Hydro Québec
TransÉnergie

Connecting the Rose Lithium-Tantalum Mine and Relocating a Segment of the 315-kV Line

Supplement to the Environmental Impact Statement

Answers to questions and comments from the
Ministère de l'Environnement et de la Lutte contre
les changements climatiques du Québec

Hydro-Québec TransÉnergie
April 2019

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This document is a supplement to the Environmental Impact Statement (EIS) and provides answers to the questions posed by the Ministère de l'Environnement et de la Lutte contre les changements climatiques du Québec (MELCC) [Québec department of environment and the fight against climate change] as part of the admissibility analysis of the EIS prepared for the Rose Lithium-Tantalum Mine and the relocation of a segment of the 315-kV line. The analysis was conducted as part of the environmental and social impact assessment and review procedure set out in section IV.1 of the Environment Quality Act.

This study was conducted by Hydro-Québec Innovation, équipement et services partagés and Hydro-Québec TransÉnergie in collaboration with Hydro-Québec's Direction – Environnement and Vice-présidence – Communications, affaires gouvernementales et relations avec les autochtones.

Foreword

This document constitutes a supplement to the Environmental Impact Statement (EIS) filed with the Ministère l'Environnement et de la Lutte contre les changements climatiques du Québec (MELCC) [Québec department of environment and the fight against climate change] in March 2018 in accordance with section 31.3 of the *Environment Quality Act*, for the purpose of obtaining the government approvals required to carry out the project to connect the Rose Lithium-Tantalum Mine and relocate a segment of the 315-kV power line.

It contains the answers to the questions and comments resulting from the admissibility analysis of the impact assessment conducted by the MELCC's Direction de l'évaluation environnementale des projets terrestres [environmental assessment of land projects division] under the Direction générale de l'évaluation environnementale et stratégique [environmental and strategic assessment branch], in collaboration with the administrative units concerned within the MELCC, as well as by other government departments and agencies. With a view to facilitating the analysts' work, we have maintained the structure of the document entitled *Questions and Comments – Connecting the Rose Lithium-Tantalum Mine and Relocating a Segment of the 315-kV Line* (file No. 3214-09-028). We have also reproduced the questions forwarded to us verbatim, each followed by the answer, correction or explanation requested.

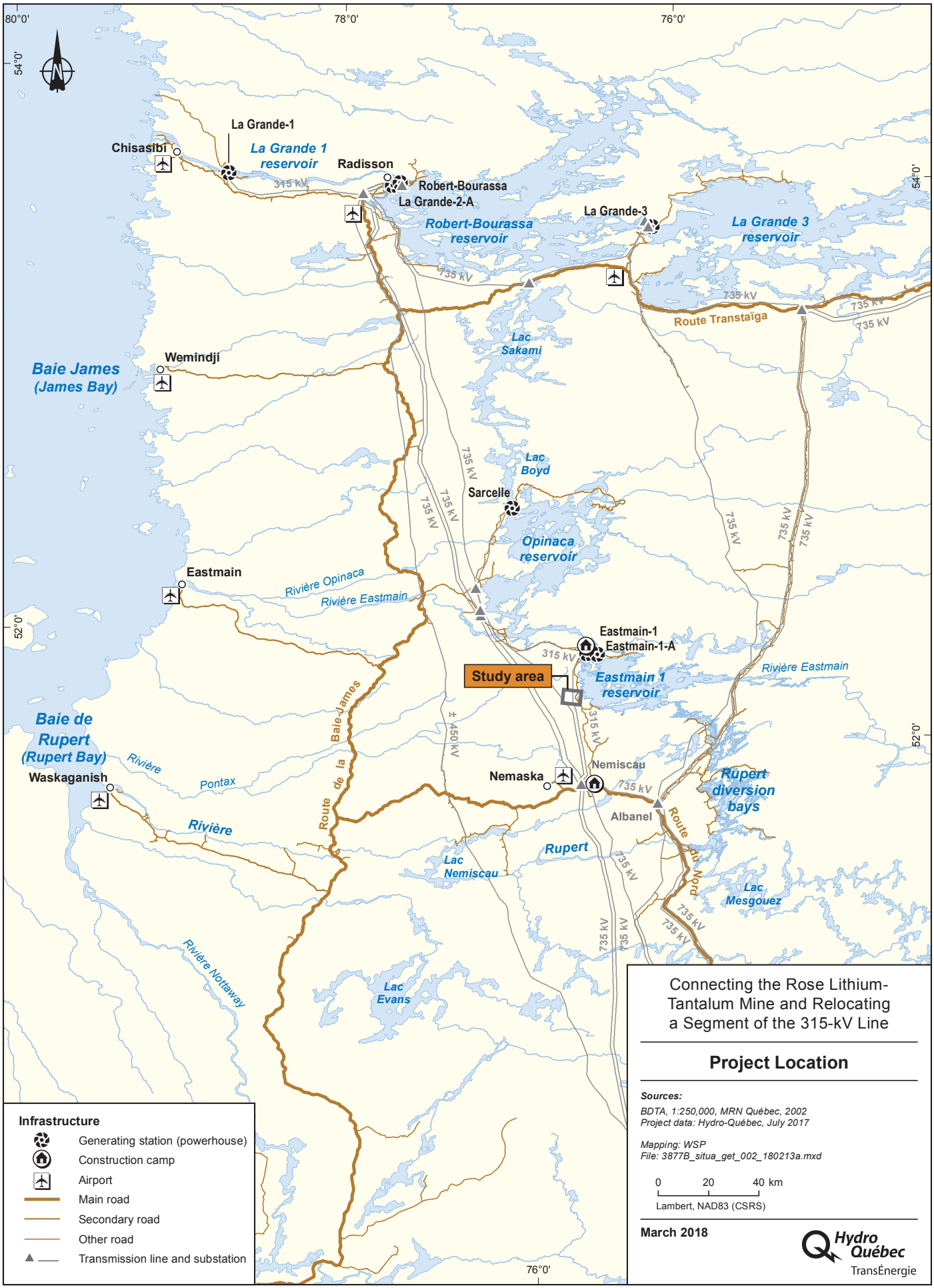


Table of Contents

Tables

Maps

Modification of Line Route

The selected line route presented in the EIS has been slightly modified since the latter was filed in March 2018.

Hydro-Québec modified the route mainly to comply with the required distance of 500 m between the future Rose Lithium-Tantalum open-pit mine and the new 315-kV line segment.

Although this optimized line route is 150 m longer than the initial route, it makes it possible to reduce the number of towers to be built; the initial route called for thirteen towers, whereas the new route requires eleven. Fewer towers will result in a significantly smaller footprint and lower costs.

However, the number of wetlands affected by the new line route is slightly higher.

Both the initial and optimized line routes are shown on an updated version of the map of the biophysical and human environments (Pocket Insert Map A).

2 Project Rationale and Description

Section 2.2 – Selection and optimization of line route

The route selected for the new segment of the Eastmain-1–Nemiscau power line was decided upon by Hydro-Québec TransÉnergie and Corporation Éléments Critiques. The relocated line segment will bypass the future open-pit site to the east, keeping a minimum distance of 500 metres from the boundaries of the planned mining site. This distance was requested by Corporation Éléments Critiques to maximize potential mining operations in the area. The study does not indicate whether any other routes were considered and does not describe the approach or criteria used to select the final line route.

■ QC-1

The proponent must present the route variants considered and a comparative analysis of said variants based on the technical, environmental, social and economic criteria used to select the final line route. The analysis may be presented as a comparative table of data, maps, etc. If only one variant was considered, the proponent must explain why and provide justification.

Answer

The line route variant being considered by Hydro-Québec runs to the east of the future mining complex. It was selected on the basis of the minimum distance required (500 m) between the planned Rose Lithium-Tantalum open-pit mine (which would be located on the east side of the complex) and the new 315-kV power line segment. This requirement cannot be contravened, even in part.

Since the route proposed in the EIS did not comply with the required minimum distance of 500 m in certain locations, Hydro-Québec modified it slightly to ensure that it adheres to this requirement in all respects. This is the shortest possible line route that complies with this constraint imposed by the mining company.

As indicated in the EIS, Hydro-Québec "had considered bypassing the pit to the west, but this option was not selected due to a conflict with the mine's other infrastructure." Moreover, a bypass to the west of the open-pit mine that complied with the minimum distance of 500 m would require a larger number of towers and would lengthen the line route. Such a route could end up being much longer than the route selected if it proved necessary to bypass the mine.

Because of these technical constraints, no other line route variant is feasible.

■ QC-2

Part of the line route will run to the east of the Nemiscau–Eastmain-1 road. However, running the line to the west, within the corridor bounded by the Nemiscau–Eastmain-1 road and the mining facilities, would help prevent anthropogenic impacts from affecting more of the territory and avoid disturbing peatlands. The proponent explains that it selected the east route because of the presence of the future mine facilities. The proponent must provide further justification for choosing to run the line route to the east of the road, and explain how the resulting encroachment into vast areas of the biophysical environment which, up to now, have been free of anthropogenic activity, was taken into account in this choice.

Answer

The optimized line route complies with the minimum distance of 500 m between the open-pit mine and the new 315-kV line segment. It meets the distance requirement in all respects. A line route running to the west of the road, within the corridor bounded by the Nemiscau–Eastmain-1 road and the mining facilities, would not comply with the minimum distance requirement.

Since the boundary of the exclusion zone is located to the east of the Nemiscau–Eastmain-1 road, the new power line segment must cross the road twice.

■ QC-3

The proponent must describe its approach to optimizing the project; for example, it must explain the methods and parameters it used to optimize the selected line route and site the towers so as to limit the project's impact on sensitive environmental elements.

Answer

The towers were initially sited using wetland inventory maps. Wetlands were avoided as much as possible.

At the request of Hydro-Québec TransÉnergie, the clearance between the conductors and the Nemiscau–Eastmain-1 road was increased to allow for the passage of a transformer transport vehicle. The lower height of the towers meant less clearance, which also limited tower siting possibilities.

Section 2.2.1.2 – Work methods

Stream crossings

The new line segment will cross seven streams, four of which are permanent and three intermittent. Temporary bridges will be installed to ensure that jobsite machinery can cross without interfering with flow or damaging streambeds. Upon completion of the work, the temporary bridges will be dismantled and all affected streambanks restored. Culverts spanning the ditches will be installed at points where the watercourses cross construction roads and the Nemiscau–Eastmain-1 road.

■ QC-4

The proponent must confirm that the temporary bridges will be installed at the crossings of the seven streams previously mentioned. If this is not the case, the proponent must indicate the criteria to be used to site the temporary bridges. The proponent must also indicate whether any other temporary stream crossing structures are planned.

Answer

Hydro-Québec plans to install temporary bridges at all new stream crossings. The forest survey, which will include producing data sheets for watercourse characterization, will confirm the dimensions required for the bridges. Before construction work begins, a field visit will be conducted to confirm the necessity and locations of the temporary bridges.

■ QC-5

The proponent must indicate whether any improvements are to be made to the existing bridges and culverts.

Answer

See answer to question QC-4.

When the forest survey is carried out, Hydro-Québec will be able to identify the nature of any improvements to be made to the existing bridges and culverts, and will ensure compliance with the *Règlement sur l'aménagement durable des forêts du domaine de l'État* (*Regulation respecting the sustainable development of forests,* RSDF).

Land clearing

Certain project components, including land clearing and the development of access roads and stream crossings, will be subject to the RSDF.

■ QC-6

The proponent must indicate how it intends to comply with the provisions of the RSDF, particularly in regard to section 29, which stipulates that shrubby or herbaceous vegetation must be preserved within a 20-metre-wide strip measured from the edge of an open peatland containing a bog-pool, or from the edge of a marsh or a riparian shrubby swamp.

Answer

Hydro-Québec will use special clearing methods to protect sensitive areas and thus comply with section 29 of the RSDF.

Clearing method B or B2 will be applied in cases where land clearing must be carried out in buffer strips and wetlands. Felling will be conducted manually and, although the RSDF allows for logging machines to travel in the riparian ecotone to carry out public utility works (s. 32, parag. 5), applying the B methods restricts machinery traffic in this area. The B methods also prescribe maintaining plant species that are compatible with the transmission system, i.e., that are no more than 2.5 m tall at maturity. Thus, grasses are never intentionally cut and only shrubs that can grow taller than 2.5 m are cut down. Stumps are preserved.

Access roads

To facilitate the movement of personnel and equipment, the existing access roads will be restored or upgraded, and new ones will be built. In total, approximately 9,045 metres of access roads will be upgraded or built. Some will be maintained during operation of the mine. At the end of the work, the temporary access roads not required during the operation phase will be decommissioned.

■ QC-7

The proponent must describe the criteria it intends to use to site its access road network. It must also indicate the criteria it will use as a basis for selecting the access roads to be preserved during operation.

Answer

The following criteria are used to design the access roads and establish their routes:

- Maximize utilization of the existing road network, including secondary roads and trails
- Ensure access to right-of-way and all towers
- Avoid sensitive areas and comply with the RSDF
- Comply with requirements for road use (width, maximum grade, curve, etc.)
- A single access road within the right-of-way will be maintained for line operation purposes.

Tower siting

The proponent has indicated that the transmission towers will be erected at least 20 metres from the buffer strips of lakes and streams. However, the mining project could affect the hydrological regime of the lakes and streams in the study area and thereby, modify the high-water lines in some of them. Variations in the hydrological regime may also have an impact on wetlands. Therefore, tower siting must consider not only the boundaries of inventoried aquatic environments and wetlands, but also their future boundaries once mining operations get under way.

■ QC-8

Given that the Rose mine project is currently under evaluation, the proponent must ensure that the anticipated changes in the hydrological regime and the future boundaries of the area's lakes, streams and wetlands are taken into account in siting the towers. The proponent must demonstrate that the minimum distance of 20 metres between the towers and buffer strips can be maintained despite the changes in the hydrological regime, and must provide maps showing the anticipated high-water lines.

Answer

The mining company has not provided us with any maps of the modified hydrological regime. Hydro-Québec will take the necessary measures to comply with these requirements once it receives this information.

Vegetation control

The proponent indicates that vegetation control will consist of mechanical control methods (selective cutting with brush cutters or chain saws) or chemical methods (selective, manual spreading of herbicides), where required. It also states that the length of time between vegetation control operations will vary based on the growth of the forest vegetation. The current maintenance program for the existing Eastmain-1–Nemiscau 315-kV line will be applied to the relocated line segment.

■ QC-9

On page 6-5, the proponent refers to a currently existing vegetation control program. The proponent must provide said program.

Answer

The vegetation control program is a process encompassing a series of activities that recur in the same order:

- Planning the work
- Conducting an inventory of vegetation and sensitive elements
- Establishing the work methods
- Performing the work
- Inspecting the quality of the work

Hydro-Québec TransÉnergie adapts its operations to the specific conditions in the areas crossed. The objective in planning vegetation control is to use the right method at the right place and at the right time.

Hydro-Québec TransÉnergie is subject to a very strict vegetation control standard set out by the North American Electric Reliability Corporation (NERC), the agency that regulates the importing and exporting of power in North America.

Before any vegetation control work, Hydro-Québec submits an authorization request that presents the results of its analysis.

■ QC-10

Based on the existing vegetation control program for the current line segment and knowledge of the area's tree species and their growth periods, the proponent must specify the anticipated frequency of vegetation control operations in the area. It must provide the work schedule and type of operations planned (mechanical or chemical).

Answer

Hydro-Québec TransÉnergie does not clear every right-of-way every year. The period between two clearing operations in a single right-of-way depends on the type of vegetation found there and the time it takes for it to grow too close to the conductors again.

The vegetation maintenance frequency (or vegetation control cycle) in the area where the new power line segment will be built is approximately seven years.

■ QC-11

According to the information recently forwarded to the CBHSSJB by Dr. Michel Plante of Hydro-Québec, the herbicides currently used by Hydro-Québec are glyphosate (Roundup) and triclopyr (Garlon). Rumors about these herbicides abound, and Hydro-Québec's use of them is causing concern within the Cree population. Should the use of these herbicides during this project be confirmed, the proponent must indicate what research, study or monitoring data on the toxicological and ecotoxicological risks associated with these substances has been consulted to ensure that the products will have no adverse effects on human health or the environment. It is important that the research, study and monitoring data considered take into account the guidelines of the Institut national de santé publique du Québec (INSPQ) [Québec national institute of public health].

Answer

The herbicides used by Hydro-Québec TransÉnergie to manage vegetation in power line rights-of-way are selective herbicides, meaning that they only affect woody plants. They are certified by Health Canada and used in compliance with current legislation.

Over the past few years, Hydro-Québec TransÉnergie has been using a product whose active ingredient is triclopyr, which is commercially sold under the name Garlon XRT (for spraying on leaves and stems) or Garlon RTU (for treating stumps).

Further information on the certification of these products can be obtained from the Health Canada Pest Management Regulatory Agency (PMRA).

The products used are safe for humans and wildlife, as Hydro-Québec takes care to apply them in accordance with industry standards. For example, in areas near watercourses, wells and water intakes, Hydro-Québec establishes a protective perimeter within which no herbicides are used.

■ QC-12

As stated in section 4.3.4.1, since land users pick berries and other plant species of traditional interest within the power line right-of-way, the proponent must indicate how vegetation control might affect these activities, particularly if herbicides are being used.

The proponent must indicate the measures it intends to use to notify land users when vegetation control is being carried out. It must also indicate whether a communication plan or information document explaining the risks (or lack thereof) associated with using and managing herbicides has been prepared and if so, provide it.

Answer

As stipulated in the *Pesticides Management Code*, a notice is published in local newspapers no later than three weeks before work begins.

The Aboriginal communities are contacted whenever work is performed on claimed land, private Aboriginal land or land subject to a special agreement, and a notice is sent to the municipalities and MRCs concerned. As one of its good practices, Hydro-Québec TransÉnergie also notifies the ZEC managers, outfitters and wildlife reserves concerned.

Berries harvested in a recently cleared power line right-of-way are safe to eat. Obviously, it is always best to wash berries before eating them.

■ QC-13

Considering the relatively short length of the project (4.1 km), the proponent must evaluate the consequences of choosing to conduct mechanical vegetation control only—without herbicides—and, should it opt to use a herbicide at this latitude, indicate the criteria to be used as the basis for this decision.

Answer

Although the Rose Lithium-Tantalum Mine is a small-scale project, it involves relocating a segment of a major power line in Hydro-Québec TransÉnergie's 315-kV transmission system. It is impossible to look at the short segment affected by the project without taking the whole system into consideration. The segment in question is, and will continue to be, part of the Eastmain-1–Nemiscau power line and its upkeep will still be subject to the maintenance program for the entire line.

Hydro-Québec TransÉnergie adapts its operations to the specific conditions in the areas crossed. The objective in planning vegetation control is to use the right method at the right place and at the right time.

There are many areas where herbicides will never be used, due to the presence of sensitive elements such as watercourses and water bodies, wetlands, residential areas and areas where special-status wildlife species are found.

Blasting

The EIS contains no information on blasting.

■ QC-14

The proponent must confirm whether or not it plans to conduct blasting. If so, it must describe the impacts of the blasting and the measures it plans to implement to mitigate them.

Answer

At this stage of the project, Hydro-Québec plans to use grillage foundations in overburden. A geotechnical survey will be required to validate this choice. At this point in the surveys, no blasting to install these foundations is planned.

4 Description of Host Environment

Section 4.2.2 – Local weather conditions

■ QC-15

The proponent must identify frost zones and zones at risk of ice storms in the study area.

Answer

The new 315-kV line segment will be built in an ice loading zone with maximum radial ice thickness on cables of 30 mm at -10°C. The line will not cross any high-risk areas for rime or frost loading.

Section 4.2.6.3 – Fish

According to the inventories conducted for the Rose Lithium-Tantalum Mine project, twelve (12) species of fish have been confirmed in the study area's lakes and streams. However, no fish were found during the stream characterization carried out along the future power line segment. Only one of the streams crossed by the power line (between towers 51A and 52A) may contain a potential brook trout spawning ground. However, although no fish were observed during characterization of the site, some streams in the area have significant hydrological connectivity (e.g., MH07, MH10, MH11 and MH12) and the characteristics of potential fish habitat.

■ QC-16

The proponent must demonstrate that the wetland sections affected by the work do not constitute fish habitat due to hydrological connectivity with a nearby water body.

Answer

The wetlands that will be affected by the work are mainly peatlands. Although some of them are hydrologically connected, they are not located in spring flood plains. Since the work areas are a good distance away from the watercourses, the parts of the wetlands affected do not constitute fish habitat.

Additional characterization will be carried out at the same time as the forest survey. Since the stream crossings will comply with the RSDF, they will not hinder the free movement of fish if there are no major obstacles. The use of temporary bridges will avoid disturbing the streambeds.

■ QC-17

The proponent must indicate how it intends to ensure that the proposed mitigation measures are effective in protecting fish habitat.

Answer

Hydro-Québec will have a site supervisor on hand to ensure that the mitigation measures set out in section 6.4.1.9.4 of the EIS are properly implemented.

Section 4.2.6.5 – Bats

The ranges of certain special-status bat species overlap the project area. Section 4.2.6.5. states that no special-status bat species were observed in the study area. This statement cannot be made, since no inventory was conducted in the area. Furthermore, special-status bat species were observed in a similar habitat near the project study area.

■ QC-18

The proponent must provide additional information regarding the presence of special-status bat species and their habitat areas. As needed, it may request information from the proponent of the Rose Lithium-Tantalum Mine project and, if applicable, justify conducting an additional inventory to evaluate the area's use by species of interest. The inventory results must be presented. In the event that the presence of any special-status species is confirmed, special prevention or mitigation measures must be considered.

Answer

As stated in section 4.2.6.5 of the EIS, Hydro-Québec based its analysis on the data made available by the Ministère des Forêts, de la Faune et des Parcs du Québec (MFFP) [Québec department of forests, wildlife and parks], the mine project proponent and the Réseau québécois d'inventaires acoustiques de chauves-souris [network of acoustic inventories of bats in Québec]. According to the MFFP's regional office, there are no known bat nursery colonies or hibernation sites within a 10-km radius of the planned mine. The office also states that all known nursery colonies in the region are on buildings. This is likely due to the lack of large-diameter trees—a phenomenon also observed in the study area. Therefore, clearing of the right-of-way will have no impact on bat nursery colonies, which are unlikely to be present in any case. Furthermore, clearing will be scheduled outside the period when bat offspring are born and nursed. For all these reasons, Hydro-Québec does not consider that additional inventories are justified.

Section 4.3.4.3 – Mining, Pits, Quarries and Claims

On page 4-41, it is indicated that mining exploration is permitted in the area occupied by Eastmain 1 reservoir, subject to certain conditions. This statement is incorrect. Mining exploration is prohibited in the sector occupied by Eastmain 1 reservoir.[1] However, mining research and operations may be carried out on surface mineral substances in the area under certain conditions.

Answer

Hydro-Québec has taken note of the comment.

Section 4.3.4.5 – Recreation, tourism and vacationing

The proponent makes reference to the Weh-Sees Indohoun sector, a special wildlife management area that also covers sport fishing. The sector was abolished on April 1, 2018, in accordance with the provisions of the agreement between Hydro-Québec and the Québec government governing the special area's creation and duration.[2]

■ QC-19

The proponent must make the necessary adjustments to the impact assessment and proposed mitigation measures, given that the Weh-Sees Indohoun sector no longer exists.

Answer

As a result of the abolition of the Weh-Sees Indohoun zone, the study area is now part of hunting area 22, where general hunting regulations apply. Since moose hunting was already permitted in the study area east of the Nemiscau–Eastmain-1 road before the Weh-Sees Indohoun was abolished, the situation remains unchanged in this part of the territory. Due to the presence of the mine, no hunting of any kind will be possible to the west of the road. Therefore, no changes are required to the impact assessment or mitigation measures related to hunting.

1. Data from Ministère de l'Énergie et des Ressources naturelles.
2. Ministère des Forêts, de la Faune et des Parcs, March 29, 2018. Zone spéciale Weh-Sees Indohoun – Le Ministère confirme l'abolition de la zone spéciale de chasse et de pêche Weh-Sees Indohoun. Press release. Online: https ://mffp.gouv.qc.ca/abolition-zone-weh-sees-indohoun-2018-03-29/.

Section 4.3.6 – Development projects

The connection project is linked to construction of the Rose Lithium-Tantalum Mine project. The mine will operate for 21 years. The EIS also refers to another mining project in the region.

■ QC-20

In this context, the proponent must explain what will happen to the power line once the Rose Lithium-Tantalum Mine ceases to operate (i.e., specify whether the line is to be maintained, relocated, extended, etc.).

Answer

The project to connect the Rose Lithium-Tantalum Mine comprises the following two components:

- Relocation of a segment of the 315-kV line approximately 4.2 km long between existing towers 42 and 48
- Construction of a 68-m bypass to connect the mining company's substation to the 315-kV line

The relocation of the 4.2-km line segment is definitive. The new segment will bypass the mine and be part of the existing Eastmain-1–Nemiscau line. As was the case prior to the mine's construction, the Eastmain-1–Nemiscau line will remain in service after the mine ceases to operate.

The 68-m bypass would be dismantled if deemed no longer useful. Should the mine continue to operate beyond the period currently planned, the 68-m segment would be maintained.

5 Public Participation

Section 5.2 – Meetings and communication with the host community

The proponent conducted consultation activities with the host community. Two meetings were held: one on November 15, 2017, with representatives of the Council of the Cree Nation of Eastmain and the Eeyou Istchee James Bay Regional Government, and another on December 1, 2017, with the tallyman of trapline RE1. Appendix D.3 of the EIS only provides the minutes of the first meeting.

■ QC-21

The proponent must indicate which of the requests arising from consultations with the stakeholders were incorporated into the project, and how.

Answer

The demands expressed during the meeting of November 15, 2017 were addressed as follows:

- The tallyman was interviewed in the context of this project.
- Hydro-Québec will organize a meeting with the Council of the Cree Nation of Eastmain to inform them of the results of the archaeological inventory scheduled for summer 2018. However, the inventory has not yet been carried out. Hydro-Québec recommends that the mining company carry out the inventory of the only area with archaeological potential affected by the planned line segment as part of its archaeological research in that area, as well as in other areas affected by the mine project. In the event that the mining company declines to do the work, or if the organizations' schedules cannot be aligned, Hydro-Québec will conduct the inventory.
- The presence of the mine and the relocation of an existing camp in another sector (pursuant to an agreement between the mining company and the tallyman concerned) should result in the abandonment of all goose and moose hunting in the study area. Nevertheless, Hydro-Québec has undertaken to inform Cree land users of the work schedule and to talk with them about useful measures designed to hinder their activities as little as possible (see section 6.4.2.1 EIS).

■ QC-22

The EIS must include the minutes of the meeting held with the tallyman of trapline RE1 on December 1, 2017.

Answer

Since the tallyman has not given his consent, we are unable to publish the minutes of the meeting with him.

Section 5.3 – Stakeholders' concerns and questions

Section 5.3 states that "Hydro-Québec plans to implement measures to help generate local economic spinoffs," with a view to addressing the expectations voiced in regard to economic spinoffs from the project.

■ QC-23

The proponent must indicate which measures are planned to help generate local economic spinoffs.

Answer

As part of its projects, Hydro-Québec works to promote regional economic spinoffs through application of the following measures, where relevant:

- Inclusion in contracts of clauses obliging its agents to hire independent truckers, in compliance with the *Transport Act*
- Use of existing material and equipment disposal sites in the region where the work is being done
- Land clearing by local contractors
- Use of regional professional service firms
- Inclusion in calls for tenders of a clause favoring regional subcontracting

Hydro-Québec will hold public calls for tenders for construction of the new line segment. The winning contractor will be subject to current regulations set out by the Commission de la construction du Québec (CCQ) [Québec construction board], and must comply with said regulations in terms of meeting the project's needs and hiring a local and regional workforce. It should be noted that, since the Nord-du-Québec region does not have its own labor pool under the terms of the CCQ, qualified workers will be brought in from other labor pools in Québec.

In its meetings with representatives of the Cree Nation of Eastmain, Hydro-Québec has demonstrated that it is sensitive to local concerns about the workforce and economic spinoffs. In this regard, it will submit a proposal to the Council of the Cree Nation of Eastmain to establish an approach to identifying the potential for economic spinoffs from the project and will conduct an inventory of local workers who meet Hydro-Québec's hiring criteria and can perform the work not governed by the CCQ.

In all its projects, Hydro-Québec reserves the right to attribute certain portions of the work to local contractors. These contracts often cover work not governed by the CCQ. In such cases, the choice of whether or not to hire local and regional workers is left to the contractor's discretion. However, the contracts may include clauses encouraging local hiring.

Within the Jamesian sociopolitical context, the Comité de maximisation des retombées économiques du Nord-du-Québec (ComaxNord) [committee for the maximization of economic spinoffs in Nord-du-Québec] constitutes the key forum through which the communities and Hydro-Québec can discuss the economic spinoffs from Hydro-Québec's projects.

Thus, in developing its supply strategy at the detail engineering stage, Hydro-Québec is able to take local and regional capacity into consideration, while adhering to its internal policies and regulations governing the acquisition of goods and services.

Maintenance and operation of the new line segment will require no new personnel, since these activities will be carried out by Hydro-Québec TransÉnergie already working in the region.

Based on prior experience, Hydro-Québec estimates total potential economic spinoffs for regional businesses (Jamesian and Cree) at about 12.7% of the total project cost (see Table QC-23-1).

Table QC-23-1: Economic Spinoffs from the Project

Source of spinoffs	Approximate value (in thousands of dollars)	Proportion of total project cost [a] (%)
Fuel for heavy machinery	250	1.4
Accommodation and services	1,650	9.6
Land clearing	300	1.6
Total (not including IEP [b])	**2,200**	**12.7**

a. Total project cost is estimated at $19.5 million
b. IEP: Integrated Enhancement Program (PMVI in French)

Section 5.5 – Other activities

Section 5.5 states that Hydro-Québec will inform the Nemaska Band Council and the tallyman of trapline R19 about the project and will produce an information bulletin for the stakeholders concerned.

■ QC-24

The proponent must indicate whether these activities have been carried out, whether any concerns, questions or comments have been expressed and if so, how these comments have been taken into consideration.

Answer

The Council of the Cree Nation of Eastmain and the tallyman of trapline R19 will be informed of the final line route and work schedule as soon as they become available.

An information bulletin will be produced to inform the communities of Eastmain and Nemaska about the nature and schedule of the work.

6 Impacts and Mitigation Measures

Section 6.3.2 – Clearing methods

Section 6.3.2 states that clearing method B will be used on land with low load-bearing capacity located near sensitive components such as peatlands and swamps and along lakeshores and riverbanks. This method consists in felling trees using portable, mechanical tools and recovering and disposing of the wood waste. Section 6.4.1.5 states that methods B, B2, APS or C will be used in wetlands if trees must be felled. Lastly, section 4.9 of the Standard Environmental Clauses indicates that clearing method B2 will be used in peatlands and swamps as long as Hydro-Québec considers that there is no disadvantage in doing so. The advantage to method B2 is that it allows for felled trees to be left in place, thereby minimizing the impacts on soil resulting from dragging tree trunks.

■ QC-25

The proponent must confirm which land clearing method will be used in wetlands. If the method selected is not method B2, as stipulated in section 4.9 of the Standard Environmental Clauses, the proponent must justify the reason for not selecting it.

Answer

Clearing method B2 is a method B variant used in situations where the vegetation is very sparse (e.g., open peatland and marsh). Leaving trees and other wood waste in place has no impact on construction when the quantities of wood waste are small. However, if the forest is relatively dense (e.g., treed swamp and treed peatland), the quantity of wood waste will be too large and will hinder construction (cable stringing) and vegetation control (safety). The decision to use method B2 will be made following the inventory of the various areas to be cleared, during the forest survey.

■ QC-26

In clearing method B, bushes and shrubs less than 2.5 metres high at maturity will be preserved. For the purpose of clarification, the proponent must specify which bush and shrub species will be preserved using this method.

Answer

The following bush and shrub species will be preserved: alder, redosier dogwood, serviceberry and beaked hazelnut, as well as all shrubs less than 30 cm high (mainly heath) and grasses.

■ QC-27

To minimize the impacts generated by clearing operations in peatlands within the planned line route, the dominant heath species in said peatlands must be preserved as much as possible. The proponent must indicate to what extent the heath will be preserved during clearing in these areas.

Answer

Peatlands are wetlands that will be cleared using method B or B2. In these cases, the work will be done manually and there will be very little machinery traffic. Heath will not be cut (see answer to question QC-26) and most heath plants will be left standing, as there is little risk of them being crushed.

Section 6.4.1.5 – Wetlands

Impacts during construction

The right-of-way of the new power line segment crosses through 34 wetlands representing a total area of 6.9 ha. Most of the affected wetlands are treed and treeless bogs of moderate to high ecological value. The project's main impact on wetlands relates to land clearing, which will affect a total area of 3.7 ha of wetlands consisting mostly of treed swamps and bogs.

Temporary access roads will be built in wetlands over a distance of approximately 875 metres. The wetlands will be restored at the end of the work, as stipulated in section 26.3 of the Standard Environmental Clauses. The work areas required during tower construction will create a temporary encroachment covering an area of 12,925 m^2 of wetland. These areas will also be restored at the end of the work. Restoration will involve completely rehabilitating the wetlands' soil, hydrology and vegetation. The methods planned should ensure that the wetlands are completely restored. However, the proponent has not planned any follow-up to verify the effectiveness of the proposed measures (section 7.2).

■ QC-28

The proponent must provide a detailed description of the work to be carried out in wetlands, including land clearing and site restoration, particularly in regard to peatlands.

Answer

Work to be carried out in wetlands consists in clearing trees, building access roads, building towers and restoring the site. In regard to clearing in wetlands, see answer to question QC-6, which refers to the use of clearing method B or B2. If no vegetation incompatible with the operation of the power line is found, no clearing operations will be carried out.

In regard to the restoration of disturbed areas, Hydro-Québec will apply Standard Environmental Clause 26.

See the answers to questions 26, 27, 29 and 30 for further information.

■ QC-29

The proponent must agree to conduct a follow-up of wetland restoration to verify the effectiveness of the measures applied and monitor the regrowth of vegetation in the replanted soil. In the event that the proposed measures do not allow for adequate restoration of the wetlands, the proponent must implement the necessary corrective measures.

Answer

Hydro-Québec will check the effectiveness of the work to restore disturbed wetland areas once it is completed.

Impacts during operation

Two towers (44A and 48A) will be constructed in treed bogs and the foundations of two other towers (51A and 53A) will encroach into the same type of peatland. The ecological value of the treed bogs is moderate, except for the two located between towers 52A and 53A, whose ecological value is considered high. The presence of these towers will cause the permanent loss of 720 m^2 of wetland. In addition to this permanent loss, an access lane will be created and maintained to allow for machinery and personnel traffic during operation of the power line. The lane will be stripped of vegetation over a width of five metres.

■ QC-30

The proponent must estimate the size of the area of the permanent encroachment into wetlands created by the access lane to be maintained during operation of the power line.

Answer

As stated on page 6-18 of the EIS, Hydro-Québec will restore the portions of wetlands crossed by the temporary access roads required for construction. Therefore, no permanent loss of wetland is anticipated.

Compensation for affected wetlands

The encroachment by the towers (720 m^2), stripping of the soil within the access lane and clearing and maintenance of the power line right-of-way will generate significant impacts on wetlands. The *Act respecting the conservation of wetlands and bodies of water* (ARCWBW) contains several provisions designed to prevent the loss of wetlands and bodies of water and minimize the impacts from projects on these environments. If, for the purposes of a project, it is not possible to avoid disturbing these areas, compensation measures are required. The project must comply with the objectives of the ARCWBW.

■ QC-31

The proponent must explain how the "avoid/minimize/mitigate/compensate" sequence has been applied. It must propose measures to compensate for the residual losses of wetlands and identify the stakeholders consulted, particularly the communities, tallymen and land users affected by the project.

Answer

The final line route was developed and selected in accordance with several criteria covering technical, economic and environmental aspects, including wetlands. One of the technical criteria for this project—the line's minimum allowable distance from the future mine complex—requires that the line route cross through large peatlands to the east of the Nemiscau–Eastmain-1 road. Despite this constraint, Hydro-Québec has made every effort to site the towers outside wetlands, has proposed a number of mitigation measures designed to reduce the project's impact on them (see section 6.4.1.5 of the EIS), and will restore the wetland areas affected by the work. The permanent residual loss of wetlands represents 1,029 m^2 (see corrected evaluation below), i.e., 1.3% of the wetlands in the planned right-of-way or 0.09% of all wetlands in the study area. According to section 46.0.1 of the *Act respecting the conservation of wetlands and bodies of water* (ACWBW), losses are compensated for "in cases where it is not possible, for the purposes of a project, to avoid adverse effects on the ecological functions and biodiversity of wetlands and bodies of water." However, the loss of 0.09% of the study

area's wetlands, or of 1.3% of all wetlands in the right-of-way, will adversely affect neither the ecological functions, nor the biodiversity of wetlands and bodies of water there. Moreover, this impact is considered minor in the EIS. It is also important to note that the area covered by the *Regulation respecting compensation for adverse effects on wetlands and bodies of water* (RCAEWBW) does not include the Nord-du-Québec region and is, therefore, part of the study area for this project (Québec, MDDELCC, 2018). In light of the above, Hydro-Québec does not consider the application of compensation measures to be justified.

Corrected evaluation of permanent and temporary losses of wetlands associated with definitive line route

As explained in the answers to questions QC-1 and QC-2, the line route has been modified since the EIS was filed. According to the new route, seven towers would be erected in wetlands. The permanent wetland losses due to the presence of the towers' foundations is now estimated at 1,029 m^2, rather than the 720 m^2 associated with the four towers cited in the EIS (section 6.4.1.5). However, these areas are based on a theoretical representation of the footprint of the tower foundations (single, square 300-m^2 foundation, rather than four separate foundations, each measuring 75 m^2) and on a tower placement that may be revised with a view to avoiding the wetlands to an even greater extent. The evaluation done at this stage of the project makes it possible to determine the scope of the impact, as well as the types of wetlands affected; Hydro-Québec will be able to provide a more detailed evaluation when the engineering phase is more advanced. Tables QC-31-1 and QC-31-2 show the revised project impacts on wetlands, based on the definitive line route.

Table QC-31-1: Wetlands Intersected by the Planned Line Segment Right-of-Way (revised Table 6-4 from EIS)

Type	Number	Total area (ha)	Area in right-of-way (ha)	Number of towers planned	Ecological value
Treed bog	18	24.2	4.1	4	High to moderate
Open bog	15	91.8	3.1	3	High to moderate
Open fen	1	0.6	0.1	0	Undetermined[a]
Treed swamp	1	0.2	0.1	0	Moderate
Shrub swamp	1	1.7	0.1	0	Moderate
Total	**36**	**118.5**	**7.5**	**7**	**—**

a. At the time of the inventory, this type of wetland was not affected by the line route and was thus not inventoried. Its ecological value cannot be estimated without inventory data.

Table QC-31-2: Tower Work Areas that Might Temporarily Encroach on Wetland (updated Table 6-5 from EIS)

Tower	Type	Size of work area (m^2)	Portion of wetland affected[a] (%)	Type of wetland
42A	ENK	2,123	39	Open bog
43A	EOA	4,338	79	Treed bog
45A	EOA	1,721	31	Treed bog
46A	ENK	3,177	58	Open bog
47A	EOA	5,500	100	Treed bog
49A	EOA	1,549	28	Open bog
51A	ENM	2,274	41	Treed bog
52A	EOA	738	13	Treed bog
53A	EOA	737	13	Treed bog
54A	ENM	37	1	Treed bog
Total	**—**	**22,194**	**—**	**—**

a. Based on a circular work area (radius = 42 m; area = 5,500 m^2) around the tower.

Reference

Québec, ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC). 2018. Area covered. Map. Online: [www.environnement.gouv.qc.ca/eau/milieux-humides/carte-territoire-application.pdf] (February 27, 2019).

■ QC-32

To better assess the project's cumulative impacts, the proponent must calculate the total quantity of greenhouse gases (GHGs) released due to disturbance of the soil, particularly in the wetlands affected by the project. The proponent may use the publication entitled "Synthèse de la valeur et la répartition du stock de carbone terrestre au Québec" [summary of the value and distribution of the terrestrial carbon supply in Québec] as a reference in calculating the release of terrestrial carbon. The document is available at: http://www.mddelcc.gouv.qc.ca/changementsclimatiques/Rapport_final.PDF.

Answer

The two gases under consideration are CO_2 and CH_4 (methane), which are absorbed/ released by the peatlands. CO_2 is usually absorbed (carbon sink) to produce vegetation, and CH_4 is generally released back into the atmosphere (carbon source).

As part of a study on greenhouse gases, Hydro-Québec measured CO_2 and CH_4 fluxes on three large peatlands in the vicinity of the Eastmain-1 development. These peatlands are representative of those in the area of the Rose Lithium-Tantalum Mine. The measurements were taken over a six-year period. The averages below are the result of hundreds of measurements taken at different times of year (Teodoru et al., 2012):

- CO_2: -385 mg/m^2/day CO_2 eq.
- CH_4: 1,415 mg/m^2/day CO_2 eq.

Therefore, the permanent residual loss of 1,029 m^2 of wetlands represents a **decrease in peatland-related GHG emissions** on the order of 1,030 g CO_2 eq. per day. Given that the area of 1,029 m^2 represents approximately 1.3% of the wetlands intersected by the planned line right-of-way, the impact is considered negligible, as it is very low in relation to the natural fluctuations in emissions from these wetlands.

Reference

Teodoru et al. 2012. « The net carbon footprint of a newly created boreal hydroelectric reservoir ». *Global Biogeochemical Cycles*, vol. 26. 14 p.

Section 6.4.1.7 – Non-native invasive plant species

The plant inventories conducted by the proponent in August 2017 revealed the presence of five colonies of reed canary grass in the study area, i.e., along the Nemiscau–Eastmain-1 road and within the existing power line right-of-way. The proponent has proposed to carry out special mitigation measures to limit the species' propagation. However, the proponent must provide further details to allow for an evaluation of whether additional soil management measures designed to prevent propagation of this species (which still only occurs sporadically at these latitudes) or any other non-native invasive species (NNIS) is necessary.

■ QC-33

On Map A, the proponent must indicate the locations of all five colonies of reed canary grass, as well as any other known colonies of NNIS in the right-of-way of the existing power line.

Answer

Pocket Insert Map A has been updated to show all reed canary grass colonies inventoried in the area. In 2017, biologists surveyed the entire line route but did not find any non-native invasive plant species anywhere along its path. The information shown in Map A was taken from the inventories conducted by the mining company as part of its project.

■ QC-34

Two years after the work is completed, the proponent must agree to conduct a follow-up to verify whether any NNIS have become established and, if any are found, must forward the data on their coordinates and abundance.

Answer

No follow-up will be conducted as there is no reed canary grass along the selected line route (see Pocket Insert Map A and answer to question QC-33).

Section 6.4.2.6 – Archaeology

The archaeological information provided in the EIS is taken from the study of archaeological potential conducted by Arkéos in 2016 as part of the Rose Lithium-Tantalum Mine project. In total, 13 areas with archaeological potential have been identified in the project study area. These are the areas most likely to contain evidence of past human activity. The planned power line runs along a distance of 66 metres through only one of the identified areas with archaeological potential. One of the special mitigation measures suggested by the proponent is an inventory of this specific area with archaeological potential prior to the start of construction.

Moreover, there are gaps in the Arkéos report, which the proponent must take into consideration.

■ QC-35

The report must be revised to include a map showing the watersheds of the Pontax and Eastmain rivers, as well as the travel routes that pass through the study area.

Answer

The MELCC is referring to the study area for the mine project (83.4 km^2). The study area for the Hydro-Québec project is less extensive (38 km^2), since the structure to be built is smaller. The Pontax and Eastmain rivers extend far beyond the implementation area for the planned line segment. This is a question for the mine project proponent.

■ QC-36

Along with the known archaeological sites, Figure 4 must show the pre-Eastmain-1 watershed to provide a clearer context for the sites and their possible geographical connections to the study area.

Answer

The MELCC is referring to Figure 4 of the survey of archaeological potential conducted by Arkéos (2016) for the mine project. The study area for the Hydro-Québec project is smaller and contains no known archaeological sites, as shown on Pocket Insert Map A. For information purposes, we are attaching a map that was taken from the summary of the archaeological research carried out for the Eastmain-1 project and shows the river system before and after the impoundment of Eastmain 1 reservoir (Map QC-36-1). This is a better question for the mine project proponent.

Reference

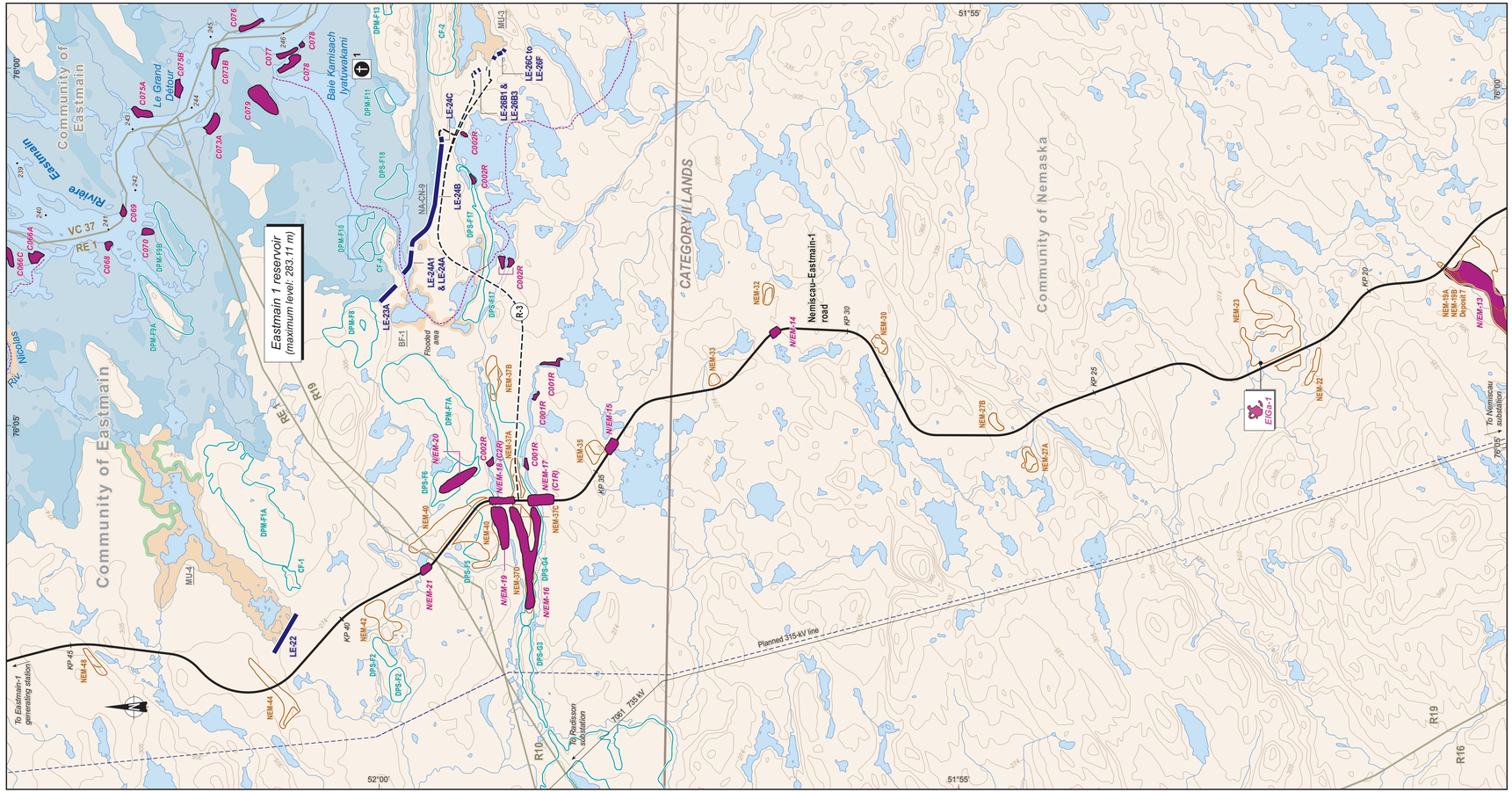
Arkéos. 2016. Projet minier Rose – Tantale et lithium. Étude du potentiel archéologique. Montréal, Arkéos. 40 p.

■ QC-37

The proponent must assess the archaeological potential within the project's footprint and further examine the lakes and streams that would be affected by the project. A more detailed analysis of the actual area covered by the project infrastructure would probably make it possible to identify the areas likely to be inventoried prior to any construction or disturbance.

Answer

The selected route of the future line segment crosses only one water body, the shores of which already show archaeological potential, as illustrated on Pocket Insert Map A. At the time of the field inventory, the archaeologist will conduct a visual inspection of the route. If he finds that there are other areas that need to be inventoried, he will conduct the necessary trial excavations.



Eastmain-1 hydroelectric development
Eastmain 1 reservoir archeological intervention program
Sheet 5: Update of archaeological potential

Archaeology

- Area with archaeological potential
  - Eastmain-1–Muskeg road — *E/O*
  - Nemiscau–Eastmain-1 road — *N/EM*
  - Muskeg–Eastmain-1 road — *M/EM*
  - Eastmain 1 reservoir — *C*
- Known archaeological site (FbGa-1)

Land use

- Roadway
- Permanent camp (Cree)
- Temporary camp (Cree)
- Other camp
- Burial sites**
  - **1-** EM-1 area: ACHP / Nadoshtin, March 2003
  - **2-** Cree land use: Nove Environnement, SEBJ, January 2003
  - **3-** Indigenous land use: Ethnoscop / Hydro-Québec, July 1991

(**The exact location of burial sites is to be confirmed)

Borrow pits (structures)

- Granular (DPS)
- Moraine (DPM)
- Quarry (CC, CD ou CF)

Borrow pits (roads)

- NEM and deposit

Planned development

- Maximum operating level of Eastmain 1 reservoir (283.11* m)
- Minimum level of Eastmain 1 reservoir (274.11* m)

*LEVELS: The geodetic coordinate reference system used is NAD83 (CSRS), MTM, Zone 9, (Sept. 2002), which results in an altitude difference of +0.11 m in comparison with the old reference system NAD 27 (CGQ77) used in 1991.

- Dike
- Transmission line (25 kV and 315 kV)
- Access road
- Work area
  - Trench landfill site
  - Disposal area (AR)
  - Storage area (S)
  - Contractor area (AE)
  - Concrete plant area

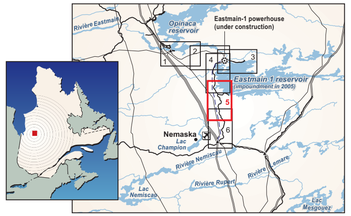
- Natural hydrography
- River kilometre point
- Transmission line (69 kV and 735 kV)
- Secondary road
- Road kilometre point
- Category II boundary
- Trapline boundary
- Contour line (metres)

Clearing for reservoir – Hydro-Québec 2003–2005 Plan

- Site No.
- Clearing
- Riparian habitat

Sources:

Map database:
BNDT, 1:50,000, 2002, with the permission of RCan
Reservoir: 1:20,000, Roche Ltée, 1:5,000, Hydro-Québec, 2003
Roads: BDAT, 1:100,000, MRN, Québec
Hydro-Québec facilities, January 2003
Eastmain-1 project data, 2003
Hydro-Québec
Borrow pits (structures and roads): SEBJ, 2003
Archaeology: Arkéos, 2003
Land use components: Nove Environnement, 2003
UTM projection, Zone 18, NAD 83
File: 3877B_rqcQC36-1_hq_005_inv_milieu_190315.fh10



0 1 2 km

Map QC-36-1
September 2003

Société d'énergie de la Baie James

Hydro Québec

■ QC-38

The interpretation of aerial photographs focuses on well-drained areas with high archaeological potential, but excludes smaller areas that would have been suitable locations for camps. The proponent should consider the possibility that there are smaller areas with potential along waterways.

Answer

See answer to question QC-37.

■ QC-39

The EIS focuses on larger rivers, since they are considered to have higher archaeological potential. Although this is generally true, it does not justify excluding the smaller streams and water bodies. The impact assessment should be based on interviews with elders and land users so that the navigability of small rivers and lakes can be determined. The study should include detailed information on areas of present-day land use, travel routes, and campsites that were used in the past and may be instrumental in identifying archaeological potential.

Answer

Section 4.3.4.1 of the EIS covers land use by the Crees. Among other activities, Hydro-Québec held a meeting with the trapline tallyman. The information gathered from him (i.e., camp, fishing sites, moose- and goose-hunting areas, and snowmobile trails) is shown on Pocket Insert Map A. The information collected by the mining company was also used.

■ QC-40

The proponent must take the archaeological research conducted on the Eastmain and Rupert rivers between 2003 and 2009 into account. See Archéotec Inc. (February 2014). Centrales de l'Eastmain-1-A, de la Sarcelle et dérivation Rupert : synthèse des informations archéologiques recueillies lors des travaux sur le territoire de la dérivation Rupert. Unpublished report prepared for Hydro-Québec and Société d'énergie de la Baie James. Bibeau, P., D. Denton and A. Burroughs, eds. (2015). *Ce que la rivière nous procurait : archéologie et histoire du réservoir de l'Eastmain-1*. University of Ottawa Press/Les Presses de l'Université d'Ottawa.

Answer

Hydro-Québec is pleased that the MELCC acknowledges the relevance of its studies and has taken note of the comment.

■ QC-41

The summary of the region's prehistoric period overestimates the importance of caribou. For thousands of years, the main staple for the inhabitants of the Eastmain-1 area was, in fact, beaver. The proponent must factor this into its evaluation of the archaeological potential of this area, which is dotted with the many streams and lakes that constitute the beaver's main habitat.

To facilitate incorporation of the above elements into the assessment of its project, Hydro-Québec TransÉnergie may request information from the proponent of the Rose Lithium-Tantalum Mine project and, if applicable, incorporate the details provided into its study.

Answer

This is, in fact, a summary of the region's prehistoric period and Hydro-Québec readily acknowledges that beaver has always been harvested there. However, identifying archaeological potential involves a large amount of data, including information on how the environment has evolved and what habitat potential it offers for different species. By referring to caribou hunting during the prehistoric period, the Hydro-Québec study also sought to report on the activity in modern times. Moreover, the land users interviewed also talked about their caribou hunting activities, as reported in the study of archaeological potential conducted by the mine project proponent.

■ QC-42

The proponent must provide further justification for conducting archaeological inventories in only one of the 13 areas identified as having archaeological potential. It must provide arguments to explain why the other areas were excluded.

Answer

Although the study area for the project to connect the Rose Lithium-Tantalum Mine encompasses thirteen areas with archaeological potential, the project will have an impact on only one of them. This is why the inventory will cover only one area with archaeological potential (zone P9, shown on Figure 5 in the report by Arkéos in 2016).

Reference

Arkéos. 2016. Projet minier Rose – Tantale et lithium. Étude du potentiel archéologique. Montréal, Arkéos. 40 p.

■ QC-43

In Appendix D.3, the proponent stated that it planned to conduct archaeological surveys in this area in summer 2018. The proponent must provide its archaeological research strategy, including the following:

- Schedule of archaeological research activities
- Methodology used: must be scientific and adapted to the archaeological research activities
- Report on archaeological inventories, or information on when it will be available
- Measures to be implemented if archaeological remains are discovered
- Alternative solutions, in the event that archaeological sites must be preserved

Answer

The inventory was not carried out due to the postponement of the mine project. Prior to the start of land clearing and construction, Hydro-Québec undertakes to conduct an inventory of the area affected by the connection of the Rose Lithium-Tantalum Mine and inform the Ministère de la Culture et des Communications du Québec [Québec department of culture and communications] of any potential discoveries, as stipulated in section 74 of the *Cultural Heritage Act.*

Land clearing is scheduled to begin in October 2019 and end in December 2019. The archaeological inventory will begin no earlier than May 2019 and will be completed in September 2019. The report will be issued within the time frame set out in the *Regulation respecting archaeological research*.

Subsurface and surface investigations within the archaeological areas to be inventoried will help ascertain whether or not remains of former human occupation are present. If they are, additional trial excavations will be used to collect samples of material remains, assess the spatial configuration of sites, verify whether architectural remains are present and study the soil horizon where the remains are found. The sites will then be marked off and given a protective perimeter. Hydro-Québec will also take these measures if archaeological remains are uncovered during the work (see Section 19 of the Standard Environmental Clauses in Appendix B of the EIS). Hydro-Québec will examine tower siting during the detailed engineering stage to determine whether or not it is possible to avoid disturbing the site. In the event that the site cannot be avoided or the placement of the towers would generate additional impacts on other environmental components, a dig of the site will be conducted to collect any information that would shed light on its occupation.

Section 6.7 – Recommissioning a borrow pit and opening a new quarry

The estimated 11,530 m^3 of granular material required for the work will be extracted from a recommissioned borrow pit and a new quarry, both located in the study area.

■ QC-44

The proponent shall provide detailed information about the borrow pit and quarry it intends to use. For each site, the proponent must provide information on elements including, but not limited to, the area to be stripped and used as a borrow pit, the type and quantity of material to be extracted, the planned access roads to the extraction sites and the site restoration measures.

Answer

To create access roads, Hydro-Québec estimates that some 25,000 m^3 of sand and gravel will be required. According to current projections, about 5,768 m^3 of MG-20 will be required to lay the foundations of the towers for the new line segment. These materials will be obtained from an old borrow pit located near the Nemiscau–Eastmain-1 and a quarry that will be opened, operated and restored by the Corporation Éléments Critiques mining company as part of its project.

■ QC-45

According to the interview conducted with him, the tallyman of trapline RE1 wants Hydro-Québec to consider replanting the sites once they are decommissioned so that they can be used for goose hunting.

The proponent must indicate whether it plans to implement special measures to replant the borrow pit and/or quarry following decommissioning and promote their use for goose hunting.

Answer

Hydro-Québec cannot make any commitment in this regard before selecting the borrow pits and evaluating whether it is technically possible to develop one of the borrow pits in a goose hunting area. If the technical and economic criteria line up, Hydro-Québec will consider developing a borrow pit.

7 Environmental Compliance Monitoring and Follow-up

■ QC-46

The proponent does not plan to conduct any environmental follow-up. Earlier in this document, the proponent was asked to commit to conducting follow-ups on wetland restoration (QC-29) and the propagation of non-native invasive plant species (QC-34), and to describe how it intends to verify the effectiveness of its fish habitat protection measures (QC-17). All of these aspects must be included in an environmental follow-up program to be prepared by the proponent. Otherwise, and considering the context relating to the Rose mine project, the proponent may explain to what extent these follow-up studies might be coordinated with those carried out for the mining project.

Answer

The answers to questions QC-16 and QC-17 show that it will not be necessary to conduct a follow-up on fish. The same applies to the propagation of non-native invasive plant species, as demonstrated by the answer to question QC-34. The only follow-up to be carried out will be on wetland restoration (see answer to question QC-29).

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