGED 15 YEARS AND OVER

- > Fifty-two percent of the population of the Eeyou Istchee communities have no certificate, diploma or degree.
 - In comparison, the population of Nord-du-Québec is at 45% and that of the province is at 20% overall.
- > Thirty-seven percent of the population of Eeyou Istchee communities have a post-secondary certificate, diploma or degree.
 - In comparison, the population of Nord-du-Québec is at 41% and that of the province is at 59% overall

Figure 14 | Education Level in 2016



EMPLOYMENT 3.4

TOTAL POPULATION AGED 15 YEARS AND OVER BY LABOUR **FORCE STATUS**

Definitions:

- > The active population includes the unemployed > The employed population excludes the unemployed
- > Labour force participation rate = Number of people in the labour force divided by the total population who are over 15 years old
- > Employment rate = Number of persons employed divided by the total population over 15
- > Unemployment rate = Number of unemployed divided by the total population
- > The activity rates of Eeyou Istchee and the province of Québec are similar (65.4% and 64.1% respectively)
- > The communities of Nemaska, Eastmain, Whapmagoostui, and Ouje-Bougoumou stand out for their higher-than-average participation rate.
- > The unemployment rate for Eeyou Istchee is 15.9% while it is 13.0% for Nord-du-Québec and 7.2% for the Province of Québec as a whole.
- > The communities of Nemaska and Eastmain have lower unemployment rates than the rest of the communities in Eeyou Istchee with values of 9.8% and 9.4% respectively.

Over by Labour Force Status







Figure 16 | Unemployment Rate (%) in 2016



TOTAL LABOUR FORCE AGED 15 AND OVER BY **OCCUPATION**

- > Two main differences distinguish the selected occupations between Eeyou Istchee and the province of Québec as a whole:
 - 5% of the Eeyou Istchee population have an occupation in the natural sciences and health sector while for the province of Québec this value is 14%.
 - 24% of the Eeyou Istchee population have an occupation in teaching, law and social, community and government services while for the province of Québec this value is 12%.

TOTAL ACTIVE POPULATION AGED 15 YEARS AND OVER BY **INDUSTRY**

- > 38.8% of the active population in Eeyou Istchee work in education and health services while this industry represents only 20.2% of the overall activity in Québec.
- > Administration and public services also represent a larger share of El's activity (21.8%) than for the rest of the province (11.3%).

Figure 18 | Employement per Industry



in the future.

PLANNING

- markets and industries.
- communities.

LAND PLANNING ACTION ITEMS

- and propose solutions.

KEY INSIGHTS TO MOVE FORWARD WITH LAND

• The young and growing population of Eeyou Istchee is beneficial for the long-term vitality of Cree culture, and it can help ensure that Cree activities and institutions (i.e. committees, governments, businesses, traplines, etc.) prosper

• More housing and services will be required with population growth, and land needed for development might extend beyond the limits of Category IA lands.

• The activity rate (percentage of employed (active) and unemployed (potentially active) persons out of the total population) is high and occupation sectors are diverse, which also contributes to guaranteeing the involvement of Crees in

• Some communities are closer than others to employment nodes, such as mines, resulting in economic inequities between

• Define lands that are favourable for community development outside of the Category IA lands. A focus should be put on population projections and age groups to identify services and equipment that will be needed.

• Improve access or servicing between communities and potential employment nodes.

• Study the issues and limitations that Category II and III land corridors along roads may pose for community development,



Figure 19 | Natural Provinces

BIOPHYSICAL ENVIRONMENT 4.1

PORTRAIT

Eeyou Istchee's topography is characterized by a relatively flat relief that comprises three geomorphological regions; a coastal plain to the west, a plateau punctuated by hills, and the Otish Mountains in the eastern part of the territory (CRRNTBJ, 2011a).

In the east, the Mistassini Highlands have an altitude varying from 300 and 450 metres, with some peaks exceeding 500 metres. In the Abitibi and Baie-James Lowlands, the relief decreases slowly, passing from 350 metres in the south and in the east, up to the sea level on the shores of James Bay. The northern part of the region comprises a network of reservoirs interconnected by rivers flowing across the rocky Canadian Shield (CRRNTBJ, 2011a).

Natural Provinces: What and Where are They?

Eeyou Istchee has six natural provinces, which can be defined as large ecosystems influenced by the natural landscape (hydrography, surficial deposits, climate, vegetation, etc.). Those provinces are:

- > The Abitibi and Baie-James Lowlands
- > Mistassini Highlands
- > The Grand River Hills
- > The Nord-du-Québec Central Plateau
- > The provinces of the Central Laurentides, which only cover a small part of the territory (CRRNTBJ, 2010b).





What Are the Main Minerals in Eeyou Istchee?

Most of Eeyou Istchee territory is situated in the geological Superior Province. This province is known to be particularly rich in precious (gold and silver) and common (copper, zinc, and nickel) metals. The base is mainly made up of volcanic (basalt) and sedimentary rocks. Certain parts of Eeyou Istchee's east end belong to the Grenville Province, which mainly consists of gneiss, anorthosite, and granite. The east end of the territory therefore presents extraction potential for industrial minerals (silica, mica, etc.), uranium, and architectural stone (MFFP, 2018).

Eeyou Istchee Is Characterized by What Types of Climates?

From north to south, the average annual temperature drops from – 6 °C to – 3 °C. Most of the territory (between the 51^{st} and 58^{th} parallel) comprises a subpolar continental climate. Yet, the south end of Eeyou Istchee (south of the 51^{st} parallel) is situated in a cold and humid continental climate (MELCC, 2010).

Between the 51st and 58th parallel, the average temperature is below the freezing point from November to April. Rainfall is steady throughout the year. Summer is considered short and cold. This climatic region is characterized by the Boreal Tundra Woodland Forest (or Taiga Forest), dominated by coniferous forests and lichens. Precipitation is less than in southern Québec with 775 millimetres annually on average. Less than two thirds of this precipitation takes the form of rain (490 millimetres). The average annual accumulation of snowfall is 270 centimetres (MELCC, 2010).

The climate south of the 51st parallel is considered cold since the temperature generally remains below freezing from November to March. The climate is humid and characterized by regular precipitation throughout the year. Summers are temperate with an average temperature above 10° C from June to September. This area is dominated by mixed and deciduous trees. Although climatic peculiarities exist within this climate region, rain, snow, and hail precipitation average 1,000 millimetres annually, nearly 75% of this falling as rain (MELCC, 2010).

KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- The biophysical environment of Eeyou Istchee is diverse and rich.
- Considering the vastness of the territory, it can be costly and extensive to collect precise data on the biophysical factors to support land planning.

LAND PLANNING ACTION ITEMS

- Develop partnerships with stakeholders to perform more detailed studies — both of traditional and scientific knowledge — on the territory and collect more precise data on its biophysical components and its vulnerability to climate change and development.
- Define strategies and norms to mitigate the effects of climate change and control the effects of development.





Figure 20 | Watersheds

4.2 HYDROGRAPHY

"ALL LIFE DEPENDS ON WATER - INDEED, LIFE PROBABLY BEGAN IN WATER. WATER'S CURIOUS HEAT-RETAINING PROPERTIES STEADY THE CLIMATE AND MAKE LIFE ON OUR PLANET SUSTAINABLE. WITHOUT CLEAN WATER, DISEASE AND MISERY TAKE THEIR TOLL. WITHOUT WATER WE DIE."

— M. de Villiers cited by CNG, 1999, p. 5)

PORTRAIT

Watercourses and Watersheds: Where Are They?

Eeyou Istchee has many rivers and lakes including lake Mistassini, the largest natural freshwater lake in Québec (CRRNTBJ, 2010c). Those watercourses form drainage regions, including the James Bay, Hudson Bay, Hannah Bay, and Rupert Bay (CRRNTBJ, 2011a). Those hydrographic regions are subdivided into watersheds, defined as territories that feed into a watercourse, a lake or a wetland (CRRNTBJ, 2010c). With the exception of the St. Lawrence River Basin, all Eeyou Istchee watersheds flow into the James Bay (CRRNTBJ, 2011a). Most watersheds therefore flow into the EMR, the area of the offshore that the Crees have traditionally used. This region is delimited and regulated by the Cree Offshore Agreement (Eeyou Marine Region, 2016). Under federal jurisdiction, this agreement recognizes the rights of the Crees in the offshore region of Eeyou Istchee. It also initiated a procedure to advance the conservation of marine protected areas within the offshore area (Eeyou Protected Areas & Conservation, 2021).

Important watersheds in Eeyou Istchee are the Grande River and the Eastmain, Nottaway, Broadback, Rupert, Harricana, and Great Whale rivers. These rivers are among the biggest rivers of the province. It is important to note that 90% of the waters of the Eastmain River were diverted into the La Grande River as part of the Grand River complex and thus, upstream from the diversion point. Eastmain therefore now forms a sub-watershed of La Grande River. (CRRNTBJ, 2011a)



Figure 21 | Water Flow and Underground Water

Water Flows

Industries that are present in the territory have had significant impacts on the waterways and underground water networks. The construction of dams, the filling of reservoirs and the diversion of rivers from the hydroelectric industry have had impacts to the water systems and water quality. Some impacts include: an increase in mercury, flooding in areas of increased water flow, and a change in the water quality downstream. In the forestry industry, the construction of new roads for forestry operations and the wastewater and debris produced has led to contamination in the waterways. The mineral extraction and processing activities from the mining industry have also led to contamination in the waterways of the region.



Wetlands: Why Are They Important and Where Are They?

Eeyou Istchee also comprises a diversity of wetlands, which play a major role in the maintenance of ecosystems and the species that depend on them. Ecosystem services often associated with wetlands are water purification and supply, flood control, erosion control, carbon storage and sequestration, and habitats for biodiversity (He et al., 2016). Most Eevou Istchee wetlands have remained natural; their quality is therefore considered excellent. Forest drainage, impoundment of reservoirs, hydroelectricity, and development of waterfront resorts are the main sources of potential disturbances (CRRNTBJ, 2011a).

The territory's wetlands include peatlands (fen and forested bogs), marshes, swamps, and shallow water ecosystems. These wetlands, as well as the areas that potentially comprise wetlands, are shown on **Figure 22**. The following paragraphs expand on their definition and importance for the preservation of ecosystems.

Peatlands (fen and forested bogs)

Peatlands are areas with a layer of peat at the surface, which are naturally accumulated. Peatlands have no closed nutrient cycle because they are permanent wet ecosystems. Peat comprises semi-decomposed plant material (e.g.; mosses, reed, and sedges), and wood, among others. Throughout this decomposing process, carbon is removed from the atmosphere. Peatlands have a unique capacity for long-term carbon sequestration and storage, including the conservation of palaeo-environmental and archaeological organic remains. Peatlands are of global significance, as they hold two times more carbon than the entire global forest biomass pool while only covering 3% of the world's surface. (Bonn & British Ecological Society, 2016). The James Bay and Hudson Bay Lowlands are considered one of the greatest global carbon sinks (JBACE & Environment and Climate Change Canad, 2017).

Marshes

Marshes have shallow water with water levels that fluctuate daily, seasonally, or annually. Marshes have high levels of nutrients and are characterized by herbaceous species. They occur adjacent to rivers, lakes, the sea and other locations where groundwater may discharge (The National Wetlands Working Group, 1997).

Swamps

Swamps are dominated by woody plants, predominantly trees, shrubs, and forbs. Swamps include periodically standing surface water and gently moving groundwater. They occur on peat and mineral soils (The National Wetlands Working Group, 1997).

Shallow Water

Shallow waters are wetlands with free surface water up to two metres deep present for most of the year. Less than 25% of the surface water area is occupied by standing emerging or woody plants. Shallow waters usually occur with lacustrine, fluvial, tidal, steam, river, and permafrost systems. (The National Wetlands Working Group, 1997).

Figure 22 | Current and Potential Wetlands



KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- The water bodies of Eeyou Istchee are among the most valuable on earth, notably for freshwater and ecosystems.
- The water bodies' potential for tourism and heritage can be developed sustainably.
- Since water bodies are all interconnected through watersheds, their contamination could affect Eeyou Istchee's hydrological systems and drinking water.
- A large proportion of the territory is wetlands, which makes construction difficult. Major drainage operations are required to meet the development needs of a growing population, which are costly, and can cause pollution and loss of ecological services.
- The provincial regulations on wetlands and hydrology does not apply beyond the 49th parallel.
- Relative to southern Québec, the water resources and wetlands of Eeyou Istchee are not very well documented, and what documentation exists is not readily available to the CNG/EPC. More research addressing both traditional and scientific knowledge and methods is needed to inform decision-making in this area.

LAND PLANNING ACTION ITEMS

- Characterize and map existing water bodies and wetlands or require developers to characterize them on site.
- Through the Cree land use mapping exercise, identify the most cultural valuable waterways and waterbodies with tallymen and land users.
- Consolidate the documented impacts of industrial and commercial projects on water environments and Category II lands and develop norms to mitigate future impacts.
- Define norms to control the effects of development on water bodies and wetlands (e.g., based on watersheds rather than projects). Identify potential construction norms adapted to wetlands.
- Integrate (or improve) the Policy for Shorelines, Coastlines, and Flood Plains Protection (Politique de protection des rives, du littoral et des plaines innondables) with planning tools.



Credit: Steven Tremblay, Whapmagoostui

Figure 23 | Forest Types

4.3 FORESTS

"THE EEYOU'S UNIQUE AND CENTRAL RELATIONSHIP WITH EEYOU ISTCHEE - ITS WATERS, ITS FORESTS, ITS PLANTS, ITS ANIMALS, ITS FISH, ITS SPIRIT - AND WHAT EEYOU HAVE BECOME AS A RESULT -THAT'S PART OF THE NATURE OF BEING EEYOU."

(CTA, 2009, p. 1)

PORTRAIT

What Types of Forests Are Present in Eeyou Istchee?

Eeyou Istchee comprises two main types of forests:

- > The Spruce Moss Forest or Boreal Tundra Woodland Forest in the north.
- > The Spruce Lichen Forest or Boreal Coniferous Forest in the south.

Although they are less dominant, other types of forests include the Woodland Tundra Forest located in the north end of the territory. Small pockets of the Fir Forest with White Birch Stand are also present in the south. Lastly, there is a small area that contains the Grassland Arctic Tundra Forest located between Chisasibi and Whapmagoostui on the shores of James Bay.



Figure 24 | Vegetation Types

The territory has a dominance of Coniferous species with pockets of Tundra, Boreal Heath, and Subarctic Heath species in the north and mixed trees in the south (Figure 24).

It also contains mixedwood stands, which are defined as "a stand composed of a blend of softwood (coniferous/resinous and hardwood (broad leaved) trees" (Ministry of forests, fauna, and parks, 2020, p. 4). Mixedwood stands are significant to Cree culture as their variation of softwood and hardwood create different habitat conditions for many different species, are sources of materials and medicine, and are used as landmarks for the Cree tallymen. "Mixedwood stands are part of Cree culture. They are Language. Memories. Sacredness." (Ministry of forests, fauna, and parks, 2020, p. 5).

As a result of the AFR, a Mixedwood Stands Management Strategy was established to respect the Cree way of life and ease the impacts of forestry within Eeyou Istchee. The strategy was developed by the Ministry of Forests, Wildlife, and Parks (MFFP) of Québec in collaboration with the CNG, and applies to 15 management units located in the area covered by the Paix des Braves. (Ministry of forests, fauna, and parks, 2020).

Public lands cover 98% of the region's territory. Privately owned forest lands are therefore absent (CRRNTBJ, 2011a).

What Types of Species Are Present in Eeyou Istchee?

The Boreal Tundra Woodland species include the black spruce, balsam fir, and jack pine (Mistissini-Sépaq S.E.N.C., 2009). The Boreal Coniferous Forest comprises a higher diversity of species, which include the black spruce, balsam fir, white spruce, tamarack, and eastern white cedar among the conifers. Hardwood species include the white birch, trembling aspen, and balsam poplar (CRRNTBJ, 2011b).


Figure 25 | Forest Age

How Old Is the Forest in Eeyou Istchee?

As shown on Figure 25, vegetation age in Eeyou Istchee ranges from species that are less than 20 years old to species that are more than 80 years old. The forest is younger in the south due to commercial tree cutting and reforestation. The non-commercial forest has been less impacted thus is older. Furthermore, there are more fires in the south due to the presence of commercial forests. (For locations of wildfires, see **Figure 40**.)







What Kinds of Plants and Non-Timber Products Are Present in Eeyou Istchee?

The plants of the Boreal Forest have provided Eeyou Istchee's inhabitants with important nutrients such as vitamins and minerals. While the communities' use of plants has evolved over time, some species of plants are still necessary for the preparation of beverages and aromatic substances therefore are still related to picking activities. Those species include berries such as blueberries, rasberries, cloudberries, and cranberries as well as certain bark and plants (MFFP, 2018).

A study is currently conducting research on non-timber species on the coast of Eeyou Istchee. Although this study is not yet completed and while the organization mentions the need to confirm the information through site visits, the following species are listed as potentially being present on the territory:

- > Black chanterelle
- > Depressed hedgehog
- > Hydne sinue
- > Scaly hydne / Turtle mushroom
- > Matsutake
- > Black morel
- Lobster mushroom
- > Black spruce
- > Tamarack
- > Alder
- Myrica gale
- > Red currant
- > Blueberries
- > Wild raspberries
- > Labrador tea
- > Achillea millefolium
- > Pearly everlasting
- > Fireweed
- > Cloudberry
- Cranberry
- > Black crowberry
- > Downy bramble (Catherinette)
- > Small tea (Hispid Gaulthérie)

(FaunENord, 2020)

KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- Eeyou Istchee's forest comprises rare mixedwood stands that are essential to wildlife habitats and Cree culture, and diverse vegetation categories that include many non-timber products.
- Some issues identified include windthrow and wildfires, decrease in forest productivity, modification of ecological processes in the face of climate change, integrity of forest soil, lack of protection, and insect epidemics.
- A Mixedwood Stands Management Strategy for the forested lands covered by the *AFR* of the *Paix des Braves* has been developed.

LAND PLANNING ACTION ITEMS

- Through the Cree land use mapping exercise, identify the most valuable areas for cultural land-based activities and for heritage conservation (e.g., areas for traditional activities like berry-picking, spawning areas, etc.).
- Consolidate up-to-date information regarding forest ecosystems (should be divided by sub-region).
- Consolidate the documented impacts of industrial and commercial projects on forests and Category II lands and develop norms to mitigate future impacts.
- Identify gaps in the MFFP's processes regarding the impacts of projects on forests and vegetation, and define norms to address these gaps.
- Collaborate with experts in order to consolidate information on solutions to address wildfires.



4.4 WILDLIFE

"EEYOU HAVE A RESPONSIBILITY TO PRESERVE AND PROTECT THEIR HERITAGE. AN IMPORTANT AND ESSENTIAL PART OF EEYOU HERITAGE IS THE EEYOU HOMELAND - EEYOU ISTCHEE - THAT IS ESSENTIAL AND CENTRAL FOR EEYOU "MIYUPIMAATISIIWIN" OR HOLISTIC WELL-BEING. THE EEYOU USE AND OCCUPATION OF EEYOU ISTCHEE AND THEIR PRESENCE IN THEIR HUNTING TERRITORIES CONTRIBUTE TO THEIR SPIRITUAL, PHYSICAL AND PSYCHOLOGICAL WELL-BEING. FOR EEYOU, THEIR PRESENCE IN THEIR HUNTING TERRITORIES MEANS FAR MORE THAN THE PURSUIT OF WILD GAME AND FISH."

(CTA, 2009, p. 1)

PORTRAIT

According to the terms of the JBNQA, only the Crees have the right to hunt, fish and trap in Category I and II lands of Eeyou Istchee. In Category III lands, several species are also reserved for the exclusive use of the Crees according to Article 24.7.1 and Schedule 2 of the JBNQA.

What Types of Fauna Species (Indoh-hoh wun) are Present?

The Crees of Eeyou Istchee consider themselves as the keepers of their territory. They therefore implemented Eeyou laws to promote the preservation and management of natural and wildlife resources. Among those laws there is the Eeyou Indoh-Hoh Weeshou-Wehwun (or Hunting Law), setting out the tools and rules concerning the allocation of hunting territories, the governance of these territories, and the conduct of activities within these areas (CTA, 2009). The Eeyou Istchee Hunting Law has categorized this fauna and three categories of species (2009):

Large Game Animals (Chii shaa indoh-hoh wun)

Large game animals are defined as species harvested for their significant food value. They include moose, caribou, bear, porcupine, whale, and seal. Other animals including the geese and some furbearers may be considered as big game. However, their harvesting is governed by different rules than those applying to large animals (CTA, 2009).

Small Game Animals (Piish indoh-hoh wun)

Small game animals include the rabbit and birds such as ptarmigan and partridge (CTA, 2009).

Fur Bearing Animals (Li yuu wun)

This category of animals is defined as species harvested for their fur that may generate profits. Animals from this category include the beaver, lynx, mink, marten, otter, muskrat, red fox, silver fox, cross fox, white fox, wolf, weasel, squirrel, fisher, raccoon, skunk, and sable. All fur-bearing animals are subject to specific rules for their harvesting including those who are considered to be big game, such as beavers (CTA, 2009).

According to some Waswanipi tallymen, fur-bearing animals can be separated in two categories: 1) riparian habitat and aquatic animals, which are hunted from fall to late spring; and 2) forest animals, which are trapped or hunted when the fur quality is highest (late fall and winter) (Dupont et al., 2005, p. 16).



Figure 26 | Fauna Species



What Animals Are Particularly Important to the Crees?

This section will present insights on some important species for the Crees of Eeyou Istchee. These animals include some that have been listed by the *Species at Risk Act (SARA)* or designated as endangered by the *LEMV*. More details about species designated as at risk or endangered are presented in the next section.

General Remarks on Fauna

Studies and the feedback provided by the Crees during consultations point out the effect of climate change and industries on Eeyou Istchee's wildlife. It has been noticed that animals in general are moving faster and are less scared of humans (Cree Nation of Waskaganish, 2018). Local observers and scientific research have reported an increase in natural disturbances (e.g., pests and invasive species), more frequent forest fires, and a change in the quality and availability of wildlife and plants used in traditional food systems (JBACE & Environment and Climate Change Canad, 2017).

Caribou

The caribou is an emblematic species of the boreal forest and is significant for the Crees of Eeyou Istchee. The wooldland Caribou is relatively sedentary and is found mostly in forested mountains and boreal regions. The migratory Caribou are much more present to the north (Cree Regional Authority, 2010).

As a subspecies of the caribou, the woodland Caribou is mostly found in the southern part of the territory. This species habitat requirements make it more vulnerable to industrial development and habitat loss. Since the early 20th century, development has modified the land, which affected the woodland caribou. This species is now listed as an endangered species under the *SARA*. Furthermore, the woodland caribou populations tend to shy away from human activity. The accelerated industrial development led to their scarcity in some areas and made it more challenging for hunters to access them (Cree Regional Authority, 2010).

The Assinica, Temiscamie, and Nottaway are herds of the Woodland Caribou that are specific to the area covered by Chapter 3 of the *Paix des Braves*. (Ministry of Natural Resources General Direction of Expertise in Energy, Fauna, Forests, Mines, Northern Québec, 2013). Woodland caribou are relatively sedentary with a reduced migration range. Given the disturbances to habitats from forestry, hydro-electric, and mining projects, the woodland Caribou are more vulnerable (Cree Regional Authority, 2010). As at 2012, the populations of these regional herds were found not to be self-sustaining, with population declines predicted to worsen (Woodland Caribou Recovery Task Force Scientific Advisory Group Nord-du-Québec, 2012).





Based on the work of the Cree and Québec Woodland Caribou Recovery Task Force, in 2013 the MFFP developed a precautionary approach to consider woodland Caribou recovery in the territory. The approach covers an area of more than 8,000 sq. km, where harvesting, road construction, and improvement activities are not allowed. The approach is in place until woodland caribou habitat management plans are implemented (Ministry of Natural Resources General Direction of Expertise in Energy, Fauna, Forests, Mines, Northern Québec, 2013).

The migratory Caribou is another species of interest for the Crees. Habitats for this animal can be found in the northern part of Eeyou Istchee, which include the Leaf and George River herds of migratory Caribou.

The modification of the caribou's habitat has been noticed by the communities. The Cree Nation of Waskaganish has noticed a decrease of woodland caribou (Cree Nation of Waskaganish, 2018) and Mistissini has observed an increase of brain worms in caribou populations (Cree Nation of Mistissini, 2018).

Goose

The goose is another key animal for Cree culture. The Crees more specifically prize the Canada, white, and long neck goose. The Goose Break holiday is a long-standing tradition for Cree that happens every spring and expresses the significance of this animal for the communities. However, climate change brings new challenges to birds and those who hunt them. In Eeyou Istchee, these changes affect the territory differently depending on the region.

On the coast, bird migratory paths have moved further inland because the eelgrass, eaten by many waterfowl birds is disappearing. This is presumably due to increased fresh water and sediments flowing into James Bay as well as deforestation, ecological changes, and algae growth (Boutsalis, 2020). The community of Waskaganish finds that there are less geese than before and that they now settle in different areas. They also notice that geese are no longer feeding on the shore and that they now fly late (Cree Nation of Waskaganish, 2018).

Inland, geese nesting areas are affected by deforestation, and tourist accommodation, which results in birds changing their routes. Nemaska inhabitants have noticed that there are fewer geese than before and that they are flying higher (Cree Nation of Nemaska, 2021). Similar to what has been observed by Waskaganish, Mistissini has noticed a change in geese flight routes. They also find that geese now fly at night and in smaller groups (Cree Nation of Waskaganish, 2018).

Moose

Although the moose is not officially designated as a vulnerable or endangered species, industrial activities and climate change have had significant impact on this animal's habitat. A report written in 1981 on the Cree position on moose, conservation, and forestry although old stressed the necessity to carry on actions to ensure the protection of the moose and its habitats (Berkes, 1981). Those arguments are supported by another report written in 2008 about the situation of moose in Eeyou Istchee. This report partially based on Cree knowledge points out the importance of mature mixedwoods, balsam fir, stands, and riparian areas for moose (Jacqmain et al., 2008)

Moose population habitat conservation is still a concern for the Crees of Eeyou Istchee. The Moose Break that usually happens around October reflects the importance of this animal for the Crees. Some communities have recently identified changes in moose habits and habitats due to climate change and industrial activities. An increase in moose movements (Cree Nation of Nemaska, 2021) and in moose on the shores of the James Bay have been noticed (Cree Nation of Waskaganish, 2018). An increase in moose ticks has also been noted by the communities of Nemaska (Cree Nation of Nemaska, 2021) and Waskaganish (Cree Nation of Waskaganish, 2018). The community of Nemaska has, furthermore, observed a decrease in moose populations (Cree Nation of Nemaska, 2021).

Fishes

The Crees have a unique relationship with fish, as many communities' subsistence have depended on them for a long time. Although fishing habits are different according to the communities, important fish species for the Crees may include the following:

- Lake sturgeon
- > Minnow
- > Trout (brook or speckled, and lake)
- > Whitefish
- > Walleye
- > Artic char (Mistissini)
- Cisco >
- > Burbot
- > White sucker
- > Red sucker
- > Yellow perch (Waswanipi, Eastmain, Waskaganish)
- > Northern pike
- > Hiodons (Mooneye or goldeye)
- > Land-locked salmon or ouananiche (Chisasibi and Whapmagoostui)

(Cree Nation of Mistissini, 2018; Cree Nation of Waskaganish, 2018; Fikret Berkes & Mackenzie, 1978)

Lake sturgeon is designated as species of Special Concern by the Government of Canada (2017). While it is the only species designated by either the federal or provincial governments, the Crees have observed changes in Eeyou Istchee fish populations due to climate change. Waskaganish has noticed fewer lake sturgeon, minnows, and trout. They also find that the whitefish comes out later and that the sturgeon are not as big as before. They also observe an increase in furunculosis in fish (Cree Nation of Waskaganish, 2018). Similarly, Mistissini has observed a decrease in minnows and trout (Cree Nation of Mistissini, 2018).

Beaver

This animal has also been facing habitat changes due to climate change. The community of Waskaganish has noticed a population increase in this species. They have also observed that beavers are skinnier than before (Cree Nation of Waskaganish, 2018).

Black Bear

This animal is considered both as big game and a furbearing animal, therefore, it can only be trapped by the Beneficiaries of the agreements. However, sports hunters have the right to hunt the black bear in specific zones. The status of black bear populations in Eevou Istchee is not well known. The Cree Nation of Mistissini has, however, observed a recent increase in bears (Cree Nation of Mistissini, 2018). Furthermore, there is currently research that aims to estimate the density of black bears in Québec. A new black bear management plan in Québec is also in development (MFFP, 2018).

Are There Any Vulnerable or Endangered Species in Eeyou Istchee?

To mitigate issues relating to species survival the Government of Canada adopted the SARA in 2002. The three main objectives are to: 1) Prevent the disappearance of endangered species; 2) Support the recovery of endangered species; 3) Monitor the situation of species of special concern to prevent them from becoming endangered species.

Similarly, the Government of Québec adopted the: Endangered or *Vulnerable Species Act (LEMV)* in 1989 to mitigate the disappearance of threatened species. According to this law, a vulnerable species is any species whose survival is precarious even if the disappearance is foreseen (CRRNTBJ, 2011b). The endangered status, means that the disappearance of a species is apprehended (CRRNTBJ, 2010b; JBACE, 2020). The following table showcases the vulnerable and endangered species in Eeyou Istchee according to the LEMV for the year 2009.



Table 1 | Vulnerable Species in Eeyou Istchee in 2010

SPECIES	PROVINCIAL FEDERAL STATUS	ELEMENTS RELATED TO THE ATTRIBUTION OF STATUS	HABITAT NEEDS
Yellow rail - Coturnicops noveboracensis	 PROV. Threatened (October 2009) FED. Concern (November 2009) 	 Yellow rail numbers are low in Quebec; This species inhabits the upper marshes, which is the most threatened by encroachment of all kinds; The wintering grounds are gradually decreasing and are threatened by human activities; Quebec includes a significant part of the world area occupied by this species. 	 Large marshes dominated by sedges, grasses an rushes, waterlogged soils, dense, low vegetation fields, wet meadows, floodplains of rivers and streams, the herbaceous peat bogs, and the the upper stages of estuarine and salt marshes.
Caspian tern - Sternia caspia	 PROV. Threatened (October 2009) FED. No status 	 The Caspian Tern has never been abundant in Quebec and it has almost disappeared from its original distribution limited to a few islands of the Lower North Shore; The disturbance, caused in particular by the harvesting of eggs and by population monitoring work (censuses) has a significant impact on the species; There is a strong association between the presence of Caspian terns and ring-billed gulls whose colonies can be destroyed for management purposes. 	 Its nesting area is limited to a single site in Quebec; The species generally inhabits the large waterplanes, coastal waters and beaches.
Wolverine - Gulo gulo	 PROV. Threatened (March 2000) FED. Endangered (May 2003) 	 The species was formerly present in Quebec; There is an absence of evidence as to the presence of wolverines in Quebec after 1962; The presence of the species is supported by some recent observations; It is recognized that the wolverine has the ability to survive at natural densities so low that it is difficult to confirm the absence or presence; There is an apparent inability of the population to recover on its own despite the increase important northern caribou herds (main source of its food) over the past 30 years. 	 Present throughout the boreal forest and the tundra, it mainly seeks the large undisturbed spaces far from human presence. It prefers mature and sub-mature coniferous forests.

Free translation from CRRNTBJ, 2011b

EXISTING PROTECTION STRATEGIE

- d
- A Federal plan on the management of this species is being drafted.

• No recovery plan has been elaborated.

• A national recovery plan was published in 2004.



Table 2 | Endangered Species in Eeyou Istchee in 2009

SPECIES	PROVINCIAL FEDERAL STATUS	ELEMENTS RELATED TO THE ATTRIBUTION OF STATUS	HABITAT NEEDS
Royal Eagle - Aquila chrysaetos	 PROV. Vulnerable (March 2005) FED. Not at risk 	 Its distribution in Quebec is only partially known; This bird would be subject to various adversary factors, including being poached by poachers or accidental capture by trapping, its feeding behaviour making it particularly vulnerable to the latter activity. 	• Usually frequent in remote areas where they can find cliffs or escarpments for nesting, rocky and open environments, for example plateaus, marshes, bogs, burns and areas of forest cuts for hunting.
Harlequin Diver - Histrionicus histrionicus	 PROV. Vulnerable (October 2009) FED. Concern (May 2001) 	 This duck is rare. In addition, it usesvery particular breeding grounds, i.e. the areas with running water in rivers, and it has a low rate of reproduction; It is particularly vulnerable, especially by hydrocarbons (spills and cleaning of bunkers near the coast), in moulting areas and wintering where it gathers; Threats are the use of rivers for certain leisure activities such as downhill rafting. 	 This species nests in freshwater on rivers and fast-flowing streams that are home to large populations of invertebrates. In winter it occupies rocky cliffs, exposed capes and infratidal cornices
Peregrine Falcon anatum - Falco peregrinus anatum	 PROV. Vulnerable (September 2003) FED. Threatened (April 2007)) 	 The size of the breeding population is still low; Organochlorine pesticides, used in some countries of Central America and North America South where several peregrine falcons migrate as well as their prey, still contaminate several birds. 	 Usually on cliffs or in escarpments, often near water. They can also use other supports for its nest, especially trees, escarpments or tall structures such as buildings, bridges and towers. As hunting grounds, this bird frequents large open spaces such as rivers, marshes, beaches, mud flats and fields.
Barrow's goldeneye - Bucephala islandica	 PROV. Vulnerable (October 2009) FED. Concern (November 2000) 	 Logging and seeding fishless lakes are a threat important to maintaining sound quality breeding habitat; This species can be easily confused with the goldeneye (Bucephala clangula) during hunting season. 	 For reproduction, this species prefer the young fish-free lakes located at the head of rivers, high altitude. The eggs are laid in natural cavities, often in white birch, trembling aspen and balsam fir a diameter at chest height (DBH) of 35 cm and more; The nests are located near water or up to a distance of about 2 km.

EXISTING PROTECTION STRATEGIE

- A Provincial recovery plan for royal eagles 2005-2010 has been published.
- ;

• A management plan in Atlantic Canada and Québec was published in 2007.

- An action plan for hawk recovery in Québec was published in 2002.
- A Canadian recovery program is being draft by Environment Canada.
- A review of recovery of the falcon in Québec was published in 2009.
- A management plan for the eastern population of the Barrow's Goldeneye is being drafted by Environment Canada.

White bald eagle - Haliaeetus leucocephalus	 PROV. Vulnerable (September 2003) FED. Not at risk 	 The population is small compared to the situation prevailing in early twentieth century; There are still threats to the bald eagle: being poached by poachers, being captured accidentally during trapping activities, contamination by toxic products, disturbance and loss of habitat. 	 Sites with dominant trees in height near large bodies of water to establish a nesting territory; The tree species often used for support for the nest: white pine, tamarack, balsam fir and spruce; It winters in groups in Quebec: the bird is looking for then the proximity of the bodies of water that remain ice free.
Woodland caribou, forest ecotype - Rangifer tarandus caribou	 PROV. Vulnerable (March 2005) FED. Threatened (March 2002) 	 The woodland caribou is in decline in Québec and the population is divided into several herds, of which some are isolated from others; Woodland caribou are very sensitive to harvesting by hunting and predation; The logging methods can modify caribou behavior and survival forest. 	 Bioclimatic domains of the spruce-lichen forest and spruce moss, in mature forests black spruce; Sometimes in recent burns during the first stages of regrowth; In winter, preferably for mature forests of coniferous; During the rutting season, the species prefers peatlands, coniferous lichen stands and young coniferous stands.
Polar bear - Ursus maritimus	 PROV. Vulnerable (October 2009) FED. No status 	 The polar bears observed in the Québec come from Nunavut and their presence in Quebec is fortuitous; The harvest by the Inuit of Québec takes place on the territory of Nunavut and may influence the population level of this species; The 2008 COSEPAQ evaluation classifies it as a species of special concern. 	 Polar bears prefer regions of annual ice, which they use as a hunting platform and protective cover, interspersed with ridges of pressure where snow accumulates, crevasses that have resumed in ice. From the start of winter until the breaking up of annual sea ice in the spring, polar bears mainly occupy coastal sea ice.

Source : CRRNTBJ, 2011b

• A provincial recovery plan for white head bald eagles was published in 2002.

- A recovery plan for Woodland Caribou in Québec was published in 2009 for the period of 2005-2012;
- A program of restoration of the boreal population of Woodland Caribou is being drafted by Environment Canada.
- An update to the evaluation and COSEWIC status report was published in 2008.



KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- Eeyou Istchee is home to various ecosystems and migration routes. Legislation exists to regulate species at risk. However intensive harvesting, development, and climate change have had negative effects on wildlife species, migration, routes and habitats.
- Québec's two migratory caribou herds, the Leaf and George River, are among the last remaining large terrestrial mammal migrations in the world. The herds are at a critical level of endangerment.
- The woodland caribou have been in decline for several decades. Human-caused impacts on habitat such as road building and tree cutting is decreasing their area of distribution.
- Insufficient requirements for buffer sizes along creeks have facilitated territory access to non-Cree hunters and fishermen.
- The Cree land use mapping work that has started will provide a baseline portrait on the Cree uses within the territory, at both the regional and trapline scales.
- Projects that use both Cree traditional ecological knowledge and academic ecological knowledge exist to ensure that the best of both knowledge systems inform the planning and decision-making of fish habitats, for example:
 - A project has been initiated to develop a Lake Sturgeon Management Plan.
- A project is underway to update the caribou core areas.
- A project has been initiated on the effectiveness of fish habitat compensatory measures in Eeyou Istchee: Cree and scientific perspectives.
- A research project is underway regarding a moose habitat quality index.
- There needs to be progress on the development of the woodland caribou recovery plan.

LAND PLANNING ACTION ITEMS

- Within the Cree land use mapping work, identify the most valuable wildlife habitats and spawning grounds.
- Perform studies and collect more data about species that are important to the Crees and their habitats. These studies should consider all Eeyou Istchee's significant species and not only wildlife that are vulnerable or endangered.
- Consolidate the documented impacts of industrial and commercial projects on wildlife and Category II lands. Integrate these considerations in land use norms (e.g., buffers around habitats, characterization by proponents, etc.)
- The EPC should collaborate in the conservation assessment of key habitats including migration routes for woodland as well as migratory caribou herds.
- Obtain access to Hydro-Québec data and conclude an agreement to be able to use this information.



4.5 CONSERVATION (NAACATAWAAYATACANO)

"CHISHAAMINITUU (GREAT SPIRIT) HAS ENTRUSTED A GREAT RESPONSIBILITY TO EEYOU TO MAINTAIN, PRESERVE AND PROTECT EEYOU ISTCHEE. IN RESPONSE TO THIS GREAT RESPONSIBILITY, EEYOU OF EEYOU ISTCHEE HAVE A DUTY TO GOVERN THEMSELVES AND THEIR TERRITORIES IN ACCORDANCE WITH EEYOU LAWS. TRADITIONS, CUSTOMS, PRACTICES, VALUES AND ASPIRATIONS. CONSEQUENTLY, EEYOU CONSIDER THEMSELVES THE CUSTODIANS, GUARDIANS AND STEWARDS OF EEYOU ISTCHEE"

(CTA, 2009, p. 1).

PORTRAIT

How Do the Crees Define Conservation?

Conservation according to the CTA or Eeyouch Kantoo-hoodoo Emmahmoueech relates to "the concept that the land and its living resources are precious to the Eeyou and that their good and respectful management will ensure the continuous well-being and renewal of the land and its living resources, and will allow future generations of Eeyou to maintain their way of life" (CTA, 2009, p. 7) The concept of conservation translates as Anaacatawaayiitaacanouch or Anaacatawaayiimaacanuud, depending on the context, or as Naacatawaaiichiichaawun when relating to the 'principle of conservation' (CTA, 2009). The following paragraphs expand on the protected areas designation, which is key to their conservation.

Protected Areas and the Cree Regional Conservation Strategy

Cree Regional Conservation Strategy

In 2015, a Cree Regional Conservation Strategy was developed by the Eeyou Protected Areas Committee, made up of representatives from all 10 Cree communities, the CTA, Cree Nation Youth Council (CNYC) and the CNG. This strategy is intended for both the terrestrial and marine regions of Eeyou Istchee to "ensure respect for Cree rights and protect Cree lands, waters and resources for today and tomorrow" (CNG, 2015, p. 2). In doing so, the strategy acts as a framework for developing conservation and protected areas initiatives in Eeyou Istchee (CNG, 2015).

Protected Areas

Protected areas are a key tool to advance conservation of the Cree cultural landscapes and important ecological areas (Eevou Protected Areas & Conservation, 2021). According to the Natural Heritage Conservation Act (NHCA), protected areas are "a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values" (MELCC, n.d.-a).

Most protected areas are places where no industrial development (commercial forestry, mining, and hydroelectricity) is allowed (Eeyou Protected Areas & Conservation, 2021).

In protected areas, "Crees can practice their traditional activities in protected areas because Cree rights to hunt, fish and trap come above all protected areas laws" (Eeyou Protected Areas & Conservation, 2021). Any activity carried out on all or a portion of a protected area must not alter its basic biological characteristics. In cases of conflict, the conservation of nature has priority.

Eeyou Istchee comprises several types of protected areas including national parks (Québec), biodiversity reserves, aquatic reserves, and protected forests of Exceptional Forest Ecosystems (EFEs) (MELCC, n.d.b).

National Parks (Québec)

National Parks are meant to protect Québec collective natural heritage. They constitute spaces where the conservation of nature is guaranteed (MFFP, n.d.-c). Cree harvesting activities are allowed in national parks. Sport fishing by tourists is allowed, but sport hunting by tourists is forbidden (Eeyou Protected Areas & Conservation, 2021).

Biodiversity Reserves

Biodiversity reserves are "protected areas established to promote biodiversity in terrestrial environments and, more specifically, to ensure that the biological diversity of the natural regions of Québec is represented" (MELCC, n.d.b).

Biodiversity reserves provide protection against industrial development. They are not established for tourism. Cree harvesting activities are allowed in biodiversity reserves. Sport hunting, fishing and outfitting by non-Crees is not allowed (Eeyou Protected Areas & Conservation, 2021).

Biological Refuges

Biological refuges are small forest areas of approximately 200 hectares. They are protected from forest management activities. These forest habitats and species are permanently protected. There are currently 3,713 in Québec, distributed relatively evenly throughout the managed forests in the domain of the State. Biological refuges serve to protect mature and old growth forests, which are essential for maintaining biological diversity. They are also used as interconnections between large protected areas ((MFFP, n.d.-a).

EFE or Protected Forests

Eevou Istchee has forests designated as EFEs by the Ministry of the Environment and the Fight Against Climate Change (MELCC)'s protected areas registry. In forests under this designation, all forestry activities and all forest management activities (cutting, drainage, road building, etc.) are prohibited. Yet, such activities under certain conditions, and after consultation with the Minister may be authorized. Furthermore, the development of an EFE for educational, scientific, or recreational purposes may be allowed provided these activities do not impact the EFE's exceptional character. EFEs remain accessible to the public and this designation does not affect the regulations that concern wildlife harvesting (Gouvernement du Québec, 2001).

Figure 27 | Protected Areas



Why Do We Need Protected Areas?

In 2002, the *Paix des Braves* was signed. This agreement was a milestone in improving the balance between conservation and sustainable development in Eeyou Istchee. Among other things, it allowed forestry operations, hydroelectric development, and mining to be regulated, and the social and economic development of the Cree Nation to be protected. It also set out environmental and wildlife conservation principles (CNG, 2021a). Since the signing of this agreement, the CNG has been working on creating an interconnected network of conservation areas in Eeyou Istchee to safeguard the Cree way of life and sustain biodiversity. As of 2019, 15% of Eeyou Istchee has been designated as protected areas, so these are protected from development and resource exploitation (CNG, 2020c).

The Northern Action Plan 2020-2023 also comprises considerations regarding conservation targets (The Société du Plan Nord, 2020). The Act Respecting the Société du Plan Nord (2014) states that, among other powers, the Society may "contribute to setting up mechanisms to allow 50% of the area covered by the Northern Plan to be used, by 2035, for purposes other than industrial purposes, for the protection of the environment and for the preservation of biodiversity" (Act Respecting the Société du Plan Nord, 2020). To achieve this objective, the Government of Québec committed to protecting a first 20% of the Eeyou Istchee James Bay Territory in the Nord-du-Québec region by 2020 within legislated protected areas (CNG, 2020c).

Parallel to the development of the Northern Plan, the *Cree Regional Conservation Strategy* was developed. From 2015 to 2019, the CNG and Eeyou Protected Areas Committee members, worked with each community to identify protected area proposals based on cultural and ecological criteria. Through consultations and thorough planning, each community proposed their own new protected areas. The network of protected area proposals was sent to Québec in 2018.



Through collaboration between the CNG and the Government of Québec as part of the Grande Alliance initiative, the protected areas network in Eeyou Istchee was expanded in December 2020. With this, conservation and protection of the Eeyou Istchee territory are linked to future development projects. Conservation was central to these negotiations, with protected areas being the first major announcement related to the partnership (Cabinet du ministre de l'Environnement et de la Lutte contre les changements climatiques, 2020). 23 proposed protected areas were officially classified as Territorial Reserves for the Purposes of Protected Areas (TRPPAs), which will bring the proportion of protected areas in the territory to 23%. Although the ultimate objective is to establish biodiversity reserves in the TRPPAs, in some instances, portions of the territory could receive the protected status of a national park (CNG, 2020c). Figure 27 presents the new proposed protected areas in green as well as those that existed prior to 2020.

What are Some Ambitions Concerning Conservation?

Through the official listing of protected areas in Québec's registry of protected areas, the Crees want to prioritize social and environmental protection within the framework of the Grande Alliance (Dr. Abel Bosum cited by MELCC, 2021).

The Crees are now working with Québec towards conserving another 30% of their territory. One issue identified by the Crees in regard to the Northern Plan is that it suggests that the concept of the 50% protected areas applies to the entire plan territory rather than to each region, such as Eeyou Istchee. Some Crees believe that this approach is unacceptable and would like the 50% protected areas to be applied within Eeyou Istchee, independently of the rest of the Northern Plan territory (Cree Nations of Eeyou Istchee, 2011).

KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- The Crees have played a leading role in protected areas planning in Eeyou Istchee, working closely in collaboration with the Government of Québec and with other Aboriginal partners and regional governments.
- As of 2020, Cree efforts to implement the Cree Regional Conservation Strategy have protected 23% of Eeyou Istchee's territory from industrial development. The next phase of protected areas development will focus on a further 30% of protection bringing the provincial total for lands under protection to 50% by 2035.
- New tools have been introduced through the amendments to the NHCA that could have potential application in Eeyou Istchee (e.g., aboriginalled protected areas, protected areas with sustainable use, and northern conservation territories).
- Except for the protected areas within the Broadback watershed, most are isolated from one another. Although they are large and based on water flow, there's a need to establish more connections between them.
- Activities are regulated by law within protected areas. However not all Cree protected area proposals are retained by the Québec government. Permitted/prohibited activities within new conservation tools have not yet been defined.
- Amendments to the *NHCA* have abolished the Aquatic Reserve designation, it is unclear whether these areas will automatically become Biodiversity Reserves, and whether that has any implications for the conservation of aquatic resources.
- Existing protected areas in Eeyou Istchee do not yet have management plans, and new protected areas will need these as well.

LAND PLANNING ACTION ITEMS

- The EPC should participate in the definition of the next 30% of territorial conservation and this process should be part of comprehensive regional planning.
- Coordinate the Challenge Fund projects with regional planning work.
- Perform a knowledge synthesis of the current state of each protected area to support the ESIA and planning.
- Explore with the Government of Québec opportunities and legal tools related to the enactment of Bill 46 to amend the NHCA.



4.6 CREE CULTURAL LANDSCAPE

"A LANDSCAPE SHOULD ESTABLISH BONDS BETWEEN PEOPLE, THE BOND OF LANGUAGE, OF MANNERS, OF THE SAME KIND OF WORK AND LEISURE, AND ABOVE ALL A LANDSCAPE SHOULD CONTAIN THE KIND OF SPATIAL ORGANIZATION WHICH FOSTERS SUCH EXPERIENCE AND RELATIONSHIPS; SPACES FOR COMING TOGETHER. TO CELEBRATE, SPACES FOR SOLITUDE, SPACES THAT NEVER CHANGE AND ARE ALWAYS AS MEMORY DEPICTED THEM. THESE ARE SOME OF THE CHARACTERISTICS THAT GIVE A LANDSCAPE ITS UNIQUENESS, THAT GIVE IT STYLE"

(Jackson, 1980).

PORTRAIT

What are Some Examples of Cree Cultural Landscapes?

Most people outside the region see Eeyou Istchee as a vast wilderness area located in between important industrial projects and small communities spread across the region. For the Cree people however, this vast wilderness is the place they call home. A delicate and humanized landscape that forms their traditional hunting and camping areas, where almost every family owns a camp. These special places are the embodiment of the long and intimate relationship between the Cree culture and the natural environment. This is where the Cree go to reconnect with the land, to get away to recuperate, and where many find their sense of well-being and peace. In Eeyou Istchee, it is often impossible to clearly disentangle or distinguish between ecological and cultural elements of concern.

Traditional Camps

Traditional camps are defining elements of the Cree cultural landscape. Their simple structure and appearance connect them to the land and belie an enduring resiliency, with minimal impact on the environment. These structures also play a crucial role in providing unique opportunities for Cree of different generations to form close bonds, as well as revitalize and transmit Cree culture and language. Preserving these cultural landscapes is important, not only from a historic point of view, but also to prevent the loss of a natural and cultural heritage.

Sites

Throughout dozens of generations of living on the land, Crees have developed deep rooted historical connections to many sites throughout the territory, and a strong interest in conserving those sites and the characteristics that make them special. Often these are places that were critical to the survival of Crees at different points throughout their history, sites of particular ecological productivity or significance that made them critical food sources in hard times. For this reason, places of cultural and ecological importance were, and are, often one and the same. Also in these places, and often scattered throughout the territory, are other sites of deep meaning: burial sites, old camp sites, traditional teaching sites. In addition to these, there are sites connected with Cree stories throughout the territory, some legends, some more historical, but all carrying meaning within Cree communities and culture.

- > Burial sites
- > Camp sites
- > Archaeological sites
- > Teaching sites
- > Sites where specific stories took place
- > Sites of historical importance to communities

Archaeology

The Crees have a long history of occupying Eeyou Istchee, and the archaeological evidence throughout the territory bears witness to this fact. Many archaeological sites explored in the context of hydroelectric development projects are now under the water of the reservoirs. Other important archaeological research was carried out by Hydro-Québec and the Société d'énergie de la Baie James (SEBJ) before the creation of the La Grande complex reservoirs in the 1970s and 1980s. The artefacts and other materials resulting from this work represent an important component of Cree heritage, and increase our understanding of the region and its history.

Traditional gathering places

Several Cree communities have sites with historic significance where community members gather on a regular basis to hold events, including big yearly celebrations where people live together on the land and practice traditional activities. Examples of this include, but are not limited to: Chisasibi's connection to Fort George at the yearly Mamoweedow celebrations, Wemindi's Old Factory gatherings, Waskaganish's famed Smokey Hill activities, Waswanipi's Old Post Chiiwetau gathering, and Nemaska's Old Post.

Several of these traditional gathering places are the locations of former trading posts that were focal points of community life at different points throughout history, and to which communities remain strongly connected.

Traditional Travel Routes

Historically Crees travelled widely across and beyond Eeyou Istchee, through a network of traditional travel routes that connect communities and that are linked to many sites and events of importance for the Crees. Mostly these routes follow the larger rivers of the region, as travel by canoe remained for a long time the easiest means of covering great distances. Often these routes went through important harvesting sites where people would stock up on supplies of dried or smoked fish for their travels, or places where several families would congregate to store supplies or discuss and coordinate their harvesting activities.

These routes remain highly significant today to the Crees. Several communities regularly plan canoe expeditions along these rivers between communities, to give youth the opportunity to get to know the routes and ways their ancestors travelled across the territory.



Figure 28 | Cree Place Names

Place Names

Through research conducted over decades, the CNG has amassed a database of thousands of Cree place names across the territory. This database is neither complete, nor likely does it include all that has been documented by other sources, but it is important evidence both of the extent of Cree occupation of the territory, and the significance of many parts of the territory for the Crees. Cree place names are highly descriptive, to the extent that traditionally people would be able to navigate the territory and find their way using place names alone – the names were the maps. In their descriptiveness, they also allow us to understand more about the ecological and other changes happening on the territory – for example, a coastal island name for the three trees that once stood on it is now a forest. The use of these place names — and the process of place naming, rooted as it is in continued Cree occupation of the territory – continues today.





How are Cree Cultural Landscapes Impacted?

Even though Eevou Istchee covers 450,000 square kilometres of land, the territory is very much affected and has gone through several cycles of transformation. Unfortunately, this cultural landscape is slowly disappearing. A network of protected areas has been put in place for the Cree, but the protected area concept has in some cases ignored the importance of traditional human practices by marking a clear separation between social and natural objectives in the conservation of biological resources. In fact, there are no protected areas that have been designated as cultural landscapes.

Since the beginning of the 20th century, due to the timber and mining industry and the hydroelectric projects on the Eeyou Istchee, the Cree have experienced a profound cultural transformation that has affected the landscape of their territory and their knowledge of it.

One of the most drastic changes on the Eeyou Istchee landscape is the diversion and drainage of several rivers, streams and lakes caused by the James-Bay hydroelectric projects. These river modifications have endangered the Cree lands, their subsistence activities and their traditional way of life.

HOW TO PROTECT THE CREE CULTURAL LANDSCAPE

The International Union for Conservation of Nature (UICN) proposes a system for classifying protected areas into six categories, and recognizes that some areas shaped by human activity can make a significant contribution to the protection of biological diversity.

Category V: Protected Landscape/Seascape is a clear distinction from the traditional status categories. A protected area where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values

(UICN, 2021).

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This category of protected areas attempts to reconcile culture and nature, human activities and natural ecosystems. For example, landscapes of interest may be the result of both natural and cultural components.

In February 2021, the Government of Québec adopted Bill 46 to amend the NHCA, thereby providing Québec with an effective legal tool to meet new challenges in the area of natural environment conservation. It aligns itself with the best international practices in the conservation of natural environments.

Three new protected area statutes were introduced, which will increase the proportion of protected areas in Québec and protect more natural environments. These are the statutes of marine reserve, protected area of sustainable use and protected area of Aboriginal initiative. This last protected area status now allows Indigenous communities to propose to the Minister conservation projects whose territories may be designated as protected areas by the Government of Québec. The objective is to conserve elements of biodiversity and associated cultural values that are of interest to Indigenous nations. (Government of Québec, 2021).

Even if not optimal, this new act can play an important role in protecting the cultural landscape of Eeyou Istchee and prevent the loss of these natural and cultural special places.

Waapushukamikw-Colline Blanche

One site is currently protected in Eeyou Istchee and has a Indigenous Heritage status. Waapushukamikw-Colline Blanche is located in the Albanel-Témiscamie-Otish national park. It was classified as a heritage site in 1975 by the Ministry of Culture and Communications (Ministère de la Culture et des Communications) of Québec in 1976, and designated as a Canadian national historical site in 2009.

The site dates back about 5000 years. Here, indigenous groups would camp and collect Mistissini quartzite to transform into various tools until the 19th century. Mistissini guartized and these tools were important for various indigenous communities as they have been found across acheological sites in the American Northeast indicating the influence of guarry in a prehistoric exchange network. Furthermore, "the first research carried out at White Hill, between 1947 and 1970, constitutes one of the foundations of the archaeological discipline in Québec and of the knowledge of the prehistory of this region."

KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- value.
- amend the NHCA.
- cultural landscape.

LAND PLANNING ACTION ITEMS

- and historical sites.
- measures should apply.
- landscapes.

• The land and all components of the environment have a special significance in the Cree culture and are the foundation of the Cree way of life. Maintaining the Cree way of life is a key Cree

 Archaeological and historical sites are found throughout the territory, but many have not yet been identified or documented officially. Some mechanisms exist to verify the existence of archeological sites before completing projects.

• Existing methodologies are in place to protect cultural landscapes: the IUCN and the Government of Québec Bill 46 to

• The current Government of Québec protected areas designations mainly consider biodiversity criteria for the justification of their establishment. There is a need to have the ability to designate cultural landscapes for conservation objectives. This will require mapping, performing historical studies on cultural landscapes, and addressing the complexity of there not being one single definition of the concept of

• Under the Cree-Québec Governance Agreement, regional government entities (CNG and EIJBRG) have the possibility of exercising certain powers attributed to MRCs for heritage conservation under the NHCA.

Consolidate existing documentation and research on cultural

• Identify cultural and historical sites where certain conservation

• Perform an analysis that extends back to the 1970s, for example through using satellite imagery and aerial photos

to better identify the impacts of development on cultural

• Explore the possibility to protect cultural landscapes through tools such as the IUCN's system and/or the NHCA.

• Define norms within planning tools that grant the power to conserve sites from development (e.g., with protection buffers, zoning designations, landscape analysis, etc.).

Figure 29 | Eeyou Istchee in 1986

Figure 30 | Eeyou Istchee in 2020



Figure 31 | Climate Projections

4.7 CLIMATE CHANGE

"THE WEATHER IS SO DIFFERENT THAN WHAT IT WAS BEFORE. IT SEEMS LIKE WE ARE MISSING A SEASON"

(Gilpin, Louise (Washaw Sibi), 2020)

PORTRAIT

Recent transformations of Eeyou Istchee's terrestrial, aquatic, and marine systems reflect the impact of climate change on the territory. Climate change also has consequences for the region's built environment and economic development. These changes affect the quality of life, activities on the territory and the well-being of Cree communities (CNG, 2020b; Ouranos, 2017).

Between 1982 and 2017, the average annual temperature has increased from 1.5° C to 2 or 3° C in winter in Eeyou Istchee (Cree Nation of Mistissini, 2018; Cree Nation of Waskaganish, 2018; Ouranos, 2017). Studies also show an increase in precipitation, storms and winds, a decrease in snow cover and depth and a change in its characteristics, as well as the late formation of ice in fall and its hasty melting in spring (Ouranos, 2017). The weather has become less predictable and the seasons are shifting (CNG, 2020b; Ouranos, 2017). Climate projections (horizon 2050) indicate an intensification of these trends in the future (Ouranos, 2017).

The consequences of climate change on Eeyou Istchee's territory are numerous. Hunting season and the availability of food are impacted as well as the land and animals that need to adapt to new climate conditions. Furthermore, changes concerning ice and snow conditions result in a decrease in the safety of the land users (CNG, 2020b). An increase in storms and coastal erosion have also been noted, leading to increased flooding, among other impacts (JBACE & Environment and Climate Change Canada, 2017). Taken as a whole, these changes can have a significant impact on Cree culture and way of life (CNG, 2020b).



KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- Although coastal, inland, southern, and northern Eeyou Istchee communities experience climate change differently, they are all impacted by it.
- There is a lack of data about how different ecosystems interact, and how climate change affects them.
- Some funding and projects exist around climate change monitoring (e.g., Challenge Fund projects, Eeyou Istchee Climate Monitoring Project for a Resilient Future, and Québec Green Economy Plan).

LAND PLANNING ACTION ITEMS

- List, locate, and study the natural hazards on the territory (e.g., costal erosion, flooding, landslides, etc.).
- Study further the impacts of climate change in the long-term and increase resources strategically to address some of the most urgent climate change issues affecting Eeyou Istchee.
- Evaluate the risks associated with the movement of invasive species towards the north.
- Collaborate with teams that monitor ice melting and safe travel routes to consolidate information for land planning purposes.
- Include environmental and habitats assessments and habitats in zoning norms that specifically address climate change (e.g., buffers, protection, characterization, etc.).
- Build climate change considerations into conservation and protected areas planning (e.g., ensuring the conservation areas network areas are large enough and flexible enough to accommodate climate change induced species habitat migration and movement).





5 Infra-Structure



INFRASTRUCTURE 5

5.1 TRANSPORTATION

Transportation has played a significant role in shaping access to and within the territory and influences many activities within Eeyou Istchee, some including health, hunting and trapping, and mining, forestry, and hydroelectric activities. The increased access to the territory has had an impact on many economic, social, and cultural aspects of life in the Cree communities. Road density also varies across the region, creating differences in the desire for limiting road access or creating more roads for access. Therefore, planning regionally for transportation is essential in shaping an Eeyou Istchee that works for Crees and others.

PORTRAIT

Roads

The road infrastructure in Eeyou Istchee is composed of a regional road network including arterial, collector and local roads, as well as gravel roads. This network is maintained by multiple organizations. Specifically, the following table divides the network's roads by the entities that are financially responsible for their maintenance (MTQ, 2002a, 2005a):



Table 3 | Roads and Management Entities

ORGANIZATION	ROADS
Ministry of Transportation of Québec (MTQ) – 1,455 KM	 Route du Nord (Nemaska to Chibougamau) Waskaganish Road Eastmain Village Road Wemindji Path 109, 113, 167
Hydro-Québec (HQ) – 1,441 KM	 Billy Diamond Highway Route Trans-Taiga North Road (James Bay Road to Nemaska)
Local Cree Communities - 10,698 KM	 Local Roads Paved Road - 2,182 km Non-Permanent Gravel Forest Roads - 8,516 km

It is important to mention that the James Bay Development Corporation (Société de développement de la Baie-James) also operates the Eeyou Istchee roads that do not have a status as well as Hydro-Québec airports.

Forestry Road Network

Since the JBNQA, the Cree have seen forestry activities grow from 100 km² of total cutting per year to nearly 800 km² in 2001. Along with these cutting operations has been the development of an extensive network of forestry roads in the southern part of Eeyou Istchee. In 2011, it was estimated that the road network comprised tens of thousands of km of roads. The forestry roads are controlled by the forestry regime. Opportunities to intervene in the planning of these roads fall within the ESIA process, for major forestry roads at least 25 km in length intended for a period of 15 years. However many smaller roads exist that do not fall within this category, resulting in

a lack of information and cumulative impacts (EPC, 2021). Although the forestry road network facilitates access to the territory and its connectivity, forestry operations have had a significant impact on the physical landscape of Eeyou Istchee and the Cree's relationship with it (Cree Nations of Eeyou Istchee, 2011).

School Transportation

School transportation is provided across all Cree communities in Eeyou Istchee and is funded through the Ministry of Education and Higher Education (Ministère de l'Éducation et de l'Enseignement supérieur) of Québec. The Cree School Board is responsible for providing school transportation. It has the authority to decide on the conditions and standards to access services and manages the route programming. It can also decide to offer para-transit services for disabled students who are attending their institutions. Each Cree community has at least one regular 12-row bus. The CSB also provides para-transit services in Whapmagoostui, Chisasibi, Wemindji, Waskaganish, and Mistissini (MTQ, 2002c).

Bus Services

There are 12 active bus transportation companies in the southern part of Eeyou Istchee and Jamesie Region. Four of them have a place of business in the territory. In addition, bus companies from other regions of Québec offer on-demand trips to Nord-du-Québec. Those are mainly popular with tourists (MTQ, 2002c).

Maheux-Cree Bus Service provides a bus line between Chisasibi and Val d'Or with 10 stops along the way. The bus ride takes approximately 11 hours to complete and departure from both Chisasibi and Val d'Or are at 8am, while arrival is typically at 7pm. The company also provides parcel delivery services through Expedibus (Maheux-Cree Bus Service, n.d.).

On-Demand Transportation

Chartered transportation is offered by ten transportation companies in the region. The clientele includes Cree customers, golden age clubs, and sport groups. The Cree users represent the largest proportion of the clientele. Each year, over one hundred chartered trips are organized. In addition, a large portion of the organized trips visit hydroelectric facilities. In fact, about 12,000 people visit Radisson between the months of May and September by car and bus (MTQ, 2002c).

Contract Employee Transportation

Contract employee transportation is offered to natural resource development companies, such as those involved in the mining and hydroelectricity industries. Bus routes are pre-established according to an agreement made with the employers (MTQ, 2002c).

Table 4 | Contract Employee Transportation Network

CARRIER	CLIENT ENTERPRISE	FLEET OF VEHICLES	TERRITORY OR ROUTE	SCHEDULE	
Autobus Chevrette (1986) inc.	Canadian International Paper Company	_	From La Tuque to James Bay (Lake Vendatour)	_	
Autobus Maheux	Mine Gonzague- Langlois	Three buses of 48 passengers	From Lebel-sur- Quévillon to the mine - 40 km	Monday through Sunday	
	Mine Troilus	Variable	_	Monday through Friday	
Autobus Messier de Chibougamau inc.	Hydro-Québec One bus From Chibougamau (H. Q Administrative Center) to Poste Abitil		From Chibougamau (H. Q Administrative Center) to Poste Abitibi	Monday through Thursday	
	Les Ressources du Lac Meston Inc.	Three-day buses and one night bus	From Chibougamau to all mining sites along road 167	Monday through Sunday	
Les Transports E. Verrault Ltée	Scierie Donohue in Chibougamau	Two regular buses	From Saint-Félicien to La Doré and Chibougamau	Monday through Friday	
Transport Baie- James Ltée	Mine Géant Dormant Ltée	Six 48-passenger buses and three 12-passenger buses	_	$- \begin{array}{c} x \\ + x \\$	
				the the	

1 The difference between the services provided by first responders and by ambulance technicians relates mainly to the required training and their needs justify the choice for either one of these services. An ambulance technician must deal with enough cases and have enough practice in one year so as not to forget what he has learned. This is why, in the Cree communities, the choice of a first responder service with the option of bringing along nursing staff for the more serious medical cases is often the most appropriate (Directly cited from MTQ, 2002c, p. 54).

Hydro-Québec also has five buses, two of which are based in La-Grande 3 Dam and La-Grande 4 Dam respectively to transport its employees to their residences. The three other buses, based in Radisson (La-Grande 2 Dam), are used for the same purpose. These buses also transport tourists to the Robert Bourassa hydroelectric power station. Other Hydro-Québec workers and Poste Nemiscau's workers use the company's trucks to commute (MTQ, 2002c).

Taxi Services

Taxi services are available in Mistissini, Ouje-Bougoumou, and Waswanipi but are absent - or unofficial - in Chisasibi, Waskaganish, Nemaska, Whapmagoostui, Eastmain and Wemindji. There is a total of seven taxi territories in Eeyou Istchee. This network serves 71% of the territory's population, including members of the Jamésie region (MTQ, 2002c).

Emergency Services (Ambulance Services, Police Services & Fire-Fighting Services)

The Ministry of Health and Social Services (Ministère de la Santé et des Services Sociaux; MSSS) establishes the framework for ambulance services, but it is the Cree Health Board that is responsible for planning and managing the emergency and ambulance transportation services. Its role is to organize the pre-hospitalization system in Eeyou Istchee. Presently, five out of the nine Cree communities have an ambulance transportation service. Whapmagoostui, Wemindji, Nemaska, Waskaganish, Eastmain and Ouje-Bougoumou have a first responder service, while Chisasibi, Waswanipi and Mistissini have a real ambulance service¹. The size of the communities and their needs justify the choice for either one of these services. Each Cree Community has a 12- to 15-passenger van used for non-urgent transportation of injured or sick persons. The vans in Mistissini, Waswanipi and Ouje-Bougoumou make one round trip per day to Chibougamau. In Mistissini, a second van makes two trips a day (MTQ, 2002c).

The Eeyou Eenou Police Force is responsible for providing police services across Eeyou Istchee. However Sûreté Québec supplements with police intervention when such services are needed but not provided or when the local or regional police force cannot meet certain needs (MTQ, 2002c).

All Cree communities have a fire station and a water supply system with fire hydrants (MTQ, 2002c).

Air

Eevou Istchee has 6 official airports located in - or within very close distance to — the Cree Communities. Different entities are responsible for their upkeep and maintenance. The table below summarizes information pertaining to official airports located in Eevou Istchee (MTQ, 2002a). It is however important to mention that some mining projects have their own private airstrips, such as Renard Mine Airport and Newmont Eleonore Mine airport as shown on Figure 32.

Table 5 | Official Airports : Organizations and Locations

ORGANIZATION	AIRPORT LOCATION
Band Council of Chisasibi	Chisasbi
Hydro-Québec (HQ)	Nemaska
Ministry of Transportation of Québec (MTQ)	Whapmagoostui
Transport Canada	• Eastmain • Waskaganish • Wemindji

Eeyou Istchee is served by commercial air carriers operating scheduled air services, chartered flights and cargo transport services. Chartered flights are used for business and medical purposes. Chartered flights (airplane and helipcopter) are also used to access hunting camps. Most of them are mainly from the Abitibi-Témiscamingue, Montréal and Québec City areas, and Kuujjuaq. Moreover, airports are in operation six days a week (MTQ, 2005b).

Commercial air services are provided through Air Creebec, a Cree-owned airline that has 18 airplanes and provides 15 destinations to its users. The Air Creebec destinations available are listed below:

Québec (9)

- > Montreal
- > Val d'or
- > Chibougamau

> Nemaska

- > Waskaganish
- > Eastmain
- > Wemindii
- > Chisasibi
- > Whapmagoostui

Ontario (6)

- > Timmins
- > Moosonee
- > Fort Albany
- > Kashechewan
- > Attawapiskat
- > Peawanuck

(AirCreebec. n.d.)

Emergency Services

The MSSS provides an aeromedical evacuation service called EVAQ. Whereas injured or sick people in Waswanipi, Mistissini and Ouje-Bougoumou are transported by ambulance or by van to the Chibougamau hospital, injured or sick people from other communities must be transported by air. Propair, an airline based in Rouyn-Noranda, provides most emergency air transportation, but non urgent transportation is carried out by Air Creebec (MTQ, 2002c).

Landing strips

Due to the challenges of access to the region, air transportation is often used. Registered and unregistered small airstrips located on private property exist across the territory. These include public, private, and unofficial landing sites (Transports Québec, 2005). Helicopters and seaplanes also use temporary sites throughout the region. Helicopters have been used for exploration and development of forest, mining, and hydroelectric resources. Seaplanes are also used to transport trappers, hunters, and fisherman (MTQ, 2005b) The use of land or water for the arrival, departure, movement or servicing of aircrafts, referred to as an aerodrome, does not have general restrictions preventing takeoffs or landings for the most part of Canada. Rules for operating an aerodrome fall under the Canadian Aviation Regulations. Transport Canada is responsible for the regulatory development and compliance oversight for the national air transportation system. (Transport Canada, 2020)

Sea

Marine transportation across Eeyou Istchee is mostly located on James Bay and within inland water systems. Because the shallow waters near the shores of Hudson Bay and James Bay hinder deep water shipping along the northern shore, marine activity is limited to resupply barges operating from Moosonee from summer through early fall, with service to coastal communities alongside Québec and Ontario's shores. Those resupply barges do not require port facilities. Moreover, the use of these services depends essentially on the extent of competing road or ice road networks. For example, the all-season road network in Nord-du-Québec has been extended to several ports (IBI & Hemson Consulting Ltd., 2016). Hence, although commercial resupply of goods used to be predominantly done through resupply barges, it is now mostly undertaken through truck shipments (MTQ, 2002a).

However, there is still some commercial transportation of goods happening in James Bay, mostly via Moosonee Transportation Company, a marine transportation company that owns several barges and boats, and services the Ontario communities, as well as Waskaganish, Wemindji, Chisasibi, Whapmagoostui, Uimijuag, Sanikiluag and Povungnituk. This company does a maximum of 56 trips per season and transports freight to all James Bay and Hudson Bay ports four times per year at the most (Moosonee Transportation Limited, n.d.). In terms of travel distances, resupply barges travel between 81 nautical miles to 183 nautical miles depending on the Cree community, Waskaganish being the closest and Chisasibi being the farthest.

In addition, even though they are no longer directly involved in supply operations, the Canadian Coast Guard plays an essential role in ensuring the efficiency of marine transport in James Bay. They offer ship escorting services and have ice breaking equipment. They are also the main provider of navigational aids that include signals, markers or guidance equipment for navigators. These aids have been installed on the territory to meet specific needs with regards to navigation. The Coast Guard also issues daily ice maps and recommended routes intended for navigators who travel the arctic waters (MTQ, 2002b).

Figure 32 | Transportation

The following table summarizes existing marine infrastructure within coastal Cree communities:

Table 6 | Marine Infrastructure: Locations and Owners

LOCATION	MARINE INFRASTRUCUTURE	OWNER			
Chieseihi	Access Ramp	Chisasibi Band Council			
Chisasidi	Navigational Aid	Canadian Coast Guard			
Eastmain	Floating Pontoons	Eastmain Band Council			
	Access Ramp	Waskaganish Band Council			
Waskaganish	Markers	Waskaganish Band Council			
	Slip Ways (used by MTL)	Wemindji Band Council			
weminaji	Markers	Wemindji Band Council			

(MTQ, 2002b)

Rail

Rail transportation in the region is used to transport goods only. Canadian National operates four connection routes in the region, namely: Barraute-Franquet (126 km), Chapais-Chibougamau (48 km), Franquet-Matagami (99 km) and Triquet-Faribault (216 km) (MTQ, 2002c). Moosonee, Ontario is also connected via a railway corridor.



	PROJECTS	INVESTMENTS	PLANNED ACTIVITIES IN 2021-2022	PLANNED ACTIVITIES IN 2022-2023
ARE THERE ANY UPCOMING PROJECT(S)?	Paving of Route 113, in the area north of Waswanipi (30 kilometers north) and from kilometer 277.1 to kilometer 280.6	\$	Works	None
La Grande Alliance La Grande Alliance has proposed infrastructure projects in Eeyou Istchee in	Paving of Route 167 north of Chibougamau, at various locations between kilometers 284 and 290	\$	Work	None
three phases over the next 30 years. A railway corridor is proposed between Matagami and Whapmagoostui. Next, there are plans for the road network to be better connected through the connection of Trans Taiga Highway to	Paving of route 167 from kilometer 268 to kilometer 278	\$\$	Work	None
Naskapi and Route 167. Finally, a seaport is proposed in Whapmagoostui. (La Grande Alliance, n.da)	Painting and rehabilitation of the bridge located on Route 113, at kilometer 242.6, over the Waswanipi River	\$\$\$	Work	Work
Below are presented La Grande Alliance phases for transportation infrastructure:	2020 Route 113 paving program in various areas	\$	Work	None
 Phase 1 (13 years): Potential railway, improvement of internal road network Phase 2 & 3 (5-30 years): Additional Rail Network, Connection of National Rail Network, Connection of	2021 paving program at various locations in the Chibougamau sector (Route 113)	\$	Work	None
in Whapmagoostui (La Grande Alliance, n.da).	2022 paving program in various locations in the Chibougamau sector (Route 113)	\$	Preparation	Work
Northern Action Plan 2020-2023 Under the Northern Action Plan 2020-2023, there is reconstruction work planned on the Billy Diamond Highway (The Société du Plan Nord, 2020). Ministry of Transportation of Québec (MTQ) The MTQ has planned infrastructure projects in Eeyou Istchee for 2021- 2024, as seen in the following table (MTQ, n.d.):	2019 Pavement rehabilitation and 2020 paving program on Route 113 from km 224 to km 234 north of Desmaraisville	\$\$	Works	Work
	Pavement rehabilitation program on Route 113, in various areas between kilometers 191 and 198	\$\$	Works	None
	Gravel reloading on Route 167 North between kilometers 341.4 and 384.4	\$\$	Preparation	Work
	Gravel reloading on Route du Nord between kilometers 102 and 129	\$\$	Work	Work
	Reconstruction of culverts under the Lebel-sur- Quévillon-Matagami road, from kilometers 0 to 14	\$\$	Preparation	Work
	Reconstruction of culverts under the Lebel-sur- Quévillon-Matagami road, from kilometers 14 to 42	\$	Work	None
	Reconstruction of culverts under the Lebel-sur- Quévillon-Matagami road, from kilometers 52 to 103	\$\$	Preparation	Work
	Reconstruction of the culvert on the tributary of the Perdrix River, on the Authier-Nord-Joutel road	\$\$	Work	None
	REGIONAL PORTRAIT OF EEYOU ISTCHEE			

KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- Access to the territory is a primary issue in the development of the region, it is tied to many aspects such as transportation of goods, transportation of materials, transportation of people, industries, employment, tourism, recreation, etc.
- The road network is important in how it facilitates land users' access to their traplines.
- The development of the road network is mainly driven by the needs for natural resource extraction.
- Many different types of users share transportation infrastructure, which can represent safety and cohabitation issues, especially on the multi-use roads and the wide load truck roads. The dust, blind hills, and problematic configuration add to the safety issues.
- Transportation infrastructure is managed by several different authorities.
- The construction and operations of transportation infrastructure have impacts on biodiversity.
- Migratory caribou conservation must be considered in the context of transportation planning.
- A pilot project with land users was conducted to identify forest roads that could be closed for caribou conservation.
- There is a lack of signage on roads, and the use of Cree language on signs.
- There is an increase in transportation traffic due to frequent delivery of oil to temporary camps. An increase in traffic related to mining development is also expected.

LAND PLANNING ACTION ITEMS

- Develop a Cree vision for access to the territory and a plan for infrastructure that is aligned with it.
- Update the mapping of access ways across the region (i.e., air, land and sea routes).
- Develop a transportation plan that analyzes the links between terrestrial, air and sea transportation, with considerations for access to traplines and employment nodes.
- Through the Cree land use mapping exercise, identify :
 - Sensitive wildlife and cultural areas that should be considered or be avoided when planning for a new road project.
 - Most valued connections (roads or trails) with the important cultural areas, and with the communities.
 - Access or new roads that are desired by land users to better occupy the territory and to practice the Cree way of life.
 - Valued road sections that need to be improved for safety reasons.
- Consolidate the information regarding the impacts of transportation infrastructure and define norms (e.g., buffers for noise, habitats, soil conditions, etc.).
- Consolidate the information regarding safety issues for land users and define design guidelines.
- Consolidate information related to the road network; the categories of road; the conditions; the entities responsible for maintenance and the regulation that applies. Define the management of transportation infrastructure to ensure its maintenance and cleanliness.
- Define the transportation infrastructure that might be required for the long-term to promote recreational and economic development favored by Crees.
- Define land and resource uses that can be hosted around roads.
- Explore the use of the commercial train as a means for transporting people.



Figure 33 | Cellphone Towers Network

5.2 TELECOMMUNICATIONS

PORTRAIT

Internet

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Eeyou Istchee has a large proportion of its territory covered by fibre optics. As of 2018, Mistissini, Ouje-Bougoumou, Waswanipi, Nemaska, Wemindji, Chisasibi, Eastmain, Waskaganish, and the James Bay highway are connected via fibre optic infrastructure.

Eeyou Communications Network is a northern telecommunication company that provides broadband telecom transport to Cree Communities in Eeyou Istchee through telecommunication infrastructure. This network, suited for voice, data, video and Internet transit support the delivery of all services to the population and businesses, including health, education, public and governmental services, business services and many others.

The following are historical events that lead to today's communication framework in Eeyou Istchee (Eeyou Communication Network, n.d.):

- > 2000 The Cree Regional Authority with Canada Economic Development envision connecting all offices of the region to the Internet
- > 2004 Creation of ECN, a not-for-profit corporation
- 2007 Start of Phase 1 to connect St-Felicien, Mistissini, Chibougamau, Chapais, Ouje-Bougoumou, Waswanipi, Quévillion, Matagami Nemaska, Radisson, Wemindji and Chisasibi by fibre optic
- > 2009 Beginning of construction of the network
- > 2011 Beginning of ECN operations with telecom transport services and Internet transit
- > 2012 Major network upgrades with Alcalet-Lucent 7750 equipments
- > 2013 ECN connectivity to Québec RITM (Réseau intégré de télécommunication multimédia) network for health services. Network expansion to Amos for diversification of connectivity and access to content
- > 2015 Fibre network expansion to Eastmain and Waskaganish
- > 2016 Completion of the regional fibre optic ring along the Billy Diamond Highway
- > 2018 Kick-off of the Fibre-to-the-Home project and implementation of the service in eight communities. Implementation of points of presence in Amos Abitibi and in Montreal



Cellphone service

In Eeyou Istchee, Cree Communities have LTE and 4G coverage throughout developed areas and a small portion of traplines (Bell, n.d.). **Figure 33** locates the areas covered by the network and the cellphone towers.

Radio

64

Eeyou Istchee has a total of nine community radio stations. The James Bay Cree Communication Society (JBCCS) is a Cree language radio broadcaster servicing Eeyou Istchee. Its mandate is to expand the communications capacity of the James Bay Territory via telecommunications, web-based services, and any other venue that is expanding in the territory. Also, the Cree Radio Network is made up of nine local community stations. The JBCCS Board of Directors is made up of representatives from each of the nine community stations, along with a representative from The Nation magazine and a Youth Representative (James Bay Cree Communications Society, n.d.).

ARE THERE ANY UPCOMING PROJECT(S)?

Northern Action Plan 2020-2023

Under the Northern Plan the rollout of optical fibre in the Eeyou Istchee James Bay Territory is planned to be finalized (The Société du Plan Nord, 2020).

La Grande Alliance

La Grande Alliance plans to prepare an inventory of the network and a needs assessment (for communities & industry), as well as to promote and enhance the communications network (La Grande Alliance, n.d.-a).



KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- Most communities are serviced by telecommunication infrastructure, except for Whapmagoostui.
- There is no coverage on significant parts of Category II lands, which can create constraints for activities.

LAND PLANNING ACTION ITEMS

- Locate where telecommunication infrastructure should be placed with regards to other land and resource uses and define norms for their installation.
- Consolidate information related to long-term planning of telecommunication infrastructure and supporting equipment such as buildings.



5.3 ENERGY

PORTRAIT

Community Access to Electric Network

La Grande Agreement (1986) was reached between the Grand Council of the Crees (Eeyou Istchee), the Cree Regional Authority, the Cree First Nations of Chisasibi, Whapmagoostui, Wemindji, Eastmain, Waswanipi, Nemaska, Waskaganish, Mistassini, Ouje-Bougoumou, Hydro-Québec and the Energy Society of James Bay (Publications Québec, 2021). Chapter 10 of this agreement provides for the provision of reliable electricity services to all Cree communities and the connection of Cree electrical installments to the Hydro-Québec network (Hydro-Québec Distribution, 1986). As of today, Whapmagoostui is not yet connected to the Hydro-Québec network, electricity there Is produced by a diesel powerplant. (Environmental and Social Impact Review Committee, 2021).

Consumption At a Glance

In 2015, the total energy consumption of Eeyou Istchee James Bay region was 817 TJ or 514,2 GJ/per person. The total of greenhouse gas emissions was emissions was 37,124 Tonnes CO²/e or 23.4 Tonnes CO²/e per person. (Global Convenant of Mayors for Climate Change & Energy, 2015a).

In 2017, annual electricity consumption per capita in Québec was 21 megawatt hours (MW.h). Québec ranked 1st in Canada for per capita electricity consumption and consumed 44% more than the national average.



Oil was the most frequently used fuel in total, with a consumption of 410 TJ/ year, followed by electricity with a consumption of 324 TJ/year.

Energy Consumption Portraits by Subsector

Figure 37 | Energy Consumption per Subsector – Residential Buildings



66

(Global Convenant of Mayors for Climate Change & Energy, 2015b)

Electricity was the most used fuel type for residential buildings with a consumption of 46 TJ/ year.

Figure 38 | Energy Consumption per Subsector – Commercial Buildings



(Global Convenant of Mayors for Climate Change & Energy, 2015b)

Natural gas was the most used fuel type for commercial buildings with a consumption of 8 TJ/year, followed by electricity with a consumption of 6 TJ/year.

Figure 39 | Energy Consumption per Subsector – Industrial



(Global Convenant of Mayors for Climate Change & Energy, 2015b)

Oil was the most used fuel type for the industrial sector with a consumption of 400 TJ/year. It is followed by electricity with a consumption of 270 TJ/year.

and Fisheries



2 TJ/year.



For agriculture, forestry, and fisheries, oil was the most used fuel with a consumption of 6TJ/year, followed by electricity with a consumption of



⁽Global Convenant of Mayors for Climate Change & Energy, 2015b)

ARE THERE ANY UPCOMING PROJECTS?

La Grande Alliance

La Grande Alliance intends to develop the electrical distribution network of Nord-du-Québec and perform an inventory of the existing electrical distribution network. It also plans to perform an evaluation and prioritization of potential in this area by considering community interests. The development of financing and ownership models done with Hydro-Québec and Infrastructure Bank of Canada is also planned (La Grande Alliance, n.d.-a).

Whapmagoostui Kuujjuaraapik Hybrid Power Plant Project

The Kuujjuaraapik Whapmagoostui Renewable Energy Corporation (KWREC) plans to build a hybrid power plant on the outskirt of the villages in the Whapmagoostui and Kuujjuaraapik communities. This project includes two wind turbines and substation, which will be linked to the existing power plant operated by Hydro-Québec, and access road. This project is in the examination stage of COMEX's review (Environmental and



PLANNING

LAND PLANNING ACTION ITEMS



KEY INSIGHTS TO MOVE FORWARD WITH LAND

• Renewable energy sources for energy consumption are accessible in Eeyou Istchee.

• Some remote activities within Category II lands require the use of oil for energy, which is not sustainable, and can create negative impacts when transported by trucks. Oil barrels run the risk of water and soil contamination.

• Explore possibility of small scale, Cree owed energy project (hydro, wind, solar) development (less than 50 MW) for as per in the Cree-Québec Governance Agreement.

• Explore the adaptability of green building practices to the context of Category II lands.

5.4 WATER MANAGEMENT

PORTRAIT

How Does Eeyou Istchee Collect Drinkable/Fresh Water?

As shown in **Table 8**, most communities use wells as their source of drinking water. However, the communities of Chisasibi, Wemindji, and Waskaganish use surface water from rivers as their drinking water source.

Spring water sources exist across the territory and are used for water consumption. Communities have expressed the significance of protecting freshwater sources, lakes, and rivers. In Waswanapi and Ouje-Bougoumou, concerns have been expressed over the destruction of spring water sources by forestry, mining and other industries, resulting in water that is unfit for consumption (EPC, 2018).

Table 8 | Drinking Water Supply (Quantity) and Water Treatment

NAME	POPULATION	DRINKING WATER SUPPLY (QUANTITY) AND WATER TREATMENT			
Whapmagoostui	1670 ¹	Underground wells (4). No treatment apart from desinfection. Operation by Whapmagoostui.			
Chisasibi	4875	Surface water (La Grande River). Complete water treatment plant (Pulsator).			
Wemindji 1445		Surface water (Maquatua River). Complete water treatment plant (Ultrafiltration and nanofiltration membranes).			
Eastmain	865	Underground wells (56 through vacuum collection) and surface water (Beaver Creek and reservoir). Complete water treatment plant (DynaSand). Green sand filtration and disinfection. Chloramination for residual disinfection.			
Waskaganish 2210		Surface water (Rupert River). Complete ultrafiltration membrame water treatment plant.			
Nemaska	760	Underground wells (2). No water treatment.			
Mistissini	3525	Underground wells (2). No water treatment.			
Ouje-Bougoumou	740	Underground wells (2). No water treatment.			
Waswanipi	1760	Underground wells (3). No water treatment for now but filtration may be added in 2019.			

Wastewater – How Is Wastewater Managed?

Domestic Wastewater

Domestic Wastewater is treated through lagoons in Eeyou Istchee. Through the lagoon system, wastewater is treated using a combination of physical, biological, and chemical processes (National Small Flows Clearinghouse, n.d.).

Table 9 | Wastewater Treatment and Number of Pumping Stations per Community

The number of waste water pumping stations operated by a community and the number of lagoons (all communities use aerated facultative lagoons for waste water treatment) are as follows:

NAME	PUMPING STATIONS	WASTE WATER TREATMENT PLANT (NUMBER OF LAGOONS AND NOTES)			
Whapmagoostui	None	3 lagoons operated by the neighbour Northern Village of Kuujjuarapik.			
Chisasibi	8	3 lagoons			
Wemindji 1		3 lagoons			
Eastmain 3		3 lagoons			
Waskaganish 3		3 lagoons			
Nemaska 3		3 lagoons			
Mistissini	3	4 lagoons			
Ouje-Bougoumou	1	2 lagoons			
Waswanipi 2 2 lagoons. Screening and SMBR s lagoons.		2 lagoons. Screening and SMBR system upstream of lagoons.			

Source: CNG, 2019

Timber Industry and Wastewater

Forestry activities produce wastewater, which must be treated before being released into the environment. This wastewater can contain large quantities of woody material and waste, so surface and groundwater contamination issues can occur. Wastewater from the pulp and paper industry is likely to contain heavy metals, hydrocarbons, and nitrogenous and phosphate substances among others, which can result in contamination. Primary wood processing plants handle large amounts of wood material. This industrial activity is therefore likely to generate contamination issues related to the management of wastewater and woody debris. Primary wood processing activities are also a potential source of noise and dust that could affect the quality of life of residents living near these sites (CRRNTBJ, 2010c).





Source: CNG, 2019



ARE THERE ANY UPCOMING PROJECTS?

Wemindji Wastewater Treatment Plant

A new wastewater treatment plant is planned for Wemindji (GCC (EI) & GGC, 2019).





PLANNING

- smaller projects.

LAND PLANNING ACTION ITEMS

- dumping sites, etc.).

- norms.
- that arise from the LQE.

KEY INSIGHTS TO MOVE FORWARD WITH LAND

• Eeyou Istchee has no watershed management organizations. Other regions of Québec have watershed organizations. (otherwise known as Organismes de bassins versants (OBVs)).

• Industrial development has negatively impacted water sources.

• There are no mechanisms to monitor wastewater on site for

• Within the Cree land use mapping work, identify the valuable water sources (e.g., the locations where people go for drinking water). Define locations of potential drinking water sources and protect them (i.e., buffers from industries, landfills, snow

• Explore setting up an OBV for Eeyou Istchee.

• Explore the possibility of developing a regional wetland and waterbody plan, similar to the one put in place under the Law for the Conservation of Wetlands and Hydrology (also known as Loi sur la conservation des milieux humides et hydriques).

• Define locations of potential sewage lagoons with regard to other long-term development of the territory and define

Define norms for grey water management on Category II lands (might differ per uses e.g., forestry vs outfitting vs community treatment plants). Identify anything lacking in the processes

5.5 WASTE MANAGEMENT

PORTRAIT

CNG's Department of Capital Works and Services oversees essential sanitation services in each Cree community (GCC (EI) & GGC, 2019).
Table 10 lists the waste management infrastructure per community. More
 detailed information on waste management is presented in the Communities and Category II Lands section of this document.

Table 10 | Waste Management Facilities in Eeyou Istchee

	WASKAGANISH	WHAPMAGOOSTUI	MISTISSINI	NEMASKA	EASTMAIN	WEMINDJI	WASWANIPI	CHISASIBI	OUJE-BOUGOUMOU
Residential Waste Management Infrastructure	Landfill (located 18km from the community)	The community uses Kuujjuarapik's landfill	Landfill	Landfill	Landfill	Landfill and incinerator	Landfill	Landfill	
Residual Waste Management Plan (F.N.)	No	No	No	No	No	No	No	No	No
Residual Waste Management Plan (QC)	No	No	Yes	No	No	No	No	No	No
Household Hazardous Waste Depot	Yes	No	Yes	Yes	No	No	No	Yes	Yes
Ecocentre (F.N)	Yes	No	Yes	Yes	No but project to implement one	Yes	No	Yes	No
Recycling (QC)	No	No	Yes	No	No	Yes	No but pilot project	Yes	Yes
Composting (F.N.)	No	No	No	Yes	No	No but pilot project	No	No	No
Ecopatrol	Yes for 2020-2021	Yes for 2020-2021	No	Yes for 2019- 2020 and 2020- 2021	Yes for 2020- 2021	No	No	No	No
Special Collect	Yes	No	No	No	Yes	Yes	Yes	Yes	No

Source of table: IDDPNQL, 2021

LEGEND

F.N: Managed by the First Nation (IDDPNQL, 2021) QC: Managed by the Québec Government (IDDPNQL, 2021)

DEFINITION

Ecopatrol: Ecopatrollers' goal is to inform and raise awareness about waste management, recycling, composting and protecting the environment (Quinn, 2020)

Domestic Waste Management

Waste

As shown in **Table 10**, waste management in Eevou Istchee is done through landfills. Six of the communities' landfills are situated on Category I lands (Wemindii, Waswanipi, Eastmain, Chisasibi, Waskaganish, Whapmagoostui). Waste management infrastructure on Category I lands is subject to provincial laws unless by-laws exist that are as stringent as the provincial laws. One community, Mistissini, has a landfill on Category II land. Two communities, Nemaska and Ouje-Bougoumou, have a landfill on Category III lands. These infrastructures are subject to provincial laws including the LQE. Capacity for most landfills is nearly reached or exceeded (Cree Nation Government & Chamard Environmental Strategies, 2021)

Recycling

About half of the communities recycle. Recycling is either managed by the Government of Québec or through First Nation managed ecocentres (IDDPNQL, 2021). These centres are used to recycle a wide range of materials while expanding the life of the landfill sites. As the conservation of the environment has always been integral part of Cree culture in Eeyou Istchee, many communities are seeking to improve their waste-management infrastructure through constructing ecocentres that recycle a broad range of materials while extending the life of landfill sites (Quinn, 2020). There are currently five communities with ecocentres managed by Cree First Nations in Eeyou Istchee (Waskaganish, Mistissini, Nemaska, Wemindji and Chisasibi). Eastmain is in the process of implementing an ecocentre. Recycling installations that are managed by the Government of Québec are available in four communities (Mistissini, Wemindji, Chisasibi, and Ouje-Bougoumou). Waswanipi is currently doing a recycling pilot project.

Composting

Three communities are composting: Nemaska, Mistissini, and Wemindji (currently carrying out a pilot project).

Waste from Mining and Quarrying Facilities

The mining and guarrying facilities sector releases pollutants into the air, water, and land. Pollutants directly released into the air are through activities such as

- > Metal ore mining and processing
- > Waste rock piles, materials handling and open pits. This can be sources of wind-blown releases
- > Operation and maintenance of vehicles and on-site power generation facilities

Most mining substances are reported as on-site disposals to tailings² and waste rock³ management areas (47,270 tonnes or 88%), followed by releases to air (5,155 tonnes or 10%) (Government of Canada, 2021).

Most of the pollutant releases to air, water, and land in Eeyou Istchee reported in 2018 were by the mining and quarrying sector. Carbon monoxide, particular matter, and nitrogen oxides were the substances released with the highest quantities. The highest quantities of substances disposed on and off-site were arsenic, manganese, and zinc. The mining and quarrying sector reported ninety-nine percent of these on and off-site disposals and transfers (Government of Canada, 2021b)

Mining activities involve multiple stages: prospecting, exploration, development and operations, rehabilitation, monitoring and maintenance. Across the stages a significant footprint is generated, and can produce hundreds of millions of tonnes of waste through the course of a mine's life (Burkhardt et al., 2017)



PLANNING

- Ecocentres are being built on the territory and some communities are now composting.
- Landfills are reaching maximum capacity.
- for small projects.
- The identification of potential sites for waste management should be part of comprehensive regional planning. The location of those sites can have a long-term impact on future nearby community development.

LAND PLANNING ACTION ITEMS

- Move towards regional coordination of waste management across Eeyou Istchee.
- Define locations of potential waste management sites with regards to other long-term development of the territory and define norms for their construction.
- Explore ways to contribute to waste recovery efforts in Category II lands.

2 Tailings are the waste material, which may or may not be mixed with water, which remains after processing ore, ore concentrate or mined materials to extract marketable components such as metals, minerals or bitumen (Directly cited from Government of Canada, 2020). 3 Waste rock is defined as a rock that is removed in the mining process to provide access to the ore and that is not further processed during the reporting year (Directly cited from Government of Canada, 2020).

KEY INSIGHTS TO MOVE FORWARD WITH LAND

- Waste transportation to ecocentres is expensive.
- There is no mechanism to monitor waste management on site
- The development of alternatives to landfills is constrained by the remoteness of recycling markets and high transportation costs. In addition to high transportation costs, the distance between Eeyou communities is also an important factor.

ARE THERE ANY UPCOMING PROJECT(S)?

Select Projects assessed by the ESIA Unit before COMEX in 2019-20

Whapmagoostui Landfill: The Cree First Nation of Whapmagoostui and the CNG will develop a landfill on Category IA lands, with access roads on Cree and Inuit territories. Both the Cree community of Whapmagoostui and the Inuit village of Kuujjuarapik will be able to access the infrastructure. The project was approved in 2020 (GCC (EI) & GGC, 2019).

Solid waste disposal site project Waswanipi: The Cree First Nation of Waswanipi will develop a new solid waste management site with an expected life span of 25 years. The project is located on Category II lands. The certificate of authorization was issued on March 10, 2017 (Environmental and Social Impact Review Committee, 2019)

Project to restore the Principale Mine: The Ministry of Energy and Natural Resources plans to restore the abandoned Principale Mine site, which has been inactive since the mid-2000s. The site is located five kilometres in proximity to Chibougamau. The remediation is intended to ensure human safety, limit the spread of harmful substances, restore the site to an environmentally acceptable condition and make the site compatible with future uses. An amendment to the certificate of authorization that was issued in 2014 was made on October 21, 2020 (Environmental and Social Impact Review Committee, 2020).


5.6 CONSTRUCTION MATERIALS

PORTRAIT

As stated in the *Cree-Québec Governance Agreement*, the CNG can have jurisdiction over gravel and sand quarries on Category II lands. Category II lands' quarries and borrow pits are shown **on Figure 46**. While the quarries mostly extract gravel and limestone, borrow pit extraction focuses on sand (MERN, n.d.).

ARE THERE ANY UPCOMING PROJECT(S)?

La Grande Alliance

As mentioned before, La Grande Alliance wants to explore the possibility of implementing a transportation corridor, which would impact the transportation of construction materials.

Billy Diamond Highway

The Billy Diamond Highway is being renovated and the construction work has already begun. The renovation work includes paving and shoulders refilling and culverts work (James Bay Development Corporation, n.d.).

Kakabat Granular Material Deposit Project by Cree Nation of Wemindji

The Cree Nation of Wemindji has planned a principal granular material deposit on Category I lands. The deposit is anticipated to have a lifetime of 40 years, and a passage is needed on the Jibaud river to access the deposit. The certificate of authorization was issued on June 28, 2017 (Environmental and Social Impact Review Committee, 2017).



KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- A shortage of construction materials in the future can be expected. There is a need to go further within the territory to get access to construction materials, which requires the opening of new roads and will increase the costs of construction materials. These new sites will increasingly be opened in Category II lands.
- There is uncontrolled development around quarries that recently reopened. There is little supervision and monitoring around quarries and borrow pits, which negatively impacts the health and safety of the communities as well as the land and rivers.

LAND PLANNING ACTION ITEMS

- Collect more data on gravel and sand management, monitoring, and needs.
- Study feasibility and economic viability of the CNG and /or the Cree First Nations ownership and management of the quarries for Category II lands.
- Identify any gaps in the processes that arise from the *LQE* and the *Regulation respecting sand pits and quarries and define norms.*
- Locate potentials pits and quarries, in order to plan and to regulate them with regard to other long-term development on the territory and the safety of land users.







ECONOMY 6

6.1 NATURAL RESOURCES

"IN RELATION TO WATER AND OTHER RESOURCES, THE JAMES BAY CREES AND OTHER ABORIGINAL PEOPLES GENERALLY ADVOCATE A PRINCIPLE OF SHARING. OUR TRADITIONAL KNOWLEDGE AND PRACTICES CAN SERVE TO MAKE A UNIQUE AND ESSENTIAL CONTRIBUTION TO RESOURCE MANAGEMENT. WHILE SHARING MAY MEAN EXCLUSIVE OR PREFERENTIAL RIGHTS OF USE AND MANAGEMENT IN SOME AREAS WITHIN OUR TRADITIONAL TERRITORIES, OTHER AREAS MAY BE SUBJECT TO JOINT OR OTHER COOPERATIVE ARRANGEMENTS. FURTHERMORE, LAND AND RESOURCE RIGHTS ARE INSTRUMENTAL IN PROVIDING APPROPRIATE SUPPORT FOR THE EFFECTIVE EXERCISE OF SELF-GOVERNMENT. RECOGNITION OF COMMUNAL PROPERTY RIGHTS TO LAND AND RESOURCES FOSTERS GOOD STEWARDSHIP OF RESOURCES; OPEN ACCESS POLICIES DO NOT"

"IN ORDER FOR CREES TO BEST CAPITALIZE ON NATURAL RESOURCE DEVELOPMENT IN THEIR TERRITORY, IT IS CRITICAL THAT THEY HAVE OWNERSHIP: OF THE RESOURCES AS MUCH AS POSSIBLE (I.E., THROUGH OWNING STAKES IN MINING PROJECTS) AND OF THE COMPANIES THAT ARE NECESSARY FOR NATURAL RESOURCE EXTRACTION AND TRANSFORMATION. THESE SHOULD BE GIVEN PREFERENTIAL TREATMENT WHEN IT COMES TO OBTAINING CONTRACTS FOR WORK AROUND NATURAL RESOURCE DEVELOPMENT"

(EPC, Group 2, n.d., p. 3)

(CNG, 1999, p. 9)



Figure 41 | The Forestry Industry

CHISAS MINDE CHISASID, ORADISSON

FORESTRY

Portrait

The development of the mining industry accelerated the growth of the forest activities in Eeyou Istchee starting in the early 20th century. It was, however, in the 1960s that the industry really settled in the southern part of the region, where most of the cutting, operations, and forestry shelters are concentrated (CRRNTBJ, 2011b).

The Crees of Waswanipi, Mistissini and Ouje-Bougoumou have knowledge and significant achievement abilities in the fields of wood processing, heavy equipment operations, forest road construction and silviculture. Yet overall, few job positions are held by Crees in the wood-processing plants and supply operations. Since the signing of the Paix des Braves, the Crees have been advocating for greater consideration and support to maximize the benefits related to job creation and economic development in the Cree communities (CNG, 2014a).

What Timber Products Are Present in Eeyou Istchee

The most widespread commercial tree species in Eeyou Istchee are balsam fir, black spruce, jack pine, tamarack, paper birch, and trembling aspen (CRRNTBJ, 2011b). The Communities and Category II Lands section contains maps that locate Eeyou Istchee's commercial forest species.

What Non-Timber Products Are Present In Eeyou Istchee?

The non-timber forest industry is booming in the Northern Québec region. Wild currants, Labrador tea, fireweed flowers, myrica seeds (sweet balsam), dune pepper (twitched alder), cloudberry, and spruce sprouts are among the plants and fruits from the region's Boreal Forest that are sought after on the market. Mushrooms including the fire morel, matsutake, and russet dermatosis (crab mushroom) are also among Northern Québec's marketed products (MFFP, 2018).







Figure 43 | Forestry Roads



What Legislation Applies to Forestry?

The MFFP has authority in Eevou Istchee for forestry matters, and issuing permits (MFFP, n.d.-b). However, the provisions stated in the agreements signed by the Crees must be respected.

Legislation that applies to forestry include:

> The Paix des Braves Chapter 3:

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- Chapter 3 of the *Paix des Braves* provides details on two key elements related to forestry:
 - Mechanisms for consultations and engagement with tallymen in the forestry planning process.
 - Cree economic development within the forestry sector (CNG & Department of Commerce and Industry, 2017).

> The Sustainable Forest Development Act

- This act contains provisions specific to Cree communities (Chapter II & III). (Sustainable Forest Development Act, 2020).

> The Regulation respecting standards of forest management for forests in the domain of the State

This regulation contains provisions with respect to location and construction of roads (Division V), forest camps (Division VI), forest management activities in terms of resources to be protected and territorial units (Division VII), and protection against forest degeneration (Division IX), among others (Regulation Respecting Standards of Forest Management for Forests in the Domain of the State, 2018).

What Do These Provisions Mean for the Crees and Their Involvement in Forestry Planning?

As a result of the AFR no forest development activities may be carried out on sites of interest to the Crees unless the tallyman agrees. These sites were identified by tallymen in 2002, where the total area of these sites must not exceed 1% of the total area of a trapline included in a development unit. Forested areas of wildlife interest were also identified in 2002, where mosaic cutting is applied and residual forest blocks to be preserved are decided by Cree tallymen and the Minister. The surface area of these wildlife interest areas cannot exceed 25% of the productive forest area of each trapline (Cree Québec Forestry Board, 2018c).

As part of Chapter 3 of the Paix des Braves, Joint Working Groups were established in 2002. Each group has four to six members, half of whom represent Québec and half are Cree. Each of the five Cree communities within the AFR have a Joint Working Group (Cree Québec Forestry Board, 2018b).

In 2019, the *Paix des Braves* was amended to harmonize the Québec Forest Regime with the AFR. Local Integrated Land and Resource Management Panels (TGIRT) were established to agree on harmonized uses between the Crees and the Government of Québec and to take into account the "interests and concerns of the Cree and Jamésians affected by the forest development activities planned on Category II and III lands" (Cree Québec Forestry Board, 2018a).

This amendment also led to the implementation of new forest planning tools: the Tactical Integrated Forest Development Plan (PAFIT) and the Integrated Operational Forest Development Plan (PAFIO). The PAFIT is established every five years and involves the Joint Working Groups, MFFP, TGIRTs, CNG, and EIBJRG. The plan includes allowable cuts and strategies to achieve the sustainable forest development objectives. The PAFIO covers the same period as the PAFIT and includes the register and zones for timber harvesting and forest development. These zones are selected annually by the Minister and Cree tallymen, with the plan preparation involving the same parties as the PAFIT (Cree Québec Forestry Board, 2018a).

Any forest intervention must also comply with the provision contained in the Regulation respecting standards of forest management for forests in the domain of the State (Regulation Respecting Standards of Forest Management for Forests in the Domain of the State, 2018).



KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- plans, supervision, etc.).
- and biodiversity.

LAND PLANNING ACTION ITEMS

- products harvesting.
- farms.
- construction of a road.

• There is economic potential for Cree-led development related to sustainable forestry management, such as using waste for biomass, selling carbon credits, implementing tree farms, and non-timber products harvesting. These markets require better control mechanisms (e.g., harvesting quotas, regeneration

• Forestry roads facilitate the access to the territory. Restoration of some of these roads is due or on going. The management of the development of forestry roads and restoration projects is essential to prevent negative impacts on landscapes, traplines

• There is a lack of monitoring of smaller construction or renovation projects that occur in forestry camps.

• Through the Cree land use mapping exercise, identify multi-use roads that are no longer used and should be reforested.

• Update the mapping of forestry roads.

• With communities, identify potential areas for non-timber

• Explore the opportunities and constraints of implementing tree

• Explore measures to address the impacts of resource development projects and multi-use roads, and define norms namely regarding forest restauration following a project or the

• In collaboration with the Department of Forestry, tallymen, and land users, assess the need for regional planning tools that could enhance and improve consultation and decision-making processes in forestry planning.

(Also see section on Transportation)

MINING

"THE CREES ARE PREPARED TO SUPPORT AND PARTICIPATE IN RESOURCE DEVELOPMENT WITHIN EEYOU ISTCHEE, PROVIDED THAT THEIR RIGHTS ARE RESPECTED, APPROPRIATE MEASURES ARE TAKEN TO PROTECT THE ENVIRONMENT, AND BENEFITS FLOW TO THE COMMUNITIES."

(Dr. Matthew Coon Come cited by GCC (EI) & CNG, 2016, p. 11)

Figure 44 | How Do Mining Activities Translate to Every-Day Life?





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Road de-icing

The Seleine mine, on the Îles-de-la-Madeleine, is the only salt mine in Québec. Canada

Figure 45 | The Mining Industry

Industry Summary

Mining activities have been present in Eeyou Istchee since the 1950s when mines opened in the southern part of the territory as well as in the regions that are adjacent to the south end of Eeyou Istchee. While there have been many fluctuations in the amount of exploration activity in the second part of the 21st century, the number of claims made in the territory since 2000, as well as the diversity of minerals found, suggest a continuing interest in mineral operations and the opening of new mines in Eeyou Istchee (CRA, 2007). Base metal deposits (zinc, lithium, and copper) (CRRNTBJ, 2011a), nickel, gold, silver, cobalt, iron, platinum, diamond, and ilmenite are among the metals and minerals mined (Government of Canada, 2021b; Québec (Province) & Secrétariat au Plan Nord, 2015). Eeyou Istchee also has borrow pits and quarries. The table below presents the current mining projects in Eeyou Istchee. In terms of the exploration projects listed, the table is not exhaustive, but presents the most advanced and significant projects. Figure 46 shows the active claims, active mines, borrow pits and quarries as well as mining projects and areas subject to maintenance operations.



Figure 46 | Current mining projects in Eeyou Istchee in 2016

PROJECT	COMPANY	ORE	STATUS/STAGE	TRAPLINE	AGREEMENT
Eleonore mine	Newmont	Gold	Exploitation	Wemindji - VC29	Opinagow Agreement
Renard Mine	Stornoway Diamonds	Diamonds	Exploitation	Mistissini – M11	Mecheshoo Agreement
Whabouchi project	Nemaska Lithium	Lithium	Development: Permitted, Section 22 review complete - Construction started, but on pause	Nemaska - R20	Chinuchi Agreement
Blackrock project	Blackrock Metals	Iron-Vanadium- Titanium	Development: Permitted, Section 22 review complete - Financing needs completion before construction	Ouje-Bougoumou – O59	Ballyhusky Agreement
Rose-Lithium- Tantalum project	Critical Elements Corporation	Lithium - Tantalum	Undergoing Section 22 review by COMEX and review by Federal-Cree Joint Committee.	Eastmain – RE01	Pikhuutaau Agreement
Bachelor Lake (Moroy zone) and Barry projects	Bonterra Resources	Gold	Undergoing section 22 review	Waswanipi - W24A (Bachelor), Lot 19 (Barry)	Harmonization Agreement was in place for Bachelor mine from 2008 onward.
James Bay Lithium project	Galaxy Lithium	Lithium	Undergoing Section 22 review by COMEX and review by Federal-Cree Joint Committee.	Eastmain – RE02	N/A
Moblan Lithium project	Lithium Guo Ao	Lithium	Undergoing Section 22 Comex Review	Mistissini - M40	N/A
Windfall Lake project	Osisko Mining	Gold	Advanced Exploration : Has not started Section 22 Review by COMEX. Several approvals for underground ramp and bulk sampling.	Waswanipi - W25B	N/A
Fenelon project	Wallbridge Mining	Gold	Advanced Exploration : Has not started Section 22 Review by COMEX. Several approvals for underground ramp and bulk sampling.	Waskaganish - A04, Washaw Sibi - Trapper Family (Beatrice)	N/A
Troilus project	Troilus Gold Corp	Gold	Advanced Exploration : Has not started Section 22 Review by COMEX for the mining project, approval obtained to dewater the pits.	Mistissini – M34, M39A, M40	Pre-Development Agreement



Titre: Renard Mine | Source : MinesQC

PROJECT	COMPANY	ORE	STATUS/STAGE	TRAPLINE	AGREEMENT
Mont Sorcier	Vanadium One Iron Corp	Iron-Vanadium- Titanium	Exploration	Ouje-Bougoumou – 057	N/A
Cheechoo project	Sirios Resources	Gold	Exploration	Wemindji - VC29	N/A
Eau Claire project	Fury Gold Mines	Gold	Exploration	Eastmain – VC37	N/A
Corner Bay, Cedar Bay	Doré Copper Mining	Gold and Copper	Exploration	Ouje-Bougoumou - 059 (Note they have other sites on other traplines as well)	N/A
Elmer	Azimut Exploration	Gold	Exploration	Eastmain - VC33	N/A

(GCC & CNG, 2016)



Legal Context

What Legislation Applies to Mining?

The Ministry of Energy and Natural Resources (MERN) of Québec administrates mining exploration and extraction activities in the province of Québec. The Crees do not have subsurface rights on public lands, therefore, the MERN is the management authority that authorizes mining claims.

Legislation that relate to mining include:

> The Paix des Braves, Chapter 5

> The Cree Nation Mining Policy

- This policy was developed by the Grand Council of the Crees to offer guidelines for undertaking mining activities sustainably and with respect to Cree rights and interests (Cree Regional Authority cited by GCC (EI) & CNG, 2016, p. 12).

> The Mining Act

- This document has provisions for mining activities. Chapter I.1 includes considerations that are specific to Indigenous communities (2020).

The CNG is currently developing a Mining Strategy to provide recommendations on how to resolve these challenges and to develop an interdepartmental mining strategy (GCC (EI) & CNG, 2016).

Summary of What These Provisions Mean for the Crees

The provisions and conditions contained in the agreements signed by the Crees, and the acts, policies, and strategies have resulted in specific conditions concerning mining exploration and extraction per land category in Eeyou Istchee. Those conditions are summarized below and on Figure 47.

Category I Lands

- > The Crees have surface rights
 - Mineral and subsurface rights belong to the Government of Québec.
 - Exploration is not allowed, only permitted with the consent of the Cree First Nation concerned.

Category II Lands

Non-beneficiaries of the JBNQA have access to Category II lands in accordance with the Québec laws and regulations governing public land.

- > Mining exploration
 - Allowed but it must be carried out so as to avoid unreasonable conflict with Cree harvesting activities.
- > Mining exploitation
 - Replacement of Category II lands affected or, if the Cree community prefers and an agreement can be reached, compensation could be provided.

Category III Lands

Non-beneficiaries of the JBQN have access to Category III lands for various uses in accordance with laws and regulations applicable to Public Lands.

- > The general mining legislation is applicable (Mining Act, L.R.Q. c. M-13.1).
- > Mining exploration in the province of Québec is managed by the MERN.
- > The owner of a claim must carry out exploration work up to a minimum standard to keep its claim in good standing and to allow for its renewal.

(Directly cited from CMEB, 2019, p. 7)



Figure 47 | Mining Restrictions



KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- Although extractive activities generate economic benefits, they have negative impacts on the environment. Exploring waste recovery potential could help diminish the negative impacts of mining activities on the environment.
- There is limited control, dialogue, and information sharing with Crees over prospecting and mining exploration activities (e.g., camps and their infrastructure, and onetime project exploration). Unlike the situation for commercial forestry, there is no formal consultations or engagement process with Cree land users for mining exploration activities.
- There is no monitoring of the restoration of mining exploration sites and camp sites.

LAND PLANNING ACTION ITEMS

- Identify gaps in the *Mining Act*, and define norms namely regarding restoration, buffers, and impacts on biodiversity and land users. This could support and inform the CNG's *Mining* Policy.
- Put in place a communication system with mining activities to collect data and the location of up-coming projects. The Mining Act requires proponents to provide this information. Map and monitor these projects to support long-term planning efforts.
- Explore the possibility to have transformation and secondary processing facilities within Eeyou Istchee. Explore potential locations for these facilities.
- Explore the possibility of identifying areas that are not compatible with mining activities, as provided for in the *Mining* Act and the Cree-Québec Governance Agreement.

Figure 48 | Hydroelectric Power Infrastructure

HYDROELECTRICITY

Portrait

Hydroelectricity has significantly impacted Eeyou Istchee's development and landscapes due to river diversion and the construction of large dams, reservoirs, and transmission lines.

The La Grande Hydro Electric Complex generates more than 50% of the total electricity produced by Hydro-Québec. The La Grande Complex refers to a series of hydroelectric facilities built by Hydro-Québec on the La Grande River between 1973 and 1996. It produces 64.6 TWh of energy every year (CRRNTBJ, 2010a).

Other significant dam complexes were constructed in Eeyou Istchee. These include the hydroelectric power station on the upper of part of the Eastmain River, along with a reservoir with an area of 600 km² (Eastmain-1 powerhouse and Eastmain reservoir). Operations began in 2003, and the complex has been in full service since April 2007. It produces 2.7 TWh of energy annually (CRRNTBJ, 2010a). Figure 48 shows the locations of the current power stations and dams in Eeyou Istchee.



Legal Context

What Legislation Applies to the Hydroelectricity Industry?

In Québec, energy production is under the responsibility of the MERN. This ministry's powers are detailed in the Act respecting the Ministère des Ressources naturelles et de la Faune (CRRNTBJ, 2010a).

Legislations that concern the hydroelectricity industry include the Paix des Braves (CNG, n.d.a).

Although the MERN and the agreements provide the provisions for energy infrastructure development in Eeyou Istchee, the CNG is authorized to develop energy projects (hydro, wind or other) of up to 50 kw/h on Category II lands.

Are There Any Upcoming Project(s)?

Whapmagoostui Wind Energy Project

This project intends to partially replace the use of diesel-powered electricity with renewable energy. The proposed two wind turbines will generate an installed capacity of 3.0 MW of wind power or approximately six gigawatt hours of electricity annually over the project's estimated 25-year lifespan, contributing about 40% of the community's energy needs. The quantity of CO2 this is replacing is the equivalent of the consumption of 4,000 cars per year and the project would therefore reduce the diesel consumption by at least 1.45 million liters in the first year of operation in 2024 or 2025 (COMEX, n.d.).



KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- The monetary cost of energy produced by hydroelectric projects is low, therefore, the economic incentives to develop alternative energy sources is relatively low. However, solar and wind energy have potential in the region, especially in remote locations.
- The CNG has powers to develop energy projects of 50 kW/h or less on Category II lands
- Hydroelectric development has had a significant impact on the environment and on the Cree way of life.
- There is a lack of maintenance on some of the hydroelectric project infrastructure.

LAND PLANNING ACTION ITEMS

- Explore the possibility of developing Cree owned smallscale energy projects, carbon capture technologies, and cogeneration facilities, and identify their potential location.
- Explore ways to manage the maintenance of infrastructure (i.e., transmission lines).
- Define norms to oversee the implementation of future hydroelectric and energy projects.



La Grande-4 | Source : Hydro-Québec

6.2 HUNTING AND TRAPPING ECONOMY

Section 30 of the *JBNQA* provided for an income security program to guarantee economic security for Cree people who wish to pursue hunting, fishing, and trapping activities as a way of life. Under this agreement, Québec has full responsibility to ensure this program has the necessary funds to give the program full effect (*James Bay and Northern Québec Agreement*, 1975). The Cree Hunters and Trappers Income Security Program is the existing program, where the head of the family must spend 120 days conducting harvesting and related activities each year to receive benefits from the program (Cree Hunters and Income Security Board, n.d.).

6.3 EMERGING MARKETS

This section presents a selection of emerging markets in education, fresh food, energy, and resource management. Those emerging trends might be relevant to Eeyou Istchee depending on the local context, funding, legal framework, weather, ecology and many other factors within the communities.

ENERGY

Mining Activities and Potential for Wind Energy

Major mining exploration projects in Eeyou Istchee are not connected to the hydroelectricity network. These projects demand a lot of energy and use diesel or natural gas to produce their own electricity, therefore, they increase road traffic in addition to not making use of a sustainable energy source. As the Grande Alliance is currently exploring solutions to adopt greener energy sources for mining projects (CNG, 2021b), the shift towards the use of wind or geothermal energy could represent an interesting solution.

Wind Energy in Raglan Mine

Eeyou Istchee could draw inspiration from the Raglan Mine in Nunavik. This mine is not linked to the hydroelectric or natural gas networks and relies on diesel to produce its own energy. In recent years, however, the mine decided to move away from diesel dependency by installing wind turbines to generate energy. The first turbine was built in 2014 and the structure has a strong steel foundation and construction, which mitigates permafrost and reduces the quantity of concrete and sand needed (which are very costly to acquire and transport to the mine's isolated location). A second

turbine was assembled in 2018. The two turbines are forecast to produce approximately 10% of the mine's total energy. This would save about 4.4 million litres of diesel fuel per year and diminish greenhouse gas emissions by about 12,000 tonnes (the equivalent of taking 2,700 vehicles off the road) (Glencore Canada, 2018).

Abandoned Mines and Potential for Geothermal Energy

Eeyou Istchee does not present the conditions for exploiting high temperature geothermal energy. Yet there is potential for geothermal exploitation using the heat stored in the water that fills abandoned mines. There are a few examples of the use of such technology in Canada. Springhill in Nova Scotia uses the hot water that fills an abandoned coal mine to heat certain areas of the Springhill Industrial Park. The town of Chapais has also implemented a geothermal system using water from decommissioned mine pipes to heat a residential development. A complete inventory of abandoned mines present in the territory, as well as a characterization of the water reservoirs contained at these sites would allow for detailed information on the potential for geothermal energy for the region. (CRRNTBJ, 2010a)

Forest Biomass

Biomass is a plant material produced by photosynthesis. It can be used as a fuel to produce heat or electricity. Biomass sources include parts of trees that are not used during harvesting, non-saleable trees, and forests disturbed by fires or insect epidemics. Biomass also includes products of industrial processes (sawdust, bark, shavings), the black liquor from wood pulp manufacture, as well as wood waste generated by construction work. Biomass can also come from tree or shrub plantations specifically created for energy production. Possible energy uses of biomass include ethanol production, cogeneration, the production of densified sticks or granules as well as the production of heat for industrial heating and for institutional and commercial buildings (CRRNTBJ, 2010a).

Biomass Energy Use in Ouje-Bougoumou

In 1992, the community of Ouje-Bougoumou built a central wood heating installation and a local energy system to heat all buildings in the community. In 2000, it was assessed that the biomass system covered 89.2% of energy needs while costing only 17.8% of the total village heating bill to operate. That year, this biomass system provided 7,688 MWh of thermal energy, out of a total consumed of 8,561 MWh. The community of Ouje-Bougoumou has been awarded several national and international distinctions in terms of sustainable development because of this sustainable integrated energy system (CRRNTBJ, 2010a).

Solar Energy

There is a lack of documentation on solar energy in Eeyou Istchee. Solar energy use is currently limited to supplying the radio communication industry, chalets, and remote residences. Solar energy use is therefore marginal and not part of distribution networks (CRRNTBJ, 2010a). That said, there is potential for better exploitation of solar energy in Eeyou Istchee. Exploring this potential could help reduce diesel dependency and move towards a cleaner energy economy. Furthermore, a few communities with as little as five hours of sun a day that have adopted this form of energy supply. This shows that solar energy does not only make sense in places where there is plenty of sunlight.

The community of Kuujjuaq in Nunavik implemented a project that saved more than 400 litres (105.67 gallons) of diesel in two months. Solar panels provided an equivalent amount of electricity (1,100 kwh). The pilot project represented an investment of \$560,000 (Del Belo, 2017).

Other northern communities have implemented solar systems. There are about 70 small communities in Alaska that have renewable hybrid systems that use wind, solar or hydro power to limit their diesel dependency. Wind and solar energy have also been used for a decade in many small Siberian communities (Sahar Zerehi, 2016).

One barrier to the deployment of renewable energy systems is the high cost associated with the development of such infrastructure. However, a study about recent developments in renewable energy in Nunavut found that there is an interest from external groups such as the environmental group, World Wildlife Fund — Canada (WWF) in supporting a shift towards renewable energy. Furthermore, recent decreases in the cost of solar infrastructure and battery storage applications and the need to replace or upgrade diesel plants in many Inuit communities led to an opportunity to rethink electricity systems in Nunavut. Such a shift would build local capacity and diminish dependency on fossil fuels (Karanasios & Parker, 2016).

LOCAL FOOD AUTONOMY

The development of bio food or non-timber products offers interesting potential for the Crees of Eeyou Istchee. The growing of fresh healthy food could complement the food that Crees get from the land without sacrificing traditional food systems. This might allow the communities to envision their own food system and gain food sovereignty. The promotion of bio food is one of the Northern Plan's objectives and this market could therefore benefit from the Plan's support in this area (Québec (Province) & Secrétariat au Plan Nord, 2015). The potential of developing bio food includes:

- > Fresher, more nutritious food products
- > Improving dietary health of the Cree and other residents in Eeyou Istchee
- > Generating revenue for Cree bio-food harvesters
- > Export potential (e.g., exporting mushrooms to Japan)
- > Possible opportunities for Cree jobs and businesses
- > Benefiting from the medicinal value of certain herbs and plants.

(Directly cited from Cree Nations of Eeyou Istchee, 2011)

On the topic of local food autonomy, some EPC Commissioners shared that generally, local initiatives such as smart farms, greenhouses, and community gardens present potential for the communities. They mentioned that such initiatives have many positive impacts, such as providing local food autonomy, supporting the establishment of new social relationship through an inexpensive and productive activity, and raising public awareness on the realities of agricultural activities (EPC, Group 1, 2019).

The Atikamekw d'Opitciwan, located south of Chibougamau, has six gardening spaces, which were implemented in 2019 and 2020. They also have a community garden, and gardens at their women's shelter and childcare centre. They also have flowerpots at their seniors' house, a capotowan greenhouse, and a food security garden plot. An educational greenhouse is planned for 2021 (Centre d'Innovation Sociale en Agriculture (CISA), n.d.).

Some Northern Indigenous communities have also started growing fresh and healthy foods. In the Northwest Territories, communities such as Kakisa, Univik, and the Ka'a'gee Tu First Nation have developed small-scale farming operations that not only help supply food for the community, but also uphold the traditional beliefs of caring for the land (Van De Woestyne, n.d.). Some nations located on the Canadian Shield use waste products such as fish waste to build soil and have started to grow potatoes and other root vegetables (Van De Woestyne, n.d.). Enhanced local production is generally supported by EPC commissioners. One suggested exploring the possibility of constructing a greenhouse to grow potatoes and pursue enhanced mushroom harvesting. Another commissioner suggested exploring the potential of fish farming (EPC, Group 3, 2019).



Credit: Rubin McNeely, Whapmagoostui



EDUCATION AND RESEARCH

Virtual Technologies

The Northern Plan intends to capitalize on the potential of tele-services for the health and education sectors. Among the proposed measures is the introduction of technological solutions adapted to remote training needs of northern institutions. Québec also wants to establish a tele-training pilot project in elementary and secondary schools (Québec (Province) & Secrétariat au Plan Nord, 2015).

Conferences

On education and research, one EPC commissioner suggested that thematic conferences (e.g., TED talks) could be held in the communities. They also suggested organizing educational activities on business development in the territory (EPC, Group 1, 2019).

Mobile Research Laboratories

In Nunavut, mobile research laboratories have been developed to act as weather stations to inform hunters of wind conditions and temperature along travel routes. These stations can also provide caches of emergency supplies that include a cellphone. The labs were developed with funding from the Canadian Northern Economic Development Agency and use discarded shipping containers that have been left behind in Arctic communities. They include insulation, a heater, a laboratory space that can host seven people, electrical outlets, and a composting toilet. Electricity is provided through solar panels during the Arctic summer and turbines during the winter (Benett, n.d.).

OPPORTUNITIES FOR NEW INDUSTRIES AND ENHANCED CREE OWNERSHIP

"CREE OWNERSHIP OF COMPANIES INVOLVED IN NATURAL RESOURCE EXTRACTION WOULD GIVE CREES MORE CONTROL. WHICH WOULD ALLOW THEM TO MINIMIZE THE IMPACTS OF THESE PROJECTS. IT WOULD ALSO ALLOW FOR THE MAXIMIZATION OF CREE EMPLOYMENT OPPORTUNITIES IN THESE SECTORS..."

(EPC, Group 3, n.d., p. 5)

Other ideas about potential economic markets have been discussed by EPC commissioners.

Many comments reflected a desire for more Cree ownership of economic markets:

- Enhanced involvement of the Crees in the manufacturing economy, ideally in the production of high end and niche market goods (e.g., eco-friendly containers) (EPC, Group 3, 2019).
- > Enhanced Cree ownership of transportation services to ensure the shipping of goods in Eeyou Istchee (EPC, Group 3, 2019).
- Enhanced direct involvement of the Crees in commerce activities for instance, through the development of a Cree chamber of commerce (EPC, Group 3, 2019).
- > Enhanced direct involvement of the Crees in industrial activities including mining, forestry, and energy production (EPC, Group 3, 2019).
- > Investing in pab housing manufacturing facilities (EPC, Group 3, 2019).



KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

is essential.

LAND PLANNING ACTION ITEMS

- connected services.



• There are several innovative projects in Eeyou Istchee that present highly sustainable development potential. Emerging market opportunities could help enhance the economic development of Eeyou Istchee while ensuring the conservation of its natural and cultural landscapes. Thoughtful coordination and monitoring of projects in this area, including pilot projects

- Create a detailed list of potential emerging projects and
- Define locations where these projects can be implemented.
- Define norms to oversee the implementation of these projects and potential impacts (e.g., for non-timber harvesting: sustainable practices and permits; for biomass: facilities near
 - commercial forests and delivery routes; for food autonomy: proper climate and soil conditions; etc.).

6.4 TOURISM AND RECREATION

Tourism and recreational activities in Eeyou Istchee are thriving. The destination is becoming increasingly popular nationally and internationally, and the region is developing its tourism offerings to increase its reach. As such, the coordination of land and resource uses as well as the conservation of the biodiversity have major impacts on tourism and recreation potential. Tourism and recreation can contribute to protecting the environment and culture of the region, while advancing the development of sustainable economic activities.

HOW IS THE TOURISM AND RECREATION INDUSTRY STRUCTURED AND MANAGED?

Recreation and tourism in Eeyou Istchee is developed and managed by different organizations that work together to offer products, create jobs, and support local endeavours in a way that will be sustainable over time. The population and entrepreneurs can work with these associations to promote and develop projects or to get access to industry-related information. Understanding the role of these organizations is important, as they act as stakeholders that participate in the development of potential tourism projects for Category II lands.

СОТА

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"OUR MISSION IS TO DEVELOP AND IMPLEMENT A COLLECTIVE VISION FOR A WORLD-CLASS SUSTAINABLE TOURISM INDUSTRY IN EEYOU ISTCHEE THAT IS IN HARMONY WITH CREE CULTURE AND VALUES AND THAT INVOLVES A PARTNERSHIP WITH CREE COMMUNITIES, INSTITUTIONS, AND BUSINESSES,"

(COTA, n.d.-a)

COTA is a non-profit corporation that was created through the JBNQA (Section 28). COTA coordinates the development of Eeyou Istchee's tourism industry.

COTA works within the following three action areas:

- > Fostering air access to Eeyou Istchee
- > Helping operators create market-ready tourism products
- > Marketing and promoting the region's tourism component and facilitating bookings with the establishment of a destination management company (COTA, n.d.-a).

Regional Tourism Associations

Regional Tourism Associations (RTA) are created by the Government of Québec, within the jurisdiction of the Ministry of Tourism, to represent and promote tourism initiatives in their respective regions. 21 RTAs exist in the province. They build management and development plans that sync regional and provincial objectives in terms of tourism, and target promotion and marketing; reception, information and signage for tourists; and the development and structuring of tourism offerings (Gouvernement du Québec, n.d.).

Eeyou Istchee Tourism

Eeyou Istchee Tourism (EIT) is the RTA responsible for Eeyou Istchee. It was created by COTA in 2007 to be eligible to receive provincial support while being able to remain a distinct Cree entity (COTA, n.d.-b).

Tourisme Baie-James

Among the RTAs, there is also Tourisme Baie-James, which is the equivalent of EIT for the James Bay region. The two regions are linked, therefore, the two associations work in partnership to represent the regions' tourism industry.

Eeyou Istchee Baie-James Travel

Eeyou Istchee Baie-James Travel (EIBJT) is a travel agency that was created by COTA, EIT and Tourisme Baie-James with respect to their mandates. The agency provides information and tools for tourists to plan and book their visits, activities, and packages. EIBJT also works with national and international travel agencies, destination management companies, and operators (EIBJT, n.d.).

Wiinipaakw Tours Solidarity Cooperative

Wiinipaakw Tours Solidarity Cooperative is a non-profit organization. It was created in 2018 and is overseen by COTA. It offers a space for communities, entrepreneurs, professionals, and trainees to develop successful sustainable coastal tourism projects. The coop is open to all communities. Currently, Wemindji, Eastmain, and Waskaganish have joined the coop, and two package projects are almost ready to be offered to customers - Cruises on the Bay and Creetopia, a glamping experience inspired by Cree Culture. Bookings and marketing will be managed by EIBJT (WTSC, n.d.).



Titre : Assinica Proposed National Park | Source: MFFP

HOW ARE TOURISM AND RECREATION OFFERINGS ORGANIZED?

Three Main Hubs

COTA and EIT's 2020-2025 Tourism Strategy offers interesting insights about land management in the region.

Figure 49 | COTA's 2020-2025 Tourism Strategy -Three Tourism Hubs



The region is divided into three tourism hubs based on potential distinctive offers, which means different potential land use activities and operating seasons. The region's tourism strategy and experiences are directly impacted by other land and resource uses and designations, and by climate change and biophysical factors.

Whapmagoostui, Chisasibi, and Wemindji are positioned as the Northern Coastal Hub, and the gateway to the Arctic experience. The Southern Hub, composed of Waskaganish, Eastmain, and Nemaska, is characterized by water landscapes. Mistissini, Waswanipi, Ouje-Bougoumou are within the Inland Hub. This hub is notable or its national park landscapes (COTA, 2020).

Access

The strategy highlights potential routes that can be used to travel between hubs and within them by looking at flight and car routes. Water routes are, however, not included. These connections form itineraries for travellers. Among the upcoming projects is the designation of the Billy Diamond Memorial Highway as a tourism route, which is in progress (COTA, 2020).

Access is very important to the creation and promotion of tourism activities. Without easy access to the land, it is challenging to bring tourists and staff to destinations while ensuring their safety and comfort. Motorized, air, and sea transportation are the current options to travel in the territory. However, vehicle transportation necessitates driving long distances. Travelling by plane or boat is very expensive, the latter means being less developed.

The roads that serve Eeyou Istchee must therefore have both functional and aesthetic attributes. For example, they need to be suitable for trucks that deliver oil to an industrial site, to families going camping, and to someone commuting for work between two communities. The management of this multiple use is crucial to ensure that the routes remain pleasing and appealing to travellers, while ensuring the safety of all users during any season. These considerations also apply to airports, marine ports, and marine routes, since they are - or will be - used by travellers, tourists, industries, and businesses.

The management of public infrastructure (emptying of garbage bins, rest areas, etc.) on Category III land routes is handled by the EIJBRG and could be improved. However, it is unclear which organization has authority on Category II land routes.

REGIONAL PORTRAIT OF EEYOU ISTCHEE

Figure 50 | Outfitting and Commercial Leases

Outfitting

The JBNQA provides COTA with the authority to support Cree outfitting camps to ensure that recreational harvesting activities in the region benefit the Crees. However, since stricter rules have been adopted in the Region restricting hunting and fishing, outfitting camps have somewhat lost their importance on the territory. In fact, a moratorium was put in place on all new outfitting developments in Category III lands. The moratorium has been in place since 1996 (Grand Council of the Crees (Eeyou Istchee), Cree Nation Government, 2020). Some recreational harvesting can still be practised in controlled environments and with quotas, for example within the Nibiischii Wildlife Reserve.

Multiple outfitting camps have therefore been abandoned across the territory. The utility of outfitting camps is being questioned and transformed. New uses and activities within outfitting camps would allow for some abandoned sites to be repurposed.



Figure 51 | Parks and Wildlife Reserves

Recreational Activities

The region offers multiple opportunities to practise recreational activities such as camping, canoeing, hiking, and others. The Cree vision for these activities is to encourage them within controlled areas. National parks, wildlife reserves, or local campsites for example are appropriate places to host activities and greet tourists.

However, there is a significant number of informal activities that are carried out in the territory by the public. Multiple issues are tied to these activities: wilderness camping is practised in unknown sites, waste is not properly managed, impacts on fauna and flora are unknown, impacts on traplines are unknown, the acceptability of the activities is not confirmed with land users, and the safety of tourists cannot be verified. A lack of defined sites and control mechanisms contributes to these issues.

MRCs are enabled through articles 112 and 121 of the Municipal Powers Act to, by by-law, determine the location of a regional park. Regional parks are natural spaces designed for the practice of recreational and sports activities. Although not a protected area, the MRC can adopt-by-laws, in respect of a regional park, regarding the protection and conservation of nature (Ministry of Municipal Affairs and Housing, n.d.). The Obalski Regional Park is one of such regional parks that exists in the territory.

National parks, wildlife reserves, and protected areas are important land designations that offer potential for recreational and tourism activities.

Wildlife reserves involve the conservation, development, and use of wildlife as well as recreational activities. In wildlife reserves, wildlife harvesting activities are restricted and heavily monitored (Sépag, 2021). Wildlife reserves are regulated under the Wildlife Conservation and Development Act, however the Regulation does not apply to Cree, Inuit and Naskapi Beneficiaries referred to in the Act Respecting the Cree, Inuit and Naskapi Native Persons in the Assinica and Lacs-Albanel-Mistassini-and-Waconichi (Règlement Sur Les Réserves Fauniques Loi Sur La Conservation et La Mise En Valeur de La Faune, n.d.). The Assinica and Albanel-Mistassini-and-Waconichi Lakes are the wildlife reserves that exist in the territory.



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Figure 52 | Forest Shelter Leases

Forest Shelter Leases

Historically the Ministry of Natural Resources has granted leases for forest shelters for the use of sport hunting and fishing. Concerns grew over the increasing number of shelter leases in Eeyou Istchee territory and the negative impact on Crees' rights to use the land. In 2004, transitional measures on the development of vacation leases were adopted by the Ministry of Natural Resources, where rough shelter leases in Category I and II lands, protected areas, and protected area projects, and territories of interest to the Crees were made prohibited (James Bay Advisory Committee on the Environment, n.d.).





James Bay Region Boundary

+ Forest Shelter

Figure 53 | Vacation Leases

Vacation Leases

Vacation leases, granted by the Government of Québec to non-Crees, are present in the Territory. The lease grants occupants a permanent right to build a cabin or cottage. No density limits existed, and resulted in an increasing number of vacation leases impacting the Crees' ability to freely exercise their rights on Category III lands (Cree Nations of Eeyou Istchee, 2011). A moratorium was agreed in 2012 between the Crees and the Ministry of Natural Resources on all new non-Cree cabin development. (Grand Council of the Crees (Eeyou Istchee), Cree Regional Authority, 2013), This moratorium on non-Cree cabin leases is still in place (Grand Council of the Crees (Eeyou Istchee), Cree Nation Government, 2020).





What Projects Have Been Nurtured in Eeyou Istchee?

The tourism and recreation experiences offered can stand on their own or be combined into a variety of packages. Most activities can be combined with historical storytelling and visits, cultural experiences, and arts and crafts. Hunting and fishing – where permitted under Treaties and supported by local First Nations — outfitting, and outdoor activities can also be found throughout the territory and can be offered complementary to other products.

In terms of land and resource use, experiences and ecosystems should be protected from negative constraints related to other uses. Moreover, the relationship potential between these activities should be considered.

Various projects have been developed or are being developed in Eeyou Istchee. Projects that are related to land use, planning, and natural resources include:

- Creation of The UNESCO Geoparks Network, which encompasses geo-sites and geo-routes that will highlight the region's sought-after geological treasures
- > Promotion of ecotourism products within protected areas
- > Development of snowmobile trails
- Advertisement of non-timber forest products for sustainable picking activities
- > Market entry of Creetopia high-end glamping sites
- > Diversification of boat cruise itineraries through Wiinipaakw Tours
- > Implementation of sea kayak and canoe tours
- > Development of snowshoe packages
- > Designation of Billy Diamond Memorial Highway as a tourism route
- Design of tourism maps and signage
- > Development of an air access master plan
- > Training of guides for various potential activities
- > Research of impacts on wildlife such as polar bears and caribou
- > Etc.

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(COTA, n.d.-c)

KEY INSIGHTS TO MOVE FORWARD WITH LAND PLANNING

- Tourism and recreation can positively impact the development of the economy and the protection the region's biodiversity, culture, and identity. The region's tourism strategy and projects are directly impacted by other land and resource uses and designations.
- National parks, wildlife reserves and protected areas now form 23% of Eeyou Istchee, which represents great potential for protecting and promoting Cree-led sustainable tourism and recreational activities.
- Infrastructure necessary for recreation and tourism itineraries such as routes, airports, and marine ports are used by other industries. Yet, the lack of access to the territory restrains the development of tourism projects, namely because of costs.
- There is currently a moratorium on vacation and rough shelter leases and on outfitting camps by non-Crees. There are multiple abandoned outfitting camps on the territory. The HFTCC can contribute to regulating new outfitting camps.
- Eeyou Istchee offers world class fishing as an outfitting experience. As an example, Lake Mistassini is the biggest freshwater lake in the province. It has thriving sport fishing businesses and upscale fishing outfitting camps.
- Wilderness camping is authorized on public lands. The provincial regulation controlling wilderness camping is not strict enough to ensure proper management of this activity in the context of Eeyou Istchee. It contributes to the illegal occupation issue. Camping equipment is sometimes altered towards a more comfortable and permanent accommodation, especially near popular strategic locations and beaches. The management of vacation leases and wilderness camping can be delegated to the regional administrative bodies through an agreement with the MERN and following the development of governmental plan framing recreational activities, developed in collaboration with regional stakeholders.
- The issues regarding vacation leases and wilderness camping mainly concern Category III lands. It requires working relationship with the EIJBRG.
- There is no mechanism to control informal activities on the territory.

LAND PLANNING ACTION ITEMS

- Identify areas where tourism and recreation activities can take place to ensure the harmonious cohabitation of uses, the preservation of experiences and potential, and the safety of users. Offer year-round activities to sustain a full-time economy.
- The EPC should be involved in any type of governmental planning exercise related to recreational activities. This involvement is necessary to ensure that the recreational activities are done in way that does not interfere with Cree use.
- Through the Cree land use mapping exercise, identify areas where Cree use is hampered by the presence of non-Cree activities, as well as areas where these activities would not hamper the traditional use of the territory.
- Establish areas where campground and wilderness camping are allowed and define norms to exert a better control on these activities and where those sites are located. Develop a permit system to regulate the access to sites that present safety concerns for users, such as rivers.
 Increase the quantity of signage and interpretation panels on the routes and use this signage to integrate Cree cultural information such as
- Increase the quantity of signage and interpretation panels on the routes and use this signage place names and language.
- Complete an inventory of abandoned outfitting camps and define whether their site should be cleaned and restored or renovated and reused.
- Explore ways to increase regional capacity and support and collaboration for the establishment of the Nibiischi National Park and Assinica National Park projects. Build connectivity and collaboration around these projects
- Provide opportunities for increased employment and tourism related activities for Whapmagoostui in relation to the Tursujuq National Park.

be cleaned and restored or renovated and reused. nent of the Nibiischi National Park and Assinica



7 Commu-nities and Category II Lands



7 COMMUNITIES AND CATEGORY II LANDS

LOCAL COMMUNITY PORTRAITS

This section presents an overall portrait of the nine Cree communities that are included in this portrait, alongside with their Category II lands. It supports the background work undertaken for the preparation of regional planning tools for Eeyou Istchee. A mapping analysis was done to highlight the differences and development potential amongst Category II lands throughout the territory. Specifically, this analysis will be looking at their locations, hydrography, topography, wetlands, forests, wildlife, infrastructure, and minerals. Overall, Category II lands cover an area of approximately 70,000 sq. km.

The sociodemographic analysis of Eeyou Istchee was based on data collected from Statistics Canada (2016) and the ISQ (2019).

The mapping analysis was based on three datasets:

- Fifth Ecoforestry Inventory of Southern Québec (Cinquième inventaire écoforestier du Québec méridional), Commercial Forest (2017).
- Northern Quebec Ecoforestry Inventory Project (Projet d'inventaire écoforestier du Québec nordique (PIEN), North of Commercial Forest and South of 53rd parallel (Wemindji) (2005 & 2009).
- Vegetation of Nord-du-Québec (Végétation du Nord Québécois, North of 53rd parallel (Wemindji), (2013 & 2015).

Chisasibi Eastmain Mistissini Nemaska Ouje-Bougoumou Waskaganish Waswanipi

Wemindji

Whapmagoostui



CHISASIBI

Chisasibi means Great or Big River in Cree. The community of Chisasibi, with approximately 5,000 inhabitants, is located on the eastern shore of James Bay, along the La Grande River, essentially at the river's mouth. It is the northernmost Cree community accessible by road.

Previously settled at Fort George Island, the community was relocated following the hydroelectric development at La Grande complex in the 1970s. This project has had significant impacts on the communty's lands, but it also influenced the economic development of the community.

Chisasibi is the biggest community of Eeyou Istchee, and it is being prepared to host several regional ameneties such as a regional hospital.





POPULATION OVERVIEW

The 2016 census places the population of Chisasibi at 4,872, including 250 Inuit and 300 non-Cree people. This represents a 40.5% increase from 2001, when the population was 3,467. The growth observed is significantly lower in the province of Québec for the same period (12.8%). However, this level of population growth is similar to the one that was observed in all of Eeyou Istchee, where the average rate of increase between 2001 and 2016 was 35.7%.

In 2019, the ISQ estimated population growth for all Québec municipalities and Indigenous communities. They estimated that the Chisasibi population would be 6,487 in 2036, representing a 31.4% increase from the 2016 population. In comparison, Eeyou Istchee will grow by 25.3% by 2036, and the province of Québec will grow by 12%.

The age composition of Chisasibi's population is comparable to that of Eeyou Istchee. It is, however, much younger than the population of the province of Québec and Canada. In fact, one third of the community's population is aged 14 and under (31%). This proportion is 30% for Eeyou Istchee and 15% for Québec. In contrast, while 24% of the population of Québec is 65 years and over, this proportion is only 9% in Chisasibi and 8% in Eeyou Istchee.

Population Growth from 2001 to 2036







HOUSING

According to the 2016 census, there are 1,005 households in Chisasibi. This represents an increase of 27% when compared to the 2006 census.

Household size in Chisasibi has decreased slightly in the last 10 years from a 5-person household in 2006, to an average household size of 4.8 between 2011 and 2016. The household size in Chisasibi is significantly higher than that of the province of Québec (2.3).

In terms of dwellings requiring major repairs, Chisasibi has experienced an increase of 29% between 2006 and 2016. In fact, in 2006, 25% of the dwellings in the community required major repairs, whereas that percentage had increased to 32% by 2016.

Household Size in 2006, 2011, and 2016



7 COMMUNITIES AND CATEGORY II LANDS

Household Size Variation from 2006 to 2016





EDUCATION

At 60%, the percentage of Chisasibi's population without a high school diploma is 9% higher than that for the total population of Eeyou Istchee. For the province of Québec, that percentage is 20%.

The percentage of Chisasibi's population with an apprenticeship or trades certificate or diploma is 9% and is lower than that of Eeyou Istchee (15%). At 17%, the percentage in the province of Québec is higher than in Chisasibi.

The proportion of the population whose highest diploma is from high school is the same in Chisasibi (11%) and in Eeyou Istchee (11%). The proportion is higher in the province of Québec generally, where 22% of the population have a high school diploma as their highest level of diploma.

At 12%, the percentage of the population whose highest diploma is a college or CEGEP certificate or diploma is similar to Eeyou Istchee (13%). In the province of Québec, that percentage is 18%.

The proportion of people with a university diploma or certificate is similar in Chisasibi (8%) and Eeyou Istchee (6%). In total, 29% of Chisasibi's population have a post-secondary level diploma.

Education Level in 2016



Employment per Occupation Sector in 2016

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EMPLOYMENT

The participation rate is the proportion of the population aged 15 years and over who are in the labour force. To be considered in the labour force, one needs to either be working or actively looking for a job. In 2016, the participation rate in Chisasibi was 63.2%, which is slightly lower than the participation rate in Eeyou Istchee (65.4%) and in the province of Québec (64.1%).

At 53.2%, the employment rate in Chisasibi was also slightly lower than that of Eeyou Istchee (55.0%) and of the province of Québec (59.5%). The employment rate is the proportion of people aged 15 years and over who are working.

The unemployment rate in Chisasibi (15.8%) is similar to Eeyou Istchee (15.9%) but higher than the province of Québec (7.2%). The unemployment rate is the proportion of the labour force that is out of a job.

Classification of workers in Chisasibi by type of occupation shows that 23% of employed community members work in management, finance and administration, 23% work in education, law and social, community and government services, 23% work in sales and services, and 16% work in trades, transportation, machinery and related occupations.

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EMPLOYMENT

Classification of workers in Chisasibi by industry shows that 43.2% of employed community members work in education and health services, 16.1% work in government and public services, 10.7% work in construction and manufacturing, and 7.7% work in retail and wholesale trade. It is notable that the majority of employed community members work in public services (59.3% - education, health services, government and public services).

Employment per Industry in 2016



LOCATION

Chisasibi's Category II lands extend north up to approximately the northern tip of Long Island, south to Chinusas Lake, west to James Bay, and east to the Robert-Bourassa Reservoir.



HYDROGRAPHY & TOPOGRAPHY

Chisasibi's Category II lands incorporate a few level 1 watersheds including:

> Aquatuc

> Truite

> Caillet

> Castor

- > Phoque
- > Roggan
- > Vaquelin
- > Kapsaquis
- > Guillaume
- > Piagochioui
- > Grande Riviere

In addition, they incorporate a few level 2 watersheds including:

- > Achazi
- > Necoapastic
- > Corbin
- > Lac Burton
- > Denys

In terms of topography, the highest point on the Category II lands is approximately 361 m above sea level. Overall, the highest elevations are located in the northeast, gradually descending towards James Bay.



WETLANDS

The main types of wetlands are peatland fens, along with a few swamps and peatland forested areas.



FOREST

Forested areas are mostly coniferous forests with some shrublands, Boreal heaths, Subarctic heaths, and tundra.



SPECIES OF SPECIAL CONCERN AND PROTECTED AREAS

Chisasibi's Category II lands are characterized generally by an important bird area along the James Bay shore, and a large proposed territorial reserve for protected area purposes named "Lac-Burton-Rivière-Rogganet- la-Pointe-Louis-XIV." In addition, ecological hotspots for specific species are found throughout the area. Specifically, Harlequin ducks can be found mostly in the proposed protected area, and lake sturgeon can be found throughout the La Grande River.



There are fourteen traplines on Chisasibi's Category II lands territory.

TRAPLINES

INFRASTRUCTURE

Chisasibi's Category II lands include minimal infrastructure. In fact, there is only one forest shelter in the northern portion of the territory.



MINERALS

Two quarries and multiple borrow pits are present on the territory, especially north of Chisasibi's Category IA & IB lands.



INFRASTRUCTURE AND WATERFLOW

Most watersheds outflow towards the James Bay.



PLACES WITH CREE NAMES

Chisasibi's territory includes a wide range of places with Cree names, including places of historical significance (trade posts, birth sites, and burial sites), waterways (lakes, rivers, waterfalls and rapids), topography (beaches, islands, mountains, caves, wooded areas), places for traditional activities (berry picking, beaver dams, spawning, campsites, and hunting blinds), places used for transportation (portages, trails, junctions, embarkation areas, and bridges), and other places (general areas and points unknown).





Locations of Communities and Category II Lands



Hydrography & Topography

0,2

GUILLAUME



> Level 1: River that flows directly into a major waterbody (e.g., ocean, sea).





> Level 2: River that flows into another river.



Wetlands



Forest







Species of Special Concern and Protected Areas



Traplines









Infrastructure



Minerals






Infrastructure and Waterflow





Places with Cree Names



N.B. : Cree language place names in the Cree Nation Government's place names database. The names were gathered from Cree elders and land users since the late 1970s and demonstrate historic and contemporary knowledge and stewardship of their territory. Gaps should not be interpreted as evidence of a lack of occupancy as research is ongoing. The presence of names within the territory of neighbouring nations should also not be interpreted as supporting any sort of claim to the territory – historic relations with neighbouring peoples, and travel routes to historic posts in these territories mean that Cree people shared, knew and used Innu, Naskapi, and Atikamekw place names. For further information on the Cree Place Names database please contact the Cree Nation Government's Department of Social and Cultural Development.

EASTMAIN

Eastmain is located on the east coast of James Bay and on the shore of the Eastmain River. Eastmain is named after the Hudson Bay trading post that was originally located on the north shore of the Eastmain River. It is home to approximately 833 residents.

Today, the community's main economic activities are its service sectors, with a wide range of recreational, commercial, and community facilities. It is also the headquarters for the Cree Regional Trappers Association, whose role is to support all local Cree Trappers by maintaining the practices of their traditional activities.

The community is accessible via Eastmain Road, which connects the community to Billy Diamond Highway. It is also accessible by air via its airport.





POPULATION OVERVIEW

The 2016 census places the population of Eastmain at 886 people. This represents a notable increase of 41.3% from 2001, when the population was 613. The growth observed in the province of Québec for the same period is significantly lower (12.8%). However, this level of population growth is similar to the one that was observed in all of Eeyou Istchee, where the average rate of increase between 2001 and 2016 was 35.7%.

In 2019, the ISQ estimated population growth for all Québec municipalities and Indigenous communities. They estimated that the Eastmain population would be 1,279 in 2036, representing a significant increase of 46.2% from the 2016 population. In comparison, Eeyou Istchee will grow by 25.3% by 2036 and the province of Québec will grow by 12%.

The age composition of Eastmain's population is comparable to that of Eeyou Istchee. It is, however, much younger than the population of the province of Québec and Canada. In fact, one third of the community's population is aged 14 and under (32%). This proportion is 30% for Eeyou Istchee and 15% for the province of Québec.

In contrast, while 24% of the population of the province of Québec is 65 years and over, this proportion is only 7% in Eastmain and 8% in Eeyou Istchee.

Population Growth from 2001 to 2036



Age Composition in 2006, 2011, and 2016





HOUSING

According to the 2016 census, there are 200 households in Eastmain. This represents a significant increase of 33% from 150 households in 2006.

Household size in Eastmain has decreased slightly in the last 10 years from 4.3 persons per household in 2006 to 4.2 in 2016. The household size in Eastmain is significantly higher than that of the province of Québec (2.3).

In terms of dwellings requiring major repairs, Eastmain has experienced a significant decrease of 25% between 2006 and 2016. In fact, in 2006, 40% of the dwellings in the community required major repairs, whereas that percentage decreased to 30% in 2016.

Household Size in 2006, 2011, and 2016



7 COMMUNITIES AND CATEGORY II LANDS

Household Size Variation from 2006 to 2016



EDUCATION

At 38%, the percentage of Eastmain's population without a high school diploma is 13% lower than that for the total population of Eeyou Istchee (51%). For the province of Québec, that percentage is 20%.

The percentage of Eastmain's population with an apprenticeship or trade certificate or diploma is 28% and is significantly higher than that of Eeyou Istchee (15%). At 17%, the percentage in the province of Québec is lower than in Eastmain.

The proportion of the population whose highest diploma is from high school is similar in Eastmain (14%) and in Eeyou Istchee (11%). The proportion is higher in the province of Québec where a high school diploma is the highest level of diploma for 22% of the population.

At 14%, the percentage of the population whose highest diploma is a college or CEGEP certificate or diploma is similar to Eeyou Istchee (13%). In the province of Québec, that percentage is 18%.

The proportion of people with a university diploma or certificate is similar in both Eastmain (6%) and for Eeyou Istchee (6%). In total, 48% of Eastmain's population have a post-secondary level diploma.

Education Level in 2016



Employment per Occupation Sector in 2016





EMPLOYMENT

In 2016, the participation rate in Eastmain was a notable 73.9%, which is higher than the participation rate in Eeyou Istchee (65.4%) and in the province of Québec (64.1%).

At 67%, the employment rate in Eastmain was also significantly higher than that of Eeyou Istchee (55.0%) and of the province of Québec (59.5%). The employment rate is the proportion of people aged 15 years and over who are working.

The unemployment rate in Eastmain is 9.4%, which is lower than Eeyou Istchee (15.9%) but slightly higher than the province of Québec (7.2%). It should be noted that Eastmain has the lowest unemployment rate in Eeyou Istchee. The unemployment rate is the proportion of the labour force that is out of a job.

Classification of workers in Eastmain by type of occupation shows that 24% of employed community members work in management, finance and administration, 23% work in education, law and social, community and government services, 30% work in sales and services, and 10% work in trades, transportation, machinery and related occupations.

7 COMMUNITIES AND CATEGORY II LANDS



EMPLOYMENT

Classification of workers in Eastmain by industry shows that 31.7% of employed community members work in education and health services, 26.8% work in government and public services, 7.3% work in construction and manufacturing, and 8.5% work in retail and wholesale trade. It is notable that the majority of employed community members work in public services (58.5% — education, health services, government and public services).

Employment per Industry in 2016



LOCATION

Eastmain's Category II lands extend north to Cape Hope Island, south to the southern edge of Namekus Lake, west to James Bay, and east to the Billy Diamond Highway.



HYDROGRAPHY & TOPOGRAPHY

Eastmain's Category II lands incorporate a few level 1 watersheds including:

- > Conn
- > Eastmain
- > Mouton
- > Jolicoeur

In addition, they incorporate level 2 watersheds including:

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- > La Pêche
- > Opinaca
- > À l'Eau Froide
- > Jolicoeur Nord-Est

In terms of topography, the highest point on Category II lands is approximately at 280 m above sea level. Overall, the highest are located in the southeast, gradually descending towards James Bay.

7 COMMUNITIES AND CATEGORY II LANDS

exploitation

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WETLANDS

The main types of wetlands are peatland fens and peatland forested areas, along with a few swamps and marshes.



FOREST

Coniferous forests are found throughout the territory, with some Boreal heaths found in the northwest and southwest portion. In addition, mixed forests, shrublands and broadleaf forests are found in the central portion of the territory.



SPECIES OF SPECIAL CONCERN AND PROTECTED AREAS

Wildlife of special concern across the territory consists mainly of lake sturgeon in the Eastmain River, with least weasels in a small area just north of the community's main settlement.



TRAPLINES

Eastmain's Category II lands includes eight traplines.



INFRASTRUCTURE

Eastmain's Category II lands include a tertiary road, namely Eastmain Road, and two infrastructure facilities, one of which is for conservation purposes.



MINERALS

Eleven quarries and sixteen borrow pits are present on the territory, with the vast majority located along Eastmain Road. In addition, the central and northeastern portions of the territory are covered with active claims.



INFRASTRUCTURE AND WATERFLOW

Most of the territory's watersheds outflow towards the James Bay.



PLACES WITH CREE NAMES

Eastmain's territory includes a wide range of places with Cree names, including places of historical significance (trade posts, birth sites, and burial sites), waterways (lakes, rivers, waterfalls and rapids), topography (beaches, islands, mountains, caves, wooded areas), places for traditional activities (berry picking, beaver dams, spawning, campsites, and hunting blinds), places used for transportation (portages, trails, junctions, embarkation areas, and bridges), and other places (general areas and points unknown).





Locations of Communities and Category II Lands





Hydrography & Topography



> Level 1: River that flows directly into a major waterbody (e.g., ocean, sea).

> Level 2: River that flows into another river.



Wetlands



Forest







Species of Special Concern and Protected Areas



Traplines









Infrastructure





Minerals





Infrastructure and Waterflow





Places with Cree Names



N.B. : Cree language place names in the Cree Nation Government's place names database. The names were gathered from Cree elders and land users since the late 1970s and demonstrate historic and contemporary knowledge and stewardship of their territory. Gaps should not be interpreted as evidence of a lack of occupancy as research is ongoing. The presence of names within the territory of neighbouring nations should also not be interpreted as supporting any sort of claim to the territory – historic relations with neighbouring peoples, and travel routes to historic posts in these territories mean that Cree people shared, knew and used Innu, Naskapi, and Atikamekw place names. For further information on the Cree Place Names database please contact the Cree Nation Government's Department of Social and Cultural Development.



MISTISSINI

The Cree Nation of Mistissini, which means Big Rock, is one of the inland communities, and is located on the shore of Lake Mistassini.

Today, the community is thriving with 3,833 community members. It is where the main oces for the Cree School Board, the Cree Human Resources Development Department, Eeyou Istchee's regional radio station, and the James Bay Cree Communications Society are located.

The community can be accessed by road through the R-167. The closest airport is located in Chibougamau, about 110 km away. The community is bordered by Mistassini Lake to the south and northwest, and forested areas to the east and northeast.





POPULATION OVERVIEW

The 2016 census places the population of Mistissini at 3,523 people. This represents a significant increase of 35.7% since 2001, when the population was 2,597. The growth observed for the same period is significantly lower in the province of Québec (12.8%). However, this level of population growth is the same as that observed in all of Eeyou Istchee, where the average rate of increase between 2001 and 2016 was also 35.7%.

In 2019, the ISQ estimated population growth for all Québec municipalities and Indigenous communities. They estimated that the Mistissini population would be 4,288 in 2036, representing a 20.3% increase from the 2016 population. In comparison, Eeyou Istchee will grow by 25.3% by 2036 and the province of Québec will grow by 12%.

The age composition of Mistissini's population is comparable to that of Eeyou Istchee. It is, however, much younger than the population of the province of Québec and Canada. In fact, one third of the community's population is aged 14 and under (29%). This proportion is 30% for Eeyou Istchee and 15% for Québec.

In contrast, while 24% of the population of the province of Québec is 65 years and over, this proportion is only 9% in Mistissini and 8% in Eeyou Istchee.

Population Growth from 2001 to 2036





HOUSING

According to the 2016 census, there are 905 households in Mistissini. This is a notable increase of 32% from 685 households in 2006.

Household size in Mistissini has decreased in the last 10 years from 4.2 persons per household in 2006, to 3.9 in 2016. The household size in Mistissini is significantly higher than that of Québec (2.3).

Household Size in 2006, 2011, and 2016



7 COMMUNITIES AND CATEGORY II LANDS

Household Size Variation from 2006 to 2016



In terms of dwellings requiring major repairs, Mistissini has experienced an increase of 21% between 2006 and 2016. In fact, in 2006, 33% of the dwellings in the community required major repairs, whereas that percentage increased to 40% in 2016.

EDUCATION

At 55%, the percentage of Mistissini's population without a high school diploma is higher than that for the total population of Eeyou Istchee (51%). For the province of the province of Québec, that percentage is 20%.

The percentage of Mistissini's population with an apprenticeship or trade certificate or diploma is 16% and is slightly higher than that of Eeyou Istchee (15%). At 17%, the percentage in the province of Québec is higher than in Mistissini.

The proportion of the population whose highest diploma is from high school in Mistissini is 9%, whereas Eeyou Istchee has an overall proportion of 11%. The proportion is higher in the province of Québec where a high school diploma is the highest level of diploma for 22% of the population.

At 13%, the percentage of the population whose highest diploma is a college or CEGEP certificate or diploma is to the same as Eeyou Istchee (13%). In the province of Québec, that percentage is 18%.

The proportion of people with a university diploma or certificate is the same in both Mistissini is 7% and Eeyou Istchee. In total, 36% of Mistissini's population has a post-secondary level diploma.

Education Level in 2016



EMPLOYMENT

In 2016, the participation rate in Mistissini was 65.2%, which is slightly lower than the participation rate in Eeyou Istchee (65.4%) and in the province of Québec (64.1%).

At 54.3%, the employment rate in Mistissini was also lower than that of Eeyou Istchee (55.0%) and of the province of Québec (59.5%). The employment rate is the proportion of people aged 15 years and over who are working.

The unemployment rate in Mistissini is a notable 17%, which is higher than Eeyou Istchee (15.9%) and higher than the province of Québec (7.2%). The unemployment rate is the proportion of the labour force that is out of a job.

Classification of workers in Mistissini by type of occupation shows that 21% of employed community members work in management, finance and administration, 24% work in education, law and social, community and government services, 26% work in sales and services, and 15% work in trades, transportation, machinery and related occupations.

Employment per Occupation Sector in 2016



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EMPLOYMENT

Classification of workers in Mistissini by industry shows that 40.5% of employed community members work in education and health services, 19.6% work in government and public services, 6.8% work in construction and manufacturing, and 10% work in agriculture, forestry, fishing, hunting, and mining. It is notable that the vast majority of employed community members work in public services (60.1% - education, health services, government and public services).

Employment per Industry in 2016



LOCATION

Mistissini's Category II lands are located around Mistassini Lake with the majority of the Category II lands located north of the lake.



HYDROGRAPHY & TOPOGRAPHY

The territory includes large water bodies like Mistassini Lake, Québec's largest natural lake by surface area, and Albanel Lake, and incorporates a few level 1 watersheds including:

- > Grande Rivière
- > Rupert
- > Nottaway

In addition, it incorporates a few level 2 watersheds including:

- > Sakami > Takwa
- > Pépeshquasati > Témiscamie
- > Wabissinane > Perche

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> Natastan > Charlifour

In terms of topography, the highest point on the Category II lands is 906 m above sea level. The territory is relatively flat with two important mountains: Mount Takwa with its peak at 714 m and Mount Bellinger.



WETLANDS

The main types of wetlands are peatland fens, peatland forested areas, and swamps. Generally, they are distributed mostly along the southern portion of the territory. Sparsely distributed shallow water wetlands and marshes can also be found.



FOREST

Coniferous forest is the predominant forest type found in Mistissini. Other types, such as mixed forests and broadleaf forests, along with some shrublands and Boreal heaths, can also be found throughout the territory in smaller quantities.



SPECIES OF SPECIAL CONCERN AND PROTECTED AREAS

Mistissini's Category II lands are characterized generally by the Albanel-Mistassini-and-Waconichi Lakes Wildlife Reserve and the proposed Nibiischii National Park, with some ecological connectivity to another reserve named "Drumlins-du-Lac-Clérac." Protected forest and habitat areas are found in the territory, mostly in the southern and eastern portions. In addition, ecological hotspots for specific species are found throughout the area. Specifically, lake sturgeon can be found in rivers flowing into Mistassini Lake.



TRAPLINES

There are nineteen traplines on the territory.



INFRASTRUCTURE

Mistissini's Category II lands include a secondary road, namely R-167, and a tertiary road, the northern section of the R-167, along with an extensive network of forestry roads, classes 1-4. In addition, a few infrastructure facilities can be found in the territory for different uses, such as outfitting camps (7), conservation (4), and others (9)).



MINERALS

Approximately twenty quarries and twenty six borrow pits are present on the territory, with the vast majority located along R-167. In addition, active mining claims can be found in the northern and southern portions of the territory.



INFRASTRUCTURE AND WATERFLOW

Watersheds outflow towards the James Bay and Lake Mistassini.



PLACES WITH CREE NAMES

Mistissini's territory incorporates a wide range of places with Cree names, including places of historical significance (trade posts, birth sites, and burial sites), waterways (lakes, rivers, waterfalls and rapids), topography (beaches, islands, mountains, caves, wooded areas), places for traditional activities (berry picking, beaver dams, spawning, campsites, and hunting blinds), places used for transportation (portages, trails, junctions, embarkation areas, and bridges), and other places (general areas and points unknown).





Locations of Communities and Category II Lands





Hydrography & Topography



> Level 1: River that flows directly into a major waterbody (e.g., ocean, sea).

> Level 2: River that flows into another river.







Wetlands



Forest







Species of Special Concern and Protected Areas





Traplines





Infrastructure





Minerals





Infrastructure and Waterflow





Places with Cree Names



N.B. : Cree language place names in the Cree Nation Government's place names database. The names were gathered from Cree elders and land users since the late 1970s and demonstrate historic and contemporary knowledge and stewardship of their territory. Gaps should not be interpreted as evidence of a lack of occupancy as research is ongoing. The presence of names within the territory of neighbouring nations should also not be interpreted as supporting any sort of claim to the territory – historic relations with neighbouring peoples, and travel routes to historic posts in these territories mean that Cree people shared, knew and used Innu, Naskapi, and Atikamekw place names. For further information on the Cree Place Names database please contact the Cree Nation Government's Department of Social and Cultural Development.

NEMASKA

The Cree Nation of Nemaska, which means Place to Fish, is located on the shores of Champion Lake and is accessible by road and air. Nemaska is the capital of the Cree Nation, and houses the Cree Nation Government's headquarters.

Originally, located on the shores of Nemascau Lake, the community was displaced in 1970 due to a hydroelectric project, and community members lived temporarily alongside the Cree Nations of Waskaganish and Mistissini. It was only in 1977 that 95 community members moved to the geographical area where the community is currently located, a location suggested and favoured by community elders at the time.

Today, the community is thriving with approximately 800 community members. It is connected to the Route du Nord, connecting community members to Mistissini and Chibougamau, as well as to the Cree Nations of Waskaganish and Chisasibi via the Billy Diamond Highway.

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POPULATION OVERVIEW

The 2016 census places the population of Nemaska at 760 people. This represents a 34.3% increase since 2001, when the population was 566. The growth observed in the province of Québec for the same period is significantly lower (12.8%). However, this level of population growth is similar to the one that was observed in all of Eeyou Istchee, where the average increase rate between 2001 and 2016 was 35.7%.

In 2019, the ISQ estimated population growth for all Québec municipalities and Indigenous communities. They estimated that the Nemaska population would be 986 in 2036, representing a 27.9% increase from the 2016 population. In comparison, Eeyou Istchee will grow by 25.3% by 2036 and the province of Québec will grow by 12%.

The age composition of Nemaska's population is comparable to that of Eeyou Istchee. It is, however, much younger than the population of the province of Québec and Canada. In fact, one third of the community's population is aged 14 and under (25%). This proportion is 30% for Eeyou Istchee and 15% for the province of Québec.

In contrast, while 24% of the population of the province of Québec is 65 years and over, this proportion is only 9% in Nemaska and 8% in Eeyou Istchee.

Population Growth from 2001 to 2036







HOUSING

According to the 2016 census, there are 210 households in Nemaska. This is a notable increase of 20% from 175 households in 2006.

Household size in Nemaska has increased slightly in the last 10 years from 3.6 persons per household in 2006 to 3.7 in 2016. The household size in Nemaska is significantly higher than that of Québec (2.3).

Household Size in 2006, 2011, and 2016



7 COMMUNITIES AND CATEGORY II LANDS

Household Size Variation from 2006 to 2016



In terms of dwellings requiring major repairs, Nemaska has experienced an increase of 66% between 2006 and 2016. In fact, in 2006, 23% of the dwellings in the community required major repairs, whereas that percentage increased to 38% in 2016.



EDUCATION

At 45%, the percentage of Nemaska's population without a high school diploma is lower than that for the total population of Eeyou Istchee (51%). For the province of Québec, that percentage is 20%.

The percentage of Nemaska's population with an apprenticeship or trade certificate or diploma is 23% and is higher than that of Eeyou Istchee (15%). At 17%, the percentage in the province of Québec is lower than in Nemaska.

The proportion of the population whose highest diploma is from high school is similar in Nemaska (13%) and in Eeyou Istchee (11%). The proportion is higher in the province of Québec where a high school diploma is the highest diploma level for 22% of the population.

At 14%, the percentage of the population whose highest diploma is a college or CEGEP certificate or diploma is similar to Eeyou Istchee (13%). In the province of Québec, that percentage is 18%.

The proportion of people with a university diploma or certificate is similar in both Nemaska (5%) and Eeyou Istchee (6%). 42% of Nemaska's population has a post-secondary level diploma.

Education Level in 2016





EMPLOYMENT

In 2016, the participation rate in Nemaska was a notable 73.9%, which is significantly higher than the participation rate in Eeyou Istchee (65.4%) and in the province of Québec (64.1%).

At 66.7%, the employment rate in Nemaska was also significantly higher than that of Eeyou Istchee (55.0%) and of the province of Québec (59.5%). The employment rate is the proportion of people aged 15 years and over who are working.

The unemployment rate in Nemaska is a notable 9.8%, which is lower than Eeyou Istchee (15.9%) but slightly higher than the province of Québec (7.2%). The unemployment rate is the proportion of the labour force that is out of a job.

Classification of workers in Nemaska by type of occupation shows that 24% of employed community members work in management, finance and administration, 24% work in education, law and social, community and government services, 25% work in sales and services, and 14% work in trades, transportation, machinery and related occupations.

Employment per Occupation Sector in 2016



7 COMMUNITIES AND CATEGORY II LANDS

EMPLOYMENT

Classification of workers in Nemaska by industry shows that 28.6% of employed community members work in education and health services, 31.0% work in government and public services, 7.1% work in construction and manufacturing, 8.3% work in agriculture, forestry, fishing, hunting and mining, and 8.3% work in retail and wholesale trade. It is notable that the majority of employed community members work in public services (59.6% - education, health services, government and public services).

Employment per Industry in 2016



LOCATION

Nemaska's Category II lands border the Route du Nord to the south, the Pontax River in part to the north and the western shore of Chenukamishish Lake to the west.



HYDROGRAPHY & TOPOGRAPHY

The territory incorporates large water bodies including Champion Lake, the Pontax River, the Rupert River, and a few level 1 watersheds including:

- > Pontax
- > Rupert

is 458 m above sea level. The landscape of the territory in each side of the Category II lands varies quite drastically. The western portion remains low with a few variations, whereas the elevations rise over the eastern portion, with some mountains being the highest elevation along the Rupert River.

In terms of topography, the highest point on Category II lands

In addition, it incorporates level 2 watersheds including:

- > Wachiskw
- > Nemiscau
- > Lemare



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WETLANDS

The main type of wetlands found in the the territory is peatland fens, and these areas are mostly located in the western portion of the territory. Peatland forested areas, swamps and marshes are also sparsely distributed.



FOREST

Coniferous forest is the predominant forest type found in Nemaska. Other types, such as mixed forests, broadleaf forests, and shrublands, along with some Boreal heaths, can also be found throughout the territory in smaller quantities.



SPECIES OF SPECIAL CONCERN AND PROTECTED AREAS

Lake sturgeon can be found in the Rupert River.



TRAPLINES

The territory comprises six traplines.



INFRASTRUCTURE

Nemaska's Category II lands incorporate a tertiary road, namely Route du Nord.



MINERALS

Approximately thirteen quarries and sixteen borrow pits are present on the territory, with the vast majority located along Route du Nord. In addition, active claims can be found throughout the eastern portion of the territory.



INFRASTRUCTURE AND WATERFLOW

Most watersheds outflow towards the James Bay and Lake Champion.



PLACES WITH CREE NAMES

Nemaska's territory includes a wide range of places with Cree names, including places of historical significance (trade posts, birth sites, and burial sites), waterways (lakes, rivers, waterfalls and rapids), topography (beaches, islands, mountains, caves, wooded areas), places for traditional activities (berry picking, beaver dams, spawning, campsites, and hunting blinds), places used for transportation (portages, trails, junctions, embarkation areas, and bridges), and other places (general areas and points unknown).

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Locations of Communities and Category II Lands





Hydrography & Topography



> Level 1: River that flows directly into a major waterbody (e.g., ocean, sea).

> Level 2: River that flows into another river.









Forest







Species of Special Concern and Protected Areas



Traplines







Infrastructure





Minerals





Infrastructure and Waterflow





Places with Cree Names



N.B. : Cree language place names in the Cree Nation Government's place names database. The names were gathered from Cree elders and land users since the late 1970s and demonstrate historic and contemporary knowledge and stewardship of their territory. Gaps should not be interpreted as evidence of a lack of occupancy as research is ongoing. The presence of names within the territory of neighbouring nations should also not be interpreted as supporting any sort of claim to the territory – historic relations with neighbouring peoples, and travel routes to historic posts in these territories mean that Cree people shared, knew and used Innu, Naskapi, and Atikamekw place names. For further information on the Cree Place Names database please contact the Cree Nation Government's Department of Social and Cultural Development.





OUJE-BOUGOUMOU

The Cree Nation of Ouje-Bougoumou, which means Place Where People

Gather, is an inland community located on the shore of Lake Opemiska. The community is home to approximately 940 people.

The community is bordered by Father Lake to the south and west, and forested areas to the north and east. It can be accessed by road via Ouje-Bougoumou Meskino, which connects the community to R-113. The closest airport is in Chibougamau, 40 km away.

Between 1920 and 1970, the community was relocated seven times due to mining activities. In the 1990s, the community built a new village at its current location after a decade of negotiations and discussions with the Government of Québec.





POPULATION OVERVIEW

The 2016 census places the population of Ouje-Bougoumou at 737 people. This represents a notable increase of 33.3% since 2001, when the population was 553. The growth observed for the same period in the province of Québec is significantly lower (12.8%). However, this level of population growth is similar to the one that was observed in all of Eeyou Istchee, where the average rate of increase between 2001 and 2016 was 35.7%.

In 2019, the ISQ estimated population growth for all Québec municipalities and Indigenous communities. They estimated that the Ouje-Bougoumou population would be 997 in 2036, representing a 33.1% increase from the 2016 population. In comparison, Eeyou Istchee will grow by 25.3% by 2036 and the province of Québec will grow by 12%.

The age composition of Ouje-Bougoumou's population is comparable to that of Eeyou Istchee. It is, however, much younger than the population of the province of Québec and Canada. In fact, one third of the community's population is aged 14 and under (33%). This proportion is 30% for Eeyou Istchee and 15% for the province of Québec.

In contrast, while 24% of the population of Québec is 65 years and over, this proportion is only 6% in Ouje-Bougoumou and 8% in Eeyou Istchee.

Population Growth from 2001 to 2036







HOUSING

According to the 2016 census, there are 205 households in Ouje-Bougoumou. This is a notable 32% increase from 155 households in 2006.

Household size in Ouje-Bougoumou has decreased in the last 10 years from 3.9 persons per household in 2006, to 3.6 in 2016. The household size in Ouje-Bougoumou is significantly higher than that of the province of Québec (2.3).

In terms of dwellings requiring major repairs, Ouje-Bougoumou has experienced a notable decrease of 12% between 2006 and 2016. In fact, in 2006, 45% of the dwellings in the community required major repairs, whereas that percentage fell to 40% in 2016.

Household Size in 2006, 2011, and 2016



7 COMMUNITIES AND CATEGORY II LANDS

Household Size Variation from 2006 to 2016



EDUCATION

At 42%, the percentage of Ouje-Bougoumou's population without a high school diploma is lower than the total population of Eeyou Istchee (51%). For the province of Québec, that percentage is 20%.

The percentage of Ouje-Bougoumou's population with an apprenticeship or trade certificate or diploma is 19% and is higher than that of Eeyou Istchee (15%). At 17%, the percentage in the province of Québec is higher than in Ouje-Bougoumou.

Proportion of the population whose highest diploma is from high school is similar in Ouje-Bougoumou (16%) and in Eeyou Istchee (11%). The proportion is higher in the province of Québec where a high school diploma is the highest for 22% of the population.

At 16%, the percentage of the population whose highest diploma is a college or CEGEP certificate, or diploma is higher than to Eeyou Istchee (13%). In the province of Québec, that percentage is 18%.

The proportion of people with a university diploma or certificate is similar in both Ouje-Bougoumou (4%) and for Eeyou Istchee (7%). In total 42% of Ouje-Bougoumou's population has a post-secondary level diploma.

Education Level in 2016



Employment per Occupation Sector in 2016





EMPLOYMENT

In 2016, the participation rate in Ouje-Bougoumou was 74.5%, which is significantly higher than the participation rate in Eeyou Istchee (65.4%) and in the province of Québec (64.1%).

At 64.3%, the employment rate in Ouje-Bougoumou was also higher than that of Eeyou Istchee (55.0%) and of the province of Québec (59.5%). The employment rate is the proportion of people aged 15 years and over that are working.

The unemployment rate in Ouje-Bougoumou is a notable 13.7%, which is lower than Eeyou Istchee (15.9%) and higher than the province of Québec (7.2%). The unemployment rate is the proportion of the labour force that is out of a job.

Classification of workers in Ouje-Bougoumou by professions shows that 28% of employed community members work in management, finance and administration, 24% work in education, law and social, community and government services, 14% work in sales and services, 13% work in trades, transportation, machinery and related occupations, and 8% work in natural resources, agriculture and related production.

7 COMMUNITIES AND CATEGORY II LANDS

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EMPLOYMENT

Classification of workers in Ouje-Bougoumou by industry shows that 30.6% of employed community members work in education and health services, 29.2% work in government and public services, 5.6% work in construction and manufacturing, and 8.3% work in agriculture, forestry, fishing, hunting, and mining. It is notable that the vast majority of employed community members work in public services (59.8% - education, health services, government, and public services).

Employment per Industry in 2016





LOCATION

The Category II lands surrounding the community of Ouje-Bougoumou are bounded by the Assinica Wildlife Reserve to the north, Lake Opemisca to the south and Route du Nord to the east. The western boundary is in the area located east of La Trève Lake.



HYDROGRAPHY & TOPOGRAPHY

The altitude varies between 325 and 587 metres. The northern part of this territory borders the Assinica Wildlife Reserve and has a higher altitude.

There are many lakes and rivers as well as two level 1 watersheds on this territory:

- > Broadback
- > Nottaway



WETLANDS

The main types of wetlands are peatland fens, which are particularly present in the eastern part of the territory, forest peatlands, and swamps. A few shallow water bodies are also present.



FOREST

Most of this territory comprises species from the coniferous forest, although the south and north ends contain mixed forest vegetation. This territory also presents a few pockets of shrubland species.



SPECIES OF SPECIAL CONCERN AND PROTECTED AREAS

As mentioned before, the northern part of the territory is in the Assinica Wildlife Reserve. The territory also includes six zones designated as protected forest areas. In addition, the proposed Assinica National Park is, furthermore, projected in the northeastern part of the territory.



TRAPLINES

Ouje-Bougoumou's Category II lands comprise six traplines.



INFRASTRUCTURE

This territory has two forest shelters. It also features forestry roads of all classes, predominantly located west of the community of Ouje-Bougoumou.



MINERALS

There are more than thirty quarries and three borrow pits. The southwestern part of this territory is under an active mining claim.



INFRASTRUCTURE AND WATERFLOW

Most watersheds outflow towards the James Bay and Opémisca Lake.



PLACES WITH CREE NAMES

Ouje-Bougoumou's territory includes a wide range of places with Cree names, including places of historical significance (trade posts, birth sites, and burial sites), waterways (lakes, rivers, waterfalls and rapids), topography (beaches, islands, mountains, caves, wooded areas), places for traditional activities (berry picking, beaver dams, spawning, campsites, and hunting blinds), places used for transportation (portages, trails, junctions, embarkation areas, and bridges), and other places (general areas and points unknown).




Locations of Communities and Category II Lands





Hydrography & Topography



> Level 1: River that flows directly into a major waterbody (e.g., ocean, sea).

> Level 2: River that flows into another river.







Wetlands





Forest





Species of Special Concern and Protected Areas



Traplines









Infrastructure





Minerals





Infrastructure and waterflow





Places with Cree Names



N.B. : Cree language place names in the Cree Nation Government's place names database. The names were gathered from Cree elders and land users since the late 1970s and demonstrate historic and contemporary knowledge and stewardship of their territory. Gaps should not be interpreted as evidence of a lack of occupancy as research is ongoing. The presence of names within the territory of neighbouring nations should also not be interpreted as a supporting any sort of claim to territory – historic relations with neighbouring peoples, and travel routes to historic posts in these territories mean that Cree people shared, knew and used Innu, Naskapi, and Atikamekw place names. For further information on the Cree Place Names database please contact the Cree Nation Government's Department of Social and Cultural Development.





WASKAGANISH

The Cree Nation of Waskaganish means Little House. It is home to about 2,400 Cree and 25 non-Cree people. The community is located at the mouth of the Rupert River on the southeastern shore of James Bay.

Waskaganish is the oldest Cree community in Eeyou Istchee and is the birthplace of the Hudson Bay Company and the British fur trade in Canada. It is also well known for its waterways and prime fishing spots, hosting an annual canoe brigade every summer.





POPULATION OVERVIEW

The 2016 census put the population of Waskaganish at 2,196 people. This represents a 29.3% increase from 2001, when the population was 1,699. The growth observed for the same period in the province of Québec is significantly lower (12.8%). However, this level of population growth is similar to the one observed in all of Eeyou Istchee, where the average increase rate between 2001 and 2016 was 35.7%.

In 2019, the ISQ estimated population growth for all Québec municipalities and Indigenous communities. They estimated that the Waskaganish population would be 2,489 in 2036, representing a 12.2% increase from the 2016 population. In comparison, Eeyou Istchee will grow by 25.3% by 2036 and the province of Québec will grow by 12%.

The age composition of Waskaganish's population is comparable to that of Eeyou Istchee. It is, however, much younger than the population of the province of Québec and Canada. In fact, one third of the community's population is aged 14 and under (31%). This proportion is 30% for Eeyou Istchee and 15% for the province of Québec.

In contrast, while 24% of the population of the province of Québecis 65 years and over, this proportion is only 9% in Waskaganish and 8% in Eeyou Istchee.

Population Growth from 2001 to 2036







HOUSING

According to the 2016 census, there are 505 households in Waskaganish. It This is a notable 15% increase from 440 households in 2006.

Household size in Waskaganish has increased slightly in the last 10 years from 4.2 persons per household in 2006 to 4.3 in 2016. The household size in Waskaganish is significantly higher than that of the province of Québec (2.3).

In terms of dwellings requiring major repairs, Waskaganish has experienced an increase of 48% between 2006 and 2016. In fact, in 2006, 26% of the dwellings in the community required major repairs, whereas that percentage increased to 39% in 2016.

Household Size in 2006, 2011, and 2016



REGIONAL PORTRAIT OF EEYOU ISTCHEE

7 COMMUNITIES AND CATEGORY II LANDS

Household Size Variation from 2006 to 2016



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EDUCATION

At 51%, the percentage of Waskaganish's population without a high school diploma is the same as for the total population of Eeyou Istchee (51%). For the province of Québec, that percentage is 20%.

The percentage of Waskaganish's population with an apprenticeship or trade certificate or diploma is 15% and is the same as that of Eeyou Istchee (15%). At 17%, the percentage in the province of Québec is higher than in Waskaganish.

The proportion of the population whose highest diploma is from high school is similar in Waskaganish (14%) and in Eeyou Istchee (11%). The proportion is higher in the province of Québec where a high school diploma is the highest level of diploma for 22% of the population.

At 14%, the percentage of the population whose highest diploma is a college or CEGEP certificate, or diploma is similar to Eeyou Istchee (13%). In the province of Québec, that percentage is 18%.

The proportion of people with a university diploma or certificate the same in both Waskaganish (6%) and for Eeyou Istchee (6%). In total, 35% of Waskaganish's population has a post-secondary level diploma.

Education Level in 2016



Employment per Occupation Sector in 2016

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EMPLOYMENT

In 2016, the participation rate in Waskaganish was a notable 60.1%, which is lower than the participation rate in Eeyou Istchee (65.4%) and in the province of Québec (64.1%).

At 48.8%, the employment rate in Waskaganish was also significantly lower than that of Eeyou Istchee (55.0%) and of the province of Québec (59.5%). The employment rate is the proportion of people aged 15 years and over who are working.

The unemployment rate in Waskaganish (18.2%), which is higher than Eeyou Istchee (15.9%) and a lot higher than the province of Québec (7.2%). The unemployment rate is the proportion of the labour force that is out of a job.

Classification of workers in Waskaganish by type of occupation shows that 20% of employed community members work in management, finance and administration, 23% work in education, law and social, community and government services, 28% work in sales and services, and 17% work in trades, transportation, machinery and related occupations.

The unemployment rate in Waskaganish (18.2%), which is higher than Eeyou Istchee (15.9%) but slightly higher than Québec (7.2%). It should be noted that Waskaganish has the highest unemployment rate in Eeyou Istchee. The unemployment rate is the proportion of the labour force that is out of a job.

EMPLOYMENT

Classification of workers in Waskaganish by industry shows that 34.1% of employed community members work in education and health services, 24.4% work in government and public services, 11.4% work in construction and manufacturing, 4.5% work in agriculture, forestry, fishing, hunting, and mining, and 4.5% work in retail and wholesale trade. It is notable that the majority of employed community members work in public services (58.5% - education, health services, government and public services).

Employment per Industry in 2016



LOCATION

Waskaganish Category II lands are bounded by the Truite watershed to the north. The southern border is in the Missisicabi watershed. The territory extends up to the James Bay and Novide watersheds to thewest, and to Billy Diamond Highway to the east.



HYDROGRAPHY & TOPOGRAPHY

This territory's topography changes considerably depending on the area. The altitude rises to 340 metres in the west and south, and descends to sea level at James Bay.

Regarding Waskaganish's hydrography, the territory comprises many lakes and rivers. It also features eight level 1 watersheds:

- > Truite > Nottaway
- > Pontax > Missisicabi
- > Rupert > Octave
- > Broadback > Novide

It also comprises twelve level 2 watersheds:

- > Enistuwach
- > Machisakahikanistikw > Kitchigama
- > Obamsca > Natouacamisie
- > Missisicabi

> Lepallier

- > Patrick
- > Richerville
- > Missisicabi Ouest

> Iroquois

> Miskwatik

Lastly, the territory has a few residual watersheds along the James Bay shore near the community of Waskaganish.



WETLANDS

This territory has many wetlands, most of which are peatland fens or forest peatlands. A few swamps are also present.



FOREST

Most of the forest cover consists of coniferous species, although the territory presents small pockets of mixed forest vegetation. Small pockets of shrubland, broadleaf, and Boreal heath species are also present, mostly in the northeastern part of the territory.



SPECIES OF SPECIAL CONCERN AND PROTECTED AREAS

There are three proposed biodiversity reserves on this territory: Péninsule de Ministikawatin, Waskaganish, and Plaine de Missisicabi. Furthermore, the Government of Canada and more precisely, *the SARA*, have designated several rivers as important areas for ake sturgeon.

In terms of wildlife, a small zone located in the northwestern part of the territory on the James Bay coast is an important area for the short-eared owl and the Boreal chorus frog. There is also an important area for the bald eagle located east of the community of Waskaganish.



TRAPLINES

There are twenty four traplines on the territory.



INFRASTRUCTURE

The territory features little industrial activity. However, the Waskaganish Road links the east and west ends of the territory. Along this route, there is one area characterized by a conservation use.



MINERALS

There are more than thirty quarries and six borrow pits on the territory, mostly located along the Waskaganish Road. In addition, there is an area with an active claim in the southwestern part of the territory.



INFRASTRUCTURE AND WATERFLOW

Most watersheds outflow towards the James Bay.



PLACES WITH CREE NAMES

Waskaganish's territory includes a wide range of places with Cree names, including places of historical significance (trade posts, birth sites, and burial sites), waterways (lakes, rivers, waterfalls and rapids), topography (beaches, islands, mountains, caves, wooded areas), places for traditional activities (berry picking, beaver dams, spawning, campsites, and hunting blinds), places used for transportation (portages, trails, junctions, embarkation areas, and bridges), and other places (general areas and points unknown).







Locations of Communities and Category II Lands





Hydrography & Topography



> Level 1: River that flows directly into a major waterbody (e.g., ocean, sea).

> Level 2: River that flows into another river.





Wetlands



Forest







Species of Special Concern and Protected Areas



Traplines









Infrastructure





Minerals





Infrastructure and Waterflow





Places with Cree Names



N.B. : Cree language place names in the Cree Nation Government's place names database. The names were gathered from Cree elders and land users since the late 1970s and demonstrate historic and contemporary knowledge and stewardship of their territory. Gaps should not be interpreted as evidence of a lack of occupancy as research is ongoing. The presence of names within the territory of neighbouring nations should also not be interpreted as supporting any sort of claim to the territory – historic relations with neighbouring peoples, and travel routes to historic posts in these territories mean that Cree people shared, knew and used Innu, Naskapi, and Atikamekw place names. For further information on the Cree Place Names database please contact the Cree Nation Government's Department of Social and Cultural Development.



WASWANIPI

The Cree Nation of Waswanipi, which means Light on the Water, is the most southerly inland community with a population of 2,000.

Initially located further downstream on the river, the community has now re-established itself in a new village 45 km upstream of the former location. It is now located along the Waswanipi River and Highway 113. It is accessible by road and connects well to other municipalities in the region. The closest airport is in Chibougamau.

Waswanipi provides a wide range of outdoor recreational and tourism amenities, such as cross-country ski trails, rustic camping spots, a number of beautiful lakes and several challenging rivers for canoeing and kayaking. The community also has a variety of summer festivals and cultural events throughout the year.





POPULATION OVERVIEW

The 2016 census places the population of Waswanipi at 1,759 people. This represents a notable 39.5% increase from 2001, when the population was 1,261. The growth observed in the province of Québec for the same period is significantly lower (12.8%). However, this level of population growth is similar to the one observed in all of Eeyou Istchee, where the average increase rate between 2001 and 2016 was 35.7%.

In 2019, the ISQ estimated population growth for all Québec municipalities and Indigenous communities. They estimated that the Waswanipi population would be 2,130 in 2036, representing a 20.1% increase from the 2016 population. In comparison, Eeyou Istchee will grow by 25.3% by 2036 and the province of Québec will grow by 12%.

The age composition of Waswanipi's population is comparable to that of Eeyou Istchee. It is, however, much younger than the population of the province of Québec and Canada. In fact, one third of the community's population is aged 14 and under (33%). This proportion is 30% for Eeyou Istchee and 15% for the province of Québec.

In contrast, while 24% of the population of the province of Québec is 65 years and over, this proportion is only 7% in Waswanipi and 8% in Eeyou Istchee.

Population Growth from 2001 to 2036







HOUSING

According to the 2016 census, there are 415 households in Waswanipi. This is a notable increase of 19% from 350 households in 2006.

Household size in Waswanipi has increased slightly in the last 10 years from 4.1 persons per household in 2006 to 4.2 in 2016. The household size in Waswanipi is significantly higher than that of the province of Québec (2.3).

Household Size in 2006, 2011, and 2016



7 COMMUNITIES AND CATEGORY II LANDS

Household Size Variation from 2006 to 2016



In terms of dwellings requiring major repairs, Waswanipi experienced an increase of 15% between 2006 and 2016. In fact, in 2006, 36% of the dwellings in the community required major repairs, whereas that percentage increased to 41% in 2016.



EDUCATION

At 46%, the percentage of Waswanipi's population without a high school diploma is lower than the total population of Eeyou Istchee (51%). For the province of Québec, that percentage is 20%.

The percentage of Waswanipi's population with an apprenticeship or trade certificate or diploma is 21% and is higher than that of Eeyou Istchee (15%). At 17%, the percentage in the province of Québec is higher lower than in Waswanipi.

The proportion of the population whose highest diploma is from high school is the same in Waswanipi (11%) as in Eeyou Istchee (11%). The proportion is higher in the province of Québec where a high school diploma is the highest level of diploma for 22% of the population.

At 15%, the percentage of the population whose highest diploma is a college or CEGEP certificate, or diploma is higher than that of Eeyou Istchee (13%). In the province of Québec, that percentage is 18%.

The proportion of people with a university diploma or certificate is similar in both Waswanipi (4%) and for Eeyou Istchee (6%). In total, 40% of Waswanipi's population has a post-secondary level diploma.

Education Level in 2016



Employment per Occupation Sector in 2016





EMPLOYMENT

In 2016, the participation rate in Waswanipi was 62.8%, which is slightly lower than the participation rate in Eeyou Istchee (65.4%) and in the province of Québec (64.1%).

At 50.9%, the employment rate in Waswanipi was also lower than that of Eeyou Istchee (55.0%) and of the province of Québec (59.5%). The employment rate is the proportion of people aged 15 years and over who are working.

The unemployment rate in Waswanipi is a notable 19%, which is higher than Eeyou Istchee (15.9%) but slightly much higher than he province of Québec (7.2%). It should be noted that Waswanipi has the highest unemployment rate in Eeyou Istchee. The unemployment rate is the proportion of the labour force that is out of a job.

Classification of workers in Waswanipi by type of occupation shows that 23% of employed community members work in management, finance and administration, 26% work in education, law and social, community and government services, 25% work in sales and services, 10% work in trades, transportation, machinery and related occupations, and 9% work in natural resources, agriculture, and related production.

7 COMMUNITIES AND CATEGORY II LANDS

EMPLOYMENT

Classification of workers in Waswanipi by industry shows that 40.3% of employed community members work in education and health services, 29.9% work in government and public services, 6% work in construction and manufacturing, 10.4% work in agriculture, forestry, fishing, hunting, and mining, and 5.2% work in retail and wholesale trade. It is notable that the vast majority of employed community members work in public services (70.2% - education, health services, government and public services).

Employment per Industry in 2016



LOCATION

Waswanipi's Category II lands stretch approximately from Lake Evans in the north to Route 113 in the south, James Bay Road in the east, and La Trève Lake in the west.



HYDROGRAPHY & TOPOGRAPHY

The topography has a relief that goes from 234 metres of altitude up to 515 metres. The northeastern part of the territory is in the Mistissini Highlands natural province, and therefore has a higher altitude.

The territory comprises many waterbodies, including two level 1 watersheds:

- > Broadback
- > Nottaway

There are three main level 2 watersheds on the territory:

- > Nipukatasi
- > Waswanipi
- > Assinica



WETLANDS

The territory comprises swamps, peatland fens, and forest peatlands, which are spread across the entire area.



FOREST

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The forest cover is mainly composed of coniferous species although there are small pockets of mixed forest vegetation, shrubland, and broadleaf species.



SPECIES OF SPECIAL CONCERN AND PROTECTED AREAS

The territory comprises several protected forests located in its eastern portion. Around Waswanipi Lake, there is also an area where an aquatic reserve is proposed.

In terms of wildlife, waterbodies located in the western end, as well as a section of Waswanipi Lake, have been designated as important lake sturgeon areas by the Government of Canada and the SARA. The territory also comprises several areas that are important for the rock vole and one important area for the bald eagle.



TRAPLINES

There are twenty traplines within the territory.



INFRASTRUCTURE

Route 113, in the south of the territory, runs through the community of Waswanipi. The territory also features several forestry roads of all classes. There are three areas that house industrial uses on the territory and one area that is characterized by a conservation use.



MINERALS

This territory features numerous quarries and borrow pits. It also comprises many active claim areas, mostly located in its southern and northern portions.



INFRASTRUCTURE AND WATERFLOW

Most watersheds outflow towards the James Bay and River Waswanipi.



PLACES WITH CREE NAMES

Waswanipi's territory includes a wide range of places with Cree names, including places of historical significance (trade posts, birth sites, and burial sites), waterways (lakes, rivers, waterfalls and rapids), topography (beaches, islands, mountains, caves, wooded areas), places for traditional activities (berry picking, beaver dams, spawning, campsites, and hunting blinds), places used for transportation (portages, trails, junctions, embarkation areas, and bridges), and other places (general areas and points unknown).

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7 COMMUNITIES AND CATEGORY II LANDS

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Locations of Communities and Category II Lands





Hydrography & Topography



- > Level 1: River that flows directly into a major waterbody (e.g., ocean, sea).
- > Level 2: River that flows into another river.



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Wetlands





Forest





Species of Special Concern and Protected Areas





Traplines







Infrastructure





Minerals





Infrastructure and Waterflow





Places with Cree Names



N.B. : Cree language place names in the Cree Nation Government's place names database. The names were gathered from Cree elders and land users since the late 1970s and demonstrate historic and contemporary knowledge and stewardship of their territory. Gaps should not be interpreted as evidence of a lack of occupancy as research is ongoing. The presence of names within the territory of neighbouring nations should also not be interpreted as supporting any sort of claim to the territory – historic relations with neighbouring peoples, and travel routes to historic posts in these territories mean that Cree people shared, knew and used Innu, Naskapi, and Atikamekw place names. For further information on the Cree Place Names database please contact the Cree Nation Government's Department of Social and Cultural Development.

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WEMINDJI

Wemindji is located at the mouth of the Maquatua River and is the third northernmost community located on the coast of James Bay. Its name is derived from the Cree word meaning Painted Hill or Ochre Mountains. t is home to 1,539 Cree and 55 non-Cree people.

In 1959, the community was relocated north to its present location from an Island of Paakumshumwashtikw, formerly known as Old Factory. This was originally a trading post founded in the seventeenth century.

Wemindji's neighbours are the Cree communities of Chisasibi and Eastmain, and the non-native community of Radisson. Wemindji is accessible by road, air and water. A permanent road opened in September 1995, and connects Wemindji to the Billy Diamond Highway.





POPULATION OVERVIEW

The 2016 census places the population of Wemindji at 1,444 people. This represents a 31.9% increase from 2001, when the population was 1,095. The growth observed for the same period in the province of Québec is significantly lower (12.8%). However, this level of population growth is similar to the one that was observed in all of Eeyou Istchee, where the average increase rate between 2001 and 2016 was 35.7%.

In 2019, the ISQ estimated population growth for all Québec municipalities and Indigenous communities. They estimated that the Wemindji population would be 1,681 in 2036, representing a 15.3% increase from the 2016 population. In comparison, Eeyou Istchee will grow by 25.3% by 2036 and the province of Québec will grow by 12%.

The age composition of Wemindji's population is comparable to that of Eeyou Istchee. It is, however, much younger than the population of the province of Québec and Canada. In fact, one third of the community's population is aged 14 and under (27%). This proportion is 30% for Eeyou Istchee and 15% for Québec.

In contrast, while 24% of the population of the province of Québec is 65 years and over, this proportion is only 9% in Wemindji and 8% in Eeyou Istchee.

Population Growth from 2001 to 2036







HOUSING

According to the 2016 census, there are 355 households in Wemindji. This is a 25% increase from 285 households in 2006.

Household size in Wemindji has decreased slightly in the last 10 years from 4.3 persons per household in 2006 to an average household size of 4.1 between 2011 and 2016. The household size in Wemindji is significantly higher than that of Québec (2.3).

Household Size in 2006, 2011, and 2016



7 COMMUNITIES AND CATEGORY II LANDS

Household Size Variation from 2006 to 2016



In terms of dwellings requiring major repairs, Wemindji has experienced an increase of 43% between 2006 and 2016. In fact, in 2006, 25% of the dwellings in the community required major repairs, whereas that percentage increased to 35% in 2016.



EDUCATION

At 47%, the percentage of Wemindji's population without a high school diploma is 4% lower than the total population of Eeyou Istchee (51%). For the province of Québec, that percentage is 20%.

The percentage of Wemindji's population with an apprenticeship or trade certificate or diploma is 18% and is higher than that of Eeyou Istchee (15%). At 17%, the percentage in the province of Québec is slightly lower than in Wemindji.

The proportion of the population whose highest diploma is from high school is similar in Wemindji (14%) and in Eeyou Istchee (11%). The proportion is higher in the province of Québec where a high school diploma is the highest level of diploma for 22% of the population.

At 15%, the percentage of the population whose highest diploma is a college or CEGEP certificate, or diploma is similar to Eeyou Istchee (13%). In the province of Québec, that percentage is 18%.

The proportion of people with a university diploma or certificate is the same in both Wemindji (6%) and Eeyou Istchee (6%). In total, 39% of Wemindji's population has a post-secondary level diploma.

Education Level in 2016



Employment per Occupation Sector in 2016





EMPLOYMENT

In 2016, the participation rate in Wemindji was 65.2%, which is slightly lower than the participation rate in Eeyou Istchee (65.4%) and slightly higher than in the province of Québec (64.1%).

At 53.6%, the employment rate in Wemindji was also slightly lower than that of Eeyou Istchee (55.0%) and of the province of Québec (59.5%). The employment rate is the proportion of people aged 15 years and over who are working.

The unemployment rate in Wemindji is 17.8%, which is slightly higher than Eeyou Istchee (15.9%) but much higher than the province of Québec (7.2%). The unemployment rate is the proportion of the labour force that is out of a job.

Classification of workers in Wemindji by type of occupation shows that 22% of employed community members work in management, finance and administration, 24% work in education, law and social, community and government services, 26% work in sales and services, and 19% work in trades, transportation, machinery and related occupations.

7 COMMUNITIES AND CATEGORY II LANDS

EMPLOYMENT

Classification of workers in Wemindji by industry shows that 38.3% of employed community members work in education and health services, 20.3% work in government and public services, 12.8% work in construction and manufacturing, 8.3% work in agriculture, forestry, fishing, hunting, and mining, 5.3% work in retail and wholesale trade. It is notable that the majority of employed community members work in public services - education, health services, government and public services).

Employment per Industry in 2016



LOCATION

Wemindji's Category II lands are bounded by the Castor watershed to the north, the community of Eastmain to the south, the Billy Diamond Highway to the east, and James Bay to the west.



HYDROGRAPHY & TOPOGRAPHY

The topography varies from 262 metres of altitude at the eastern end to 0 metres at the James Bay shore.

The territory is composed of many lakes and watersheds.

It comprises eight level 1 watersheds:

- > Comb > Clergue
- > Castor > Peuplier
- > Suaganstuc > Vieux-Comptoir
- > Maquatua > Conin

It also comprises one level 2 watershed, Castor Est, and several residual watersheds located along the shore of James Bay.



WETLANDS

Peatland fens are spread over the whole territory. Forest peatlands are present south of the Wemindji Road. The area also comprises small pockets of swamps.



FOREST

This territory features mostly species from the coniferous forest, although there are a few zones with species from mixed and broadleaf forests in the eastern end. There are also a few areas with shrubland species.



SPECIES OF SPECIAL CONCERN AND PROTECTED AREAS

A significant portion of this territory is located within the proposed Paakumshumwaau-Maatuskaau biodiversity reserve.



TRAPLINES

There are fourteen traplines within the territory.



INFRASTRUCTURE

MINERALS

road.

This territory is connected from west to east by the Wemindji Road.



INFRASTRUCTURE AND WATERFLOW

Most watershed outflow towards the James Bay.



PLACES WITH CREE NAMES

Wemindji's territory includes a wide range of places with Cree names, including places of historical significance (trade posts, birth sites, and burial sites), waterways (lakes, rivers, waterfalls and rapids), topography (beaches, islands, mountains, caves, wooded areas), places for traditional activities (berry picking, beaver dams, spawning, campsites, and hunting blinds), places used for transportation (portages, trails, junctions, embarkation areas, and bridges), and other places (general areas and points unknown).

7 COMMUNITIES AND CATEGORY II LANDS

There are eighteen quarries and fourteen borrow pits located around the Wemindji Road. A few active claim areas are located north of this





Locations of Communities and Category II Lands





Hydrography & Topography



> Level 1: River that flows directly into a major waterbody (e.g., ocean, sea).

> Level 2: River that flows into another river.



Wetlands









Species of Special Concern and Protected Areas



Traplines









Infrastructure



Minerals







Infrastructure and Waterflow





Places with Cree Names



N.B. : Cree language place names in the Cree Nation Government's place names database. The names were gathered from Cree elders and land users since the late 1970s and demonstrate historic and contemporary knowledge and stewardship of their territory. Gaps should not be interpreted as evidence of a lack of occupancy as research is ongoing. The presence of names within the territory of neighbouring nations should also not be interpreted as supporting any sort of claim to the territory – historic relations with neighbouring peoples, and travel routes to historic posts in these territories mean that Cree people shared, knew and used Innu, Naskapi, and Atikamekw place names. For further information on the Cree Place Names database please contact the Cree Nation Government's Department of Social and Cultural Development.

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The Cree Nation of Whapmagoostui is the northernmost community of Eeyou Istchee. It is located in the triangular area formed by the Great Whale River and the eastern Hudson Bay coast, just north of the 55th parallel.

Whapmagoostui means Place of the Beluga. Prior to its incorporation, it also had the names Great Whale River and later Poste de la Baleine.

With a population of 985, Whapmagoostui is the only Cree community that is not accessible by road. The community can be reached by plane, and also by boat during the later summer months.

The Cree community is adjacent to the Inuit community of Kuujjuarapik. Even though the communities live next to each other, they are governed by two different legal systems.






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POPULATION OVERVIEW

The 2016 census places the population of Whapmagoostui at 984 people. This represents a 26.5% increase from 2001, when the population was 778. The growth observed for the same period in the province of Québec is significantly lower (12.8%). However, this level of population growth is closer to the one that was observed in all of Eeyou Istchee, where the average increase rate between 2001 and 2016 was 35.7%.

In 2019, the ISQ estimated population growth for all Québec municipalities and Indigenous communities. They estimated that the Whapmagoostui population would be 1,384 in 2036, representing a 39% increase from the 2016 population. In comparison, Eeyou Istchee will grow by 25.3% by 2036 and Québec will grow by 12%. Based on these forecast numbers, Whapmagoostui will experience the second highest growth rate in Eeyou Istchee.

The age composition of Whapmagoostui's population is comparable to that of Eeyou Istchee. It is, however, much younger than the population of the province of Québec and Canada. In fact, one third of the community's population is aged 14 and under (33%). This proportion is 30% for Eeyou Istchee and 15% for the province of Québec.

In contrast, while 24% of the population of Québec is 65 years and over, this proportion is only 6% in Whapmagoostui and 8% in Eeyou Istchee.



HOUSING

According to the 2016 census, there are 210 households in Whapmagoostui. This is an 8% increase from 195 households in 2006.

As the population became larger, the number of people living under the same roof, and therefore forming a household, grew as well. This explains why the number of households did not increase by the same rate as the number of people in Whapmagoostui.

Household size in Whapmagoostui has increased slightly in the last five years from a stable 4.3 persons per household from 2006 to 2011, to an average household size of 4.7 in 2016. The household size in Whapmagoostui is significantly higher than that of the province of Québec (2.3).

Population Growth from 2001 to 2036



Age Composition in 2006, 2011, and 2016



Household Size in 2006, 2011, and 2016



7 COMMUNITIES AND CATEGORY II LANDS

Household Size Variation from 2006 to 2016



In terms of dwellings requiring major repairs, Whapmagoostui has experienced an increase of 86% between 2006 and 2016. In fact, in 2006, 26% of the dwellings in the community required major repairs, whereas that percentage increased to 48% in 2016.

EDUCATION

At 50%, the percentage of Whapmagoostui's population without a high school diploma is similar to that of the total population of Eeyou Istchee. For the province of Québec, that percentage is 20%.

The percentage of Whap magoostui's population with an apprenticeship or trade certificate or diploma is 15% and is equal to that of Eeyou Istchee. At 17%, the percentage in the province of Québec is higher than in Whapmagoostui.

The proportion of the population whose highest diploma is from high school is similar in Whapmagoostui (14%) and in Eeyou Istchee (11%). The proportion is higher in the province of Québec where a high school diploma is the highest diploma level for 22% of the population.

At 13%, the percentage of the population whose highest diploma is a college or CEGEP certificate, or diploma is 13%. In Québec, that percentage is 18%.

The proportion of people with a university diploma or certificate is the similar in Whapmagoostui (8%) and Eeyou Istchee (6%). In total, 36% of Whapmagoostui's population has a post-secondary level diploma.

Education Level in 2016



Employment per Occupation Sector in 2016





EMPLOYMENT

In 2016, the participation rate in Whapmagoostui was 72.3%, which is higher than the participation rate in Eeyou Istchee (65.4%) and in the province of Québec (64.1%).

At 62.3%, the employment rate in Whapmagoostui was also slightly higher than that of Eeyou Istchee (55.0%) and of the province of Québec (59.5%). The employment rate is the proportion of people aged 15 years and over who are working.

The unemployment rate in Whapmagoostui (13.8%), which is slightly lower than that of Eeyou Istchee (15.9%) and higher than that of the Provine of Québec (7.2%). The unemployment rate is the proportion of the labour force that is out of a job.

Classification of workers in Whapmagoostui by type of occupation shows that 19% of employed community members work in management, finance and administration, 33% work in education, law and social, community and government services, 29% work in sales and services, and 11% work in trades, transportation, machinery and related occupations.

7 COMMUNITIES AND CATEGORY II LANDS



EMPLOYMENT

Classification of workers in Whapmagoostui by industry shows that 43% of employed community members work in education and health services, 20.4% work in government and public services, 5.4% work in construction and manufacturing, and 7.5% work in retail and wholesale trade. It is notable that the vast majority of employed community members work in public services (63.4% education, health services, government and public services).

Employment per Industry in 2016



LOCATION

The Category II land of Whapmagoostui is bounded by the Petite Baleine watershed to the north, Chisasibi's Category II land to the south, the Coat watershed to the east, and James Bay to the west.



HYDROGRAPHY & TOPOGRAPHY

This territory's topography goes from 444 metres of altitude in the east to 0 metres at the James Bay coast.

There are many small rivers, and two level 2 watersheds:

- > Second
- > Grande Baleine

The territory also comprises one level 1 watershed, Coats, as well as residual watersheds along James Bay.

7 COMMUNITIES AND CATEGORY II LANDS



WETLANDS

There are several peatland fens spread across the territory. The northern part also features a few swamps.



FOREST

The territory comprises a diversity of forest species. While most of the vegetation cover corresponds to the coniferous forest, the territory comprises Subarctic heath species along the James Bay shore and in its northern portion. Areas that feature species from the Boreal heath forest can also be found in the eastern portion of the territory. Shrubland and tundra vegetation are present in the northwestern portion of the territory.



SPECIES OF SPECIAL CONCERN AND PROTECTED AREAS

This territory comprises three important areas for the golden eagle, as well as several important areas for the Harlequin duck.



TRAPLINES

There are seven traplines within the territory.



INFRASTRUCTURE

There is no major infrastructure on the territory. The only way to access the territory is by flying into Kuujjuarapik Airport.



MINERALS

There is one active claim area located in the southern portion of the territory.



INFRASTRUCTURE AND WATERFLOW

Most watersheds outflow towards the James Bay.



PLACES WITH CREE NAMES

Whapmagoostui's territory includes a wide range of places with Cree names, including places of historical significance (trade posts, birth sites, and burial sites), waterways (lakes, rivers, waterfalls and rapids), topography (beaches, islands, mountains, caves, wooded areas), places for traditional activities (berry picking, beaver dams, spawning, campsites and hunting blinds), places used for transportation (portages, trails, junctions, embarkation areas, and bridges), and other places (general areas and points unknown).



7 COMMUNITIES AND CATEGORY II LANDS





Locations of Communities and Category II Lands





Hydrography & Topography



> Level 1: River that flows directly into a major waterbody (e.g., ocean, sea).

> Level 2: River that flows into another river.





Wetlands



Forest





Species of Special Concern and Protected Areas



Traplines









Infrastructure



Minerals







Infrastructure and Waterflow



Places with Cree Names





N.B. : Cree language place names in the Cree Nation Government's place names database. The names were gathered from Cree elders and land users since the late 1970s and demonstrate historic and contemporary knowledge and stewardship of their territory. Gaps should not be interpreted as evidence of a lack of occupancy as research is ongoing. The presence of names within the territory of neighbouring nations should also not be interpreted as supporting any sort of claim to the territory – historic relations with neighbouring peoples, and travel routes to historic posts in these territories mean that Cree people shared, knew and used Innu, Naskapi, and Atikamekw place names. For further information on the Cree Place Names database please contact the Cree Nation Government's Department of Social and Cultural Development.



PROJECT ACTION PLAN 8

8.1 MOVING FORWARD WITH THE DEVELOPMENT OF THE DRAFT REGIONAL LAND AND **RESOURCE USE PLAN**

SUMMER 2021	FALL 2021 - SPRING 2022	SPRING 2022	SUMMER 2022	FALL - WINTER 2023	SU
REGIONAL PORTAIT	ENGAGEMENT WITH REGIONAL EXPERTS	ESTABLISH A VISION AND ORIENTATIONS	DRAFT OF IMPLEMENTATION PLAN	 FIRST DRAFT OF THE RLRUP DEVELOPMENT OF COMMUNICATION TOOLS (EX: ONLINE STORY MAPS) 	FIN TH

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8.2 MOVING FORWARD WITH LAND PLANNING



THEME	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
	Achieve a comprehensive understanding of the scope of the territorial planning powers that arise from agreements, using a legal team and strategic planning.	Knowledge Acquisition	 Executive Committee Coordinating team of the Cree-Quebec Governance Agreement Implementation Legal Partner 		\$\$\$
	Define the mandate of the EPC for once the regional plan is completed.	Administrative	 Executive Committee Management Environment and Remedial Works 		\$\$\$
Planning Tools	Develop planning tools to analyze and control land and resource use as well as development projects.	Regulation and policy	• Legal Partner	$\bullet \bullet \bullet \bullet$	\$\$\$
	Develop mechanisms to implement and enforce planning tools.	Administrative	• Legal Partner		\$\$\$
	Explore the possibility of developing a structure that can be shared with the EMRPC, which includes sharing staff.	Administrative	 Executive and Management Committees EMRPC Legal Partner 		\$\$\$
	Define lands that are favourable for community development outside of the Category IA lands. A focus should be put on population projections and age groups to identify services and equipment that will be needed.	Documentation	 Cree First Nations Capital Works and Services Environment and Remedial Works (Environmental and Social impact assessment) 		\$\$\$
Sociodemographic Profile	Improve access or servicing between communities and potential employment nodes.	Administrative	 Cree First Nations Commerce and Industry Social and Cultural Development 		\$\$\$
	Study the issues and limitations that Category II and III land corridors along roads may pose for community development, and propose solutions.	Knowledge Acquisition	 Cree First Nations Legal Partner Eeyou Istchee James Bay Regional Government Quebec Government 		\$\$\$

0 TO 5 YEARS	10 YEARS +
5 TO 10 YEARS	CONTINUOUSLY

THEME	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
Biophysical Environment	Develop partnerships with stakeholders to perform more detailed studies – both of traditional and scientific knowledge – on the territory and collect more precise data on its biophysical components and its vulnerability to climate change and development.	Knowledge Acquisition	 Environment and Remedial Works (Protected Areas and Wildlife management) Cree Trappers Association Cree First Nations Various Universities Laval (Centre of Northern Studies) and McGill 		_
	Define strategies and norms to mitigate the effects of climate change and control the effects of development.	Regulation and Policy	 Environment and Remedial Works Cree First Nations Cree Trappers Association 		\$\$\$
	Characterize and map existing water bodies and wetlands or require developers to characterize them on site.	Documentation	 Environment and Remedial Works 		\$\$\$\$
	Through the Cree land use mapping exercise, identify the most cultural valuable waterways and waterbodies with tallymen and land users.	Documentation	 Cree First Nations Environment and Remedial Works (GIS) 	$\bullet \bullet \bullet \bullet$	\$\$\$
Hydrography	Consolidate the documented impacts of industrial and commercial projects on water environments and Category II lands and develop norms to mitigate future impacts.	Documentation	 Environment and Remedial Works 	$\bullet \bullet \bullet \bullet$	\$\$\$
Tydrography	Define norms to control the effects of development on water bodies and wetlands (e.g., based on watersheds rather than projects). Identify potential construction norms adapted to wetlands.	Regulation and Policy	 Environment and Remedial Works Legal Partner For Category III lands: Eeyou Istchee James Bay Regional Government 		\$\$\$
	Integrate (or improve) the Policy for Shorelines, Coastlines, and Flood Plains Protection (Politique de protection des rives, du littoral et des plaines innondables) with planning tools.	Regulation and Policy	• Environment and Remedial Works For Category III lands: Eeyou Istchee James Bay Regional Government		\$\$\$

THEME	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
	Through the Cree land use mapping exercise, identify the most valuable areas for cultural land-based activities and for heritage conservation (e.g., areas for traditional activities like berry-picking, spawning areas, etc.).	Documentation	 Cree First Nations Environment and Remedial Works (GIS) 		\$\$\$
	Consolidate up-to-date information regarding forest ecosystems (should be divided by sub-region).	Documentation	 Department of Forestry Environment and Remedial Works 		\$\$\$
	Consolidate the documented impacts of industrial and commercial projects on forests and Category II lands and develop norms to mitigate future impacts.	Documentation	 Department of Forestry Environment and Remedial Works 		\$\$\$
Forests	Identify gaps in the MFFP's processes regarding the impacts of projects on forests and vegetation, and define norms to address these gaps.	Regulation and Policy	 Environment and Remedial Works (Wildlife, Protected Areas, Environmental and Social Impact Assessment) Department of Forestry Cree First Nations Cree Trappers Association Legal Partner For Category III lands: Eeyou Istchee James Bay Regional Government 		\$\$\$
	Collaborate with experts in order to consolidate information on solutions to address wildfires.	Knowledge Acquisition	 Department of Forestry Cree Health Board Public Security 		_

THEME	ACTION ITEM	TYPE	PARTNERS	TIMESCALE	BUDGET
Wildlife	Within the Cree land use mapping work, identify the most valuable wildlife habitats and spawning grounds.	Documentation	 Cree First Nations Environment and Remedial Works (GIS) 		_
	Perform studies and collect more data about species that are important to the Crees and their habitats. These studies should consider all Eeyou Istchee's significant species and not only wildlife that are vulnerable or endangered.	Knowledge Acquisition	 Environment and Remedial Works (Wildlife management) Cree Trappers Association 		\$\$\$
	Consolidate the documented impacts of industrial and commercial projects on wildlife and Category II lands. Integrate these considerations in land use norms (e.g., buffers around habitats, characterization by proponents, etc.)	Documentation	• Environment and Remedial Works (Wildlife, Environmental and Social impact Assessment, and Protected Areas)		_
	The EPC should collaborate in the conservation assessment of key habitats — including migration routes - for woodland as well as migratory caribou herds.	Administrative	 Environment and Remedial Works (Wildlife management and Protected Areas) Cree First Nations Cree Trappers Association 		\$\$\$
	Obtain access to Hydro-Québec data and conclude an agreement to be able to use this information.	Knowledge Acquisition	• Environment and Remedial Works		_

THEME	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
	The EPC should participate in the definition of the next 30% of territorial conservation and this process should be part of comprehensive regional planning.	Administrative	• Environment and Remedial Works (Protected Areas)		—
Conconvotion	Coordinate the Challenge Fund projects with regional planning work.	Administrative	• Environment and Remedial Works (Protected Areas)		_
Conservation	Perform a knowledge synthesis of the current state of each protected area to support the ESIA and planning.	Knowledge Acquisition	 Environment and Remedial Works (Protected Areas) Cree First Nations Cree Trappers Association 	TBD	\$\$\$
	Explore with the Government of Québec opportunities and legal tools related to the enactment of Bill 46 to amend the <i>NHCA</i> .	Regulation and Policy	Executive CommitteeEnvironment and Remedial Works		\$\$\$

ТНЕМЕ	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
Cree Cultural Landscape	Consolidate existing documentation and research on cultural and historical sites.	Documentation	 Cree First Nations Cree Women's Association Social and Cultural Development Cree Cultural Institute 		\$\$\$
	Identify cultural and historical sites where certain conservation measures should apply.	Documentation	 Environment and Remedial Works (Protected Areas) Social and Cultural Development Cree Cultural Institute Cree First Nations 		\$\$\$
	Perform an analysis that extends back to 1970s, for example through using satellite imagery and aerial photos, to better identify the impacts of development on cultural landscapes.	Knowledge Acquisition	• Environment and Remedial Works (GIS)		\$\$\$
	Explore the possibility to protect cultural landscapes through tools such as the IUCN's system and/or the <i>NHCA</i> .	Regulation and Policy	 Environment and Remedial Works (Protected Areas) Legal Partner 		\$\$\$
	Define norms within planning tools that grant the power to conserve sites from development (e.g., with protection buffers, zoning designations, landscape analysis, etc.).	Regulation and Policy	 Environment and Remedial Works Cree Cultural Institute Social and Cultural Development Legal Partner For Category III lands: Eeyou Istchee James Bay Regional Government		\$\$\$

THEME	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
Climate Change	List, locate, and study the natural hazards on the territory (e.g., coastal erosion, flooding, landslides, etc.).	Knowledge Acquisition	 Environment and Remedial Works (Protected Areas and Wildlife management, GIS) Cree Trappers Association Canadian Rangers Cree First Nations Public Safety Cree Health Board For Category III lands: Eeyou Istchee James Bay Regional Government 		_
	Study further the impacts of climate change in the long-term and increase resources strategically to address some of the most urgent climate change issues affecting Eeyou Istchee.	Knowledge Acquisition	 Environment and Remedial Works Various Universities Laval (Centre of Northern Studies) and McGill Cree Trappers Association 		\$\$\$
	Evaluate the risks associated with the movement of invasive species towards the North.	Knowledge Acquisition	 Environment and Remedial Works (Climate Change, Protected Areas and Wildlife management) Various Universities Laval (Centre of Northern Studies) and McGill Cree Trappers Association 		\$\$\$
	Collaborate with teams that monitor ice melting and safe travel routes to consolidate information for land planning purposes.	Knowledge Acquisition	 Environment and Remedial Works Cree Trappers Association 		_
	Include environmental and habitats assessments and habitats in zoning norms that specifically address climate change (e.g., buffers, protection, characterization, etc.).	Regulation and Policy	 Environment and Remedial Works Legal Partner Cree Trappers Association For Category III lands: Eeyou Istchee James Bay Regional Government 		\$\$\$
	Build climate change considerations into conservation and protected areas planning (e.g., ensuring the conservation areas network are large enough and flexible enough to accommodate climate change induced species habitat migration and movement).	Regulation and Policy	 Environment and Remedial Works (Protected Areas and Wildlife management) Legal Partner Cree Trappers Association 		_

THEME	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
	Develop a Cree vision for access to the territory and a plan for infrastructure that is aligned with it.	Administrative	 CNG Executive Committee and Council Cree First Nations Cree Trappers Associations CNG Departments Women's and Youth Associations 		\$\$\$
	Update the mapping of access ways across the region (i.e., air, land and sea routes).	Documentation	• Environment and Remedial Works (GIS)		\$\$\$
Transportation	Develop a transportation plan that analyzes the links between terrestrial, air and sea transportation, with considerations for access to traplines and employment nodes.	Administrative	 Commerce and Industry Environment and Remedial Works Cree First Nations Cree Trappers Association 		\$\$\$
	 Through the Cree land use mapping exercise, identify: Sensitive wildlife and cultural areas that should be considered or be avoided when planning for a new road project. Most valued connections (roads or trails) with the important cultural areas, and with the communities. Access or new roads that are desired by land users to better occupy the territory and to practice the Cree way of life. Valued road sections that need to be improved for safety reasons. 	Documentation	• Cree First Nations • Environment and Remedial Works (GIS)		\$\$\$
	Consolidate the information regarding the impacts of transportation infrastructure and define norms (e.g., buffers for noise, habitats, soil conditions, etc.).	Documentation Regulation and Policy	• Environment and Remedial Works • Legal Partner		\$\$\$

THEME	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
	Consolidate the information regarding safety issues for land users and define design guidelines.	Documentation Regulation and Policy	 Cree First Nations Environment and Remedial Works Department of forestry Cree Trappers Association Cree Health Board 		\$\$\$
	Consolidate information related to the road network; the categories of road; the conditions; the entities responsible for maintenance and the regulation that applies. Define the management of transportation infrastructure to ensure its maintenance and cleanliness.	Documentation	 Environment and Remedial Works Department of forestry 		\$\$\$
Transportation (continued)	Define the transportation infrastructure that might be required for the long-term to promote recreational and economic development favored by Crees.	Documentation	 Cree First Nations Cree Outfitting Tourism Association Commerce and Industry Social and Cultural Development 		\$\$\$
	Define land and resource uses that can be hosted around roads.	Documentation	Cree First NationsEnvironment and Remedial Works		\$\$\$
	Explore the use of the commercial train as a means for transporting people.	Knowledge Acquisition	 Commerce and Industry Cree Trappers Association Cree First Nations 		\$\$\$
Telecom-	Locate where telecommunication infrastructure should be placed with regards to other land and resource uses and define norms for their installation.	Documentation Regulation and Policy	 Eeyou Communications Environment and Remedial Works For Category III lands: Eeyou Istchee James Bay Regional Government 		\$\$\$
munications	Consolidate information related to long-term planning of telecommunication infrastructure and supporting equipment such as buildings.	Documentation	 Eeyou Communications Cree Health Board Environment and Remedial Works (GIS) 		\$\$\$

THEME	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
Energy	Explore possibility of small scale, Cree owed energy project (hydro, wind, solar) development (less than 50 MW) for as per in the <i>Cree-Québec Governance Agreement.</i>	Knowledge Acquisition	 Commerce and Industry Environment and Remedial Works 		\$\$\$
	Explore the adaptability of green building practices to the context of Category II lands.	Knowledge Acquisition	 Commerce and Industry Environment and Remedial Works 		\$\$\$
	Within the Cree land use mapping work, identify the valuable water sources (e.g., the locations where people go for drinking water). Define locations of potential drinking water sources and protect them (i.e., buffers from industries, landfills, snow dumping sites, etc.).	Documentation	 Cree First Nations Environment and Remedial Works (GIS) 		\$\$\$
	Explore setting up an OBV for Eeyou Istchee.	Administrative	 Environment and Remedial Works For Category III lands: Eeyou Istchee James Bay Regional Government Legal Partner 		\$\$\$
Water Management	Explore the possibility of developing a regional wetland and waterbody plan, similar to the one put in place under the <i>Law for the Conservation of Wetlands and Hydrology</i> (also known as <i>Loi sur la conservation des milieux humides et hydriques</i>).	Regulation and Policy	 Environment and Remedial Works For Category III lands: Eeyou Istchee James Bay Regional Government Legal Partner 		\$\$\$
	Define locations of potential sewage lagoons with regard to other long-term development of the territory and define norms.	Documentation Regulation and Policy	 Capital Works and Services Environment and Remedial Works (Environmental and Social impact assessment Cree First Nations 		\$\$\$
	Define norms for grey water management on Category II lands (might differ per uses e.g., forestry vs outfitting vs community treatment plants). Identify anything lacking in the processes that arise from the <i>LQE</i> .	Regulation and Policy	 Legal Partner Environment and Remedial Works (Environmental and Social impact assessment) 		\$\$\$

THEME	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
	Move towards regional coordination of waste management across Eeyou Istchee.	Administrative	 Capital Works and Services Environment and Remedial Works (Environmental and Social impact assessment) For Category III lands: Eeyou Istchee James Bay Regional Government 		\$\$\$
Waste Management	Define locations of potential waste management sites with regards to other long-term development of the territory and define norms for their construction.	Documentation	 Capital Works and Services Environment and Remedial Works (Environmental and Social impact assessment) Legal Partner For Category III lands: Eeyou Istchee James Bay Regional Government 		\$\$\$
	Explore ways to contribute to waste recovery efforts in Category II lands.	Knowledge Acquisition	• Environment and Remedial Works (Environmental and Social impact assessment)	TBD	
	Collect more data on gravel and sand management, monitoring, and needs.	Knowledge Acquisition	 Environment and Remedial Works Capital Works and Services 		\$\$\$
Construction	Study feasibility and economic viability of the CNG and /or the Cree First Nations ownership and management of the quarries for Category II lands.	Knowledge Acquisition	 Commerce and Industry Capital Works and Services Executive Committee Coordinating team of the Cree-Quebec Governance Agreement Implementation 		\$\$\$
Materials	Identify any gaps in the processes that arise from the <i>LQE and the Regulation respecting sand pits and quarries</i> and define norms.	Documentation	• Environment and Remedial Works (Environmental and Social impact assessment)		\$\$\$
	Locate potentials pits and quarries, in order to plan and to regulate them with regard to other long-term development on the territory and the safety of land users.	Documentation	 Capital Works and Services Environment and Remedial Works (Environmental and Social impact assessment Cree Trappers Association For Category III lands: Eeyou Istchee James Bay Regional Government 		\$\$\$

THEME	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
Forestry	Through the Cree land use mapping exercise, identify multi-use roads that are no longer used and should be reforested.	Documentation	 Cree First Nations Environment and Remedial Works (GIS) 		\$\$\$
	Update the mapping of forestry roads.	Documentation	 Department of Forestry Cree First Nations Environment and Remedial Works (GIS) 		\$\$\$
	With the communities, identify potential areas for non-timber products harvesting.	Documentation	 Cree First Nations Environment and Remedial Works (GIS) 		\$\$\$
	Explore the opportunities and constraints of implementing tree farms.	Knowledge Acquisition	 Commerce and Industry Department of Forestry Cree Trappers Association 		\$\$\$
	Explore measures to address the impacts of resource development projects and multi-use roads, and define norms namely regarding forest restauration following a project or the construction of a road.	Regulation and Policy	 Department of Forestry Environment and Remedial Works (Environmental and Social impact assessment) Legal Partner 		\$\$\$
	In collaboration with the Department of Forestry, tallymen, and land users, assess the need for regional planning tools that could enhance and improve consultation and decision-making processes in forestry planning.	Administrative	 Department of Forestry Cree First Nations Cree Trappers Association 		\$\$\$

THEME	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
Mining	Identify gaps in the <i>Mining Act</i> , and define norms namely regarding restoration, buffers, and impacts on biodiversity and land users. This could support and inform the CNG's <i>Mining Policy</i> .	Regulation and Policy	 Environment and Remedial Works (Environmental and Social impact assessment and Mining) Legal Partner 		\$\$\$
	Put in place a communication system with mining activities to collect data and the location of up-coming projects. The <i>Mining Act</i> requires proponents to provide this information. Map and monitor these projects to support long-term planning efforts.	Administration	Commerce and Industry		\$ \$\$
	Explore the possibility to have transformation and secondary processing facilities within Eeyou Istchee. Explore potential locations for these facilities.	Knowledge Acquisition	• Commerce and Industry		\$\$\$
	Explore the possibility of identifying areas that are not compatible with mining activities, as provided for in the <i>Mining Act</i> and the <i>Cree-Québec Governance Agreement</i> .	Documentation	 Cree First Nations Environment and Remedial Works (Environmental and Social impact assessment and Mining) Commerce and Industry Coordinating team of the Cree-Quebec Governance Agreement Implementation 		\$\$\$
	Explore the possibility of developing Cree owned small-scale energy projects, carbon capture technologies, and cogeneration facilities, and identify their potential location.	Knowledge Acquisition	Commerce and Industry		\$\$\$
Hydroelectricity	Explore ways to manage the maintenance of infrastructure (i.e., transmission lines).	Documentation	Hydro-QuebecCree First Nations		\$\$\$
	Define norms to oversee the implementation of future hydroelectric and energy projects.	Regulation and Policy	 Environment and Remedial Works (Environmental and Social impact assessment) Legal Partner 		\$\$\$

THEME	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
Emerging Market	Create a detailed list of potential emerging projects and connected services.	Documentation	 Cree First Nations Commerce and Industry Cree Outfitting Tourism Association 		\$\$\$
	Define locations where these projects can be implemented.	Regulation and Policy	 Commerce and Industry Legal Partner 		\$\$\$
	Define norms to oversee the implementation of these projects and potential impacts (e.g., for non-timber harvesting: sustainable practices and permits; for biomass: facilities near commercial forests and delivery routes; for food autonomy: proper climate and soil conditions; etc.).	Regulation and Policy	 Cree First Nations Environment and Remedial Works Cree Health Board Commerce and Industry Legal Partner For Category III lands: Eeyou Istchee James Bay Regional Government		\$\$\$
Tourism and Recreation	Identify areas where tourism and recreation activities can take place to ensure the harmonious cohabitation of uses, the preservation of experiences and potential, and the safety of users. Offer year-round activities to sustain a full-time economy.	Documentation	 Cree First Nations Cree Trappers Association Environment and Remedial Works (Protected Areas) Cree Outfitting Tourism Association 		\$\$\$
	The EPC should be involved in any type of governmental planning exercise related to recreational activities. This involvement is necessary to ensure that the recreational activities are done in way that does not interfere with Cree use.	Administrative	 Cree Outfitting Tourism Association Commerce and Industry 		_
	Through the Cree land use mapping exercise, identify areas where Cree use is hampered by the presence of non-Cree activities, as well as areas where these activities would not hamper the traditional use of the territory.	Documentation	 Cree First Nations Environment and Remedial Works (GIS) 		\$\$\$

THEME	ACTION ITEM	ТҮРЕ	PARTNERS	TIMESCALE	BUDGET
Tourism and Recreation (continued)	Establish areas where campground and wilderness camping are allowed and define norms to exert a better control on these activities and where those sites are located. Develop a permit system to regulate the access to sites that present safety concerns for users, such as rivers.	Regulation and Policy	 Cree First Nations Environment and Remedial Works Legal Partner For Category III lands: Eeyou Istchee James Bay Regional Government 		\$\$\$
	Increase the quantity of signage and interpretation panels on the routes and use this signage to integrate Cree cultural information such as place names and language.	Administrative	 Cree Cultural Institute Cree Outfitting Tourism Association For Category III lands: Eeyou Istchee James Bay Regional Government 		\$\$\$
	Complete an inventory of abandoned outfitting camps and define whether their site should be cleaned and restored or renovated and reused.	Documentation	• Environment and Remedial Works		\$\$\$
	Explore ways to increase regional capacity and support and collaboration for the establishment of the Nibiischii National Park and Assinica National Park projects. Build connectivity and collaboration around these projects	Administrative	 Cree Outfitting Tourism Association Environment and Remedial Works (Protected Areas) Nibiischii Corporation Cree First Nations of Mistissini and Ouje- Bougoumou 		\$\$\$
	Provide opportunities for increased employment and tourism related activities for Whapmagoostui in relation to the Tursujuq National Park.	Administrative	 Cree Outfitting Tourism Association Wiinipaakw Tour Environment and Remedial Works (Protected Areas) Nunavik Parks 		\$\$\$

THEME	ACTION ITEM	TYPE	PARTNERS	TIMESCALE	BUDGET
Communities and Category II Lands	Develop a detailed analysis of each community's Category II lands to define land and resource uses and to complement the regional portrait.	Documentation	 Environment and Remedial Works Cree First Nations Cree Trappers Association Department of Forestry Capital Works and Services Social and Cultural Development Commerce and Industry Cree Cultural Institute Cree Outfitting Tourism Association 		\$\$\$



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A NOTE ON MAPPING AND STATISTICAL DATA

The socio-demographic analysis of the Cree communities was based on data collected from Statistics Canada (2016) and the ISQ (2019). The mapping analysis was based on available public data. Due to the vastness of the territory and the limited local studies available, the degree of precision of the data at smaller scales is limited.

LIST OF SOURCES

FOR EASY REFERENCE, HERE ARE ALL SOURCES THAT APPEAR THROUGHOUT THE REPORT:

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