



# ***Côte-Nord Mining Railway***

## ***Summary Document***





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Approved by:

Martin Larose, Project Director



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# SUMMARY DOCUMENT

## 1 GENERAL INFORMATION

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Côte-Nord Mining Railway Company Inc. (hereafter referred to as the “Company”) proposes the construction and operation of a railway network (including the possibility of using existing rail infrastructures) as well as an ore handling and storage terminal in the Côte-Nord and Labrador regions, a project entitled “the Côte-Nord Mining Railway”.

The Côte-Nord Mining Railway Company Inc. (proponent) representative is:

Contact	Mr. Normand Pellerin Assistant Vice-president Environment and Sustainability, CN Phone: 514 399-7400 Fax: 514 399-6573 Email: normand.pellerin@cn.ca
Address	935 de la Gauchetière St. West 16 <sup>th</sup> Floor Montréal (Québec) H3B 2M9 Website: <a href="http://www.cn.ca">http://www.cn.ca</a>

The environmental consultant that will conduct the Environmental Assessment (EA) is GENIVAR INC. Its principal representative is:

Contact	Mr. Martin Larose Project Director Phone: 418 679-2151 ext. 10801 Fax: 418 679-9245 Email: martin.larose@genivar.com
Address	1125 Sacré-Cœur Blvd Office 202 Saint-Félicien (Québec) G8K 1P6 Website: <a href="http://www.genivar.com">http://www.genivar.com</a>

The majority of the railway project will be located on provincial crown lands except for some areas in the Pointe-Noire, Fermont, Wabush and Labrador City sectors. The material handling and storage facility could require easements, purchases or long-term leases from private landowners and an expected lease from the Port Authority of Sept-Îles. This potential lease relates to federal crown land. No other federal crown land is expected to be touched by the project.

### Consultations

The Tshiuetin Railway administration has been met three times for commercial purposes. Chiefs of Uashat mak Mani-Utenam and Matimekush-Lac-John were

present at one meeting to discuss the project. The Company has had numerous calls/meetings with the City of Sept Îles and the Port of Sept Îles to advise about the geotechnical and hydrogeological sampling works. In addition to this, advertisements of this work was provided to the public in two newspapers and on the radio. No other public information or consultation activity has been undertaken by the Company. The proposed railway options intersects the territory of two regional county municipalities (RCM) which are Sept-Rivières, whose territory includes the city of Sept-Îles and Lac-Walker unorganized territory, and Caniapiscau RCM that covers Rivière-Mouchalagane and Caniapiscau unorganized territory. Options also pass through the city of Fermont territory. In Labrador, the railway project crosses the Hyron Regional Economic Development Corporation territory, which includes Labrador City and Wabush municipalities.

Public information and consultation processes have not yet been determined but open house sessions will be planned in Sept-Îles, Wabush/Labrador City, and Fermont. The number of sessions, their locations and the exact nature of the information provided during these sessions will be determined once the final option is chosen and confirmed. The stakeholders that may be concerned by the project includes, without being limited to, Aboriginal communities, general public of the area, the municipalities where the project will take place, the Sept-Îles Port Authority, the Tshiuetin Railway administration, and numerous non-governmental organizations.

Meetings with Aboriginal communities concerned by the project will also be held with Innu community of Uashat mak Mani-Utenam, Innu community of Matimekush-Lac-John and Naskapi community in Kawawachikamach. The Innu community of Pessamit may also be contacted depending on the chosen option for the southern end of the railway project. The Betsiamites reserve is located 54 km south-west of Baie-Comeau.

The project could also be of interest for the Innu Nation (two Innu communities of Labrador: Natuashish and Sheshatshiu) and the Nunatukavut Community Council. All Aboriginal communities will be contacted by the Company early in the environmental assessment process. The actual traditional land use by Aboriginal communities will be documented during the environmental assessment process.

### **Other relevant information**

The project will be reviewed under the federal environmental assessment process and no review is required provincially. Prior to construction, specific provincial permits may be required for certain aspects of the project for agencies such as Ministry of Sustainable Development, Environment and Parks in Québec and from Labrador Department of Environment and Conservation in Newfoundland and Labrador. The specifics of these permits and agencies involved will be determined once final designs of the proposed project are complete.

No regional environmental study was or is currently being performed for the project location area.

Global demand for iron ore in recent years has generated extensive exploration activities and commissioning of new mines in the region of the Labrador Trough. The economic development of Côte-Nord and Northern Quebec has recently been identified as a strategic priority by the government of Quebec (development project called “Plan Nord”). Mining operations represent a major component of the economy of Côte-Nord, of Northern Quebec and of Labrador regions, where the exploration of mineral resources is far from being fully established. As the world demand for iron ore grows, Quebec offers a strategic opportunity to fulfill part of this demand and to maximize its economic potential.

Numerous mining projects in these regions are at various stages of completion with anticipated volumes of 50 to 125 million tonnes of ore per year between 2015 and 2019.

The Company plans to support the mining development in the Côte-Nord, Northern Quebec and Labrador regions by building a multi-user railway network primarily dedicated to ore transportation and to the inbound transportation of various products, as well as by building a multi-user ore handling and storage terminal in the Pointe-Noire area. The railway may also provide transportation services for other products such as fuel, construction equipment, and building materials depending on customer demands. Both the Pointe-Noire terminal and the railway will be designed with the intention of serving multiple clients. This approach significantly differs from the traditional approach in the mining industry of building and operating facilities dedicated for a single mining company. The multi-user aspect of both components of the project will generate synergies and will allow to significantly reduce the environmental footprint while ensuring capacity required for ore transport, storage and handling.

Because the project is designated under the *Regulation Designating Physical Activities* of the Canadian Environmental Assessment Act (2012), the Canadian Environmental Assessment Agency (CEAA) must act as the responsible authority with respect to environmental assessment. This *Regulation Designating Physical Activities* state that the construction, operation, decommissioning and abandonment of a railway line more than 32 km in length in a new right-of-way is a designated *physical activity* (section 28).

### **Project description**

The Company's project is composed of two distinct but complementary components:

- Railway network serving the transportation needs of the mining industry;
- Ore handling and storage terminal at the port of Sept-Îles, in the Pointe-Noire area.

Many options are currently under consideration to add the required railway capacity to serve the mining operations located between Sept-Îles and the northern regions. Given the numerous components to address in a sustainable development

perspective, the final railway line option that will be selected has not been determined yet. The potential for increased economic development in the region, the minimization of costs, the environmental footprint of the project, the impacts to stakeholders and the ability to use, wherever possible, the existing facilities are among the important parameters that will guide the decision on the selected option. The railway line will begin in the Pointe-Noire industrial area, where it could connect to the existing railway network (Arnaud railway; CFA). From Pointe-Noire, the mainline will extend north for a distance of 510 to 550 km (315 to 340 miles; depending on the selected option) to connect to the existing Tshiuetin Railway at Emeril Junction. The main line will be located near the Fermont and Wabush/Labrador City areas.

South of Champion Minerals' proposed Fire Lake Nord mine, three new construction options are under consideration (Figures 1 and 2):

- The Sainte-Marguerite-A option, which starts from Pointe-Noire and generally follows the east bank of the Sainte-Marguerite River (hereafter referred to as "Sainte-Marguerite-A option");
- The Sainte-Marguerite-B option, which starts from Pointe-Noire and generally follows the orientation of the Sainte-Marguerite-A option at a distance varying from about 0 to 20 km on its east side (hereafter referred to as "Sainte-Marguerite-B option"); and
- The Quebec-Cartier option, which starts from Pointe-Noire and generally follows a line east of the Quebec Cartier Railway (hereafter referred to as "Quebec-Cartier option").

North of Champion Minerals' proposed Fire Lake Nord mine, two options are considered:

- The Alderon-Emeril option heads eastward from 27 km southwest of Fermont, turns north to pass in the Alderon mining project sector and east of Fermont, then continue east approximately following the existing Northernlands Railway to the Tshiuetin Railway (hereafter referred to as the "Alderon-Emeril option"). The length of this option in the territory of Newfoundland and Labrador is approximately 94 km; and
- The Cliffs-Emeril option heads east in the Bloom Lake mine area, follow the existing Bloom Lake Railway and continue east approximately following the existing Northernlands Railway to the Tshiuetin Railway (hereafter referred to as the "Cliffs-Emeril option"). The length of this option in the territory of Newfoundland and Labrador is approximately 95 km.

The connection with the Tshiuetin Railway is subject to commercial agreements with the latter.



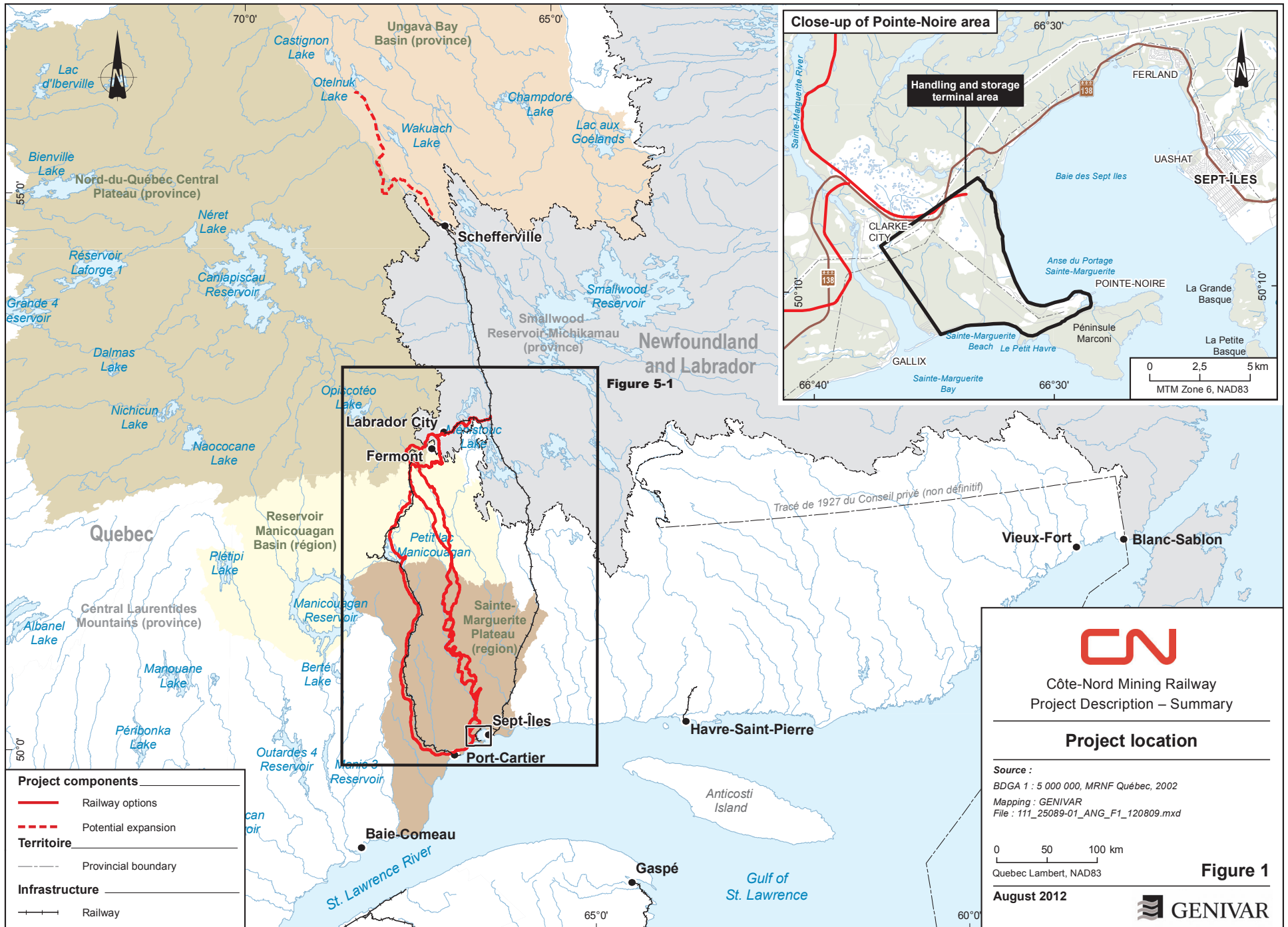



Figure 5-1



**Côte-Nord Mining Railway**  
Project Description – Summary

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**Project location**

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Source :  
BDGA 1 : 5 000 000, MRNF Québec, 2002  
Mapping : GENIVAR  
File : 111\_25089-01\_ANG\_F1\_120809.mxd

0 50 100 km

Quebec Lambert, NAD83

**Figure 1**

**August 2012**







Côte-Nord Mining Railway  
Project Description – Summary

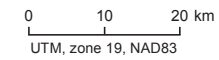
**Railway options  
environment description**

**Sources :**

BDGA, 1 : 1 000 000, MRN Québec, 2002  
 CanVec, 1 : 50 000, RNCAN, 2010  
 SDA, 1 : 20 000, MRNF Québec, mai 2010  
 Gestion des titres miniers (GESTIM), MRNF Québec, décembre 2011  
 Territoires récréatifs du Québec (TRQ), MRNF Québec, septembre 2009  
 Ministère du Développement durable, Environnement et Parcs (MDDEP) : MRNF, 2011  
 CCAE, 2M, 2012

Mapping : GENIVAR

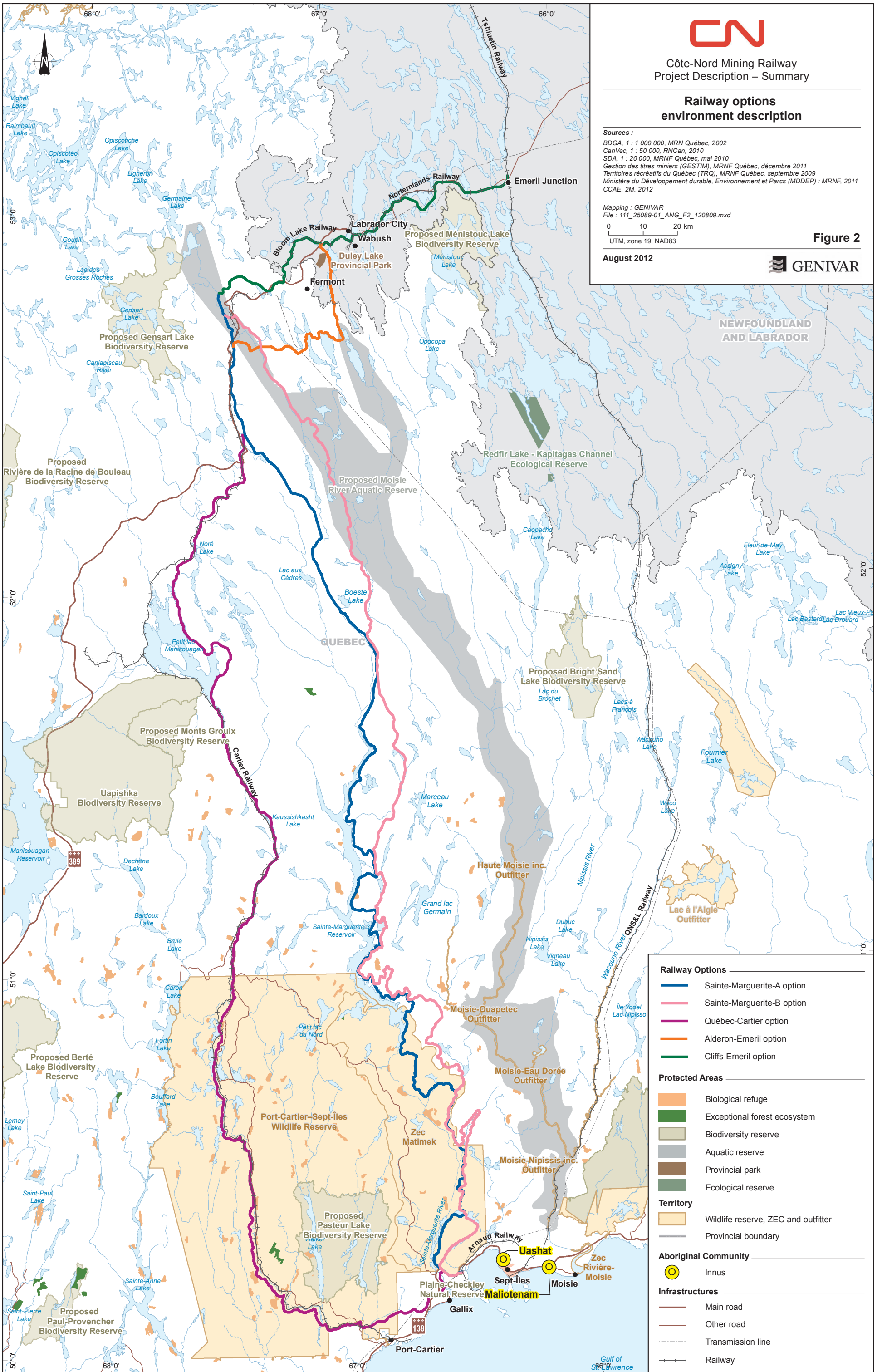
File : 111\_25089-01\_ANG\_F2\_120809.mxd



UTM, zone 19, NAD83

**Figure 2**

August 2012



**Railway Options**

- Sainte-Marguerite-A option
- Sainte-Marguerite-B option
- Québec-Cartier option
- Alderon-Emeril option
- Cliffs-Emeril option

**Protected Areas**

- Biological refuge
- Exceptional forest ecosystem
- Biodiversity reserve
- Aquatic reserve
- Provincial park
- Ecological reserve

**Territory**

- Wildlife reserve, ZEC and outfitter
- Provincial boundary

**Aboriginal Community**

- Innus

**Infrastructures**

- Main road
- Other road
- - - Transmission line
- Railway



The mainline will have a planned right-of-way (ROW) width between 30 and 105 m (100 to 350 ft) and could be wider in some areas for machinery and material storage during the construction phase. The planned track speed is 55 to 70 km/h (35 to 45 mph). Track construction is planned to be 37 tonne axle load, 136 lbs rail on hardwood ties with standard fasteners, 12" ballast depth and standard roadbed, in accordance with industry standards. Track targeted grades are 0.4% against loads and 1.3% against empties. The mainline will contain many sidings of approximately three km each and will include double tracks in certain areas. A number of spurs will connect to the mainline railway to service the mining projects but they are not included in this project description and are under the responsibility of the mining companies that want to connect to the mainline.

Depending on which option is chosen, between 10 and 50 utility crossings and between 3 and 10 tunnels will be required. A parallel access road covering 30-60% of the length of the chosen option will be constructed. Perpendicular access roads will be necessary at every 50 km to provide access to the construction camps. Finally, one or two crew bunkhouses will be required to provide crew accommodations and crew changes.

The facility in Pointe-Noire will be principally dedicated to the handling and storage of ore coming from existing and future mines in the regions of the Côte-Nord and Nord-du-Québec as well as Labrador. The facility will be designed for a final annual capacity of 125 million tonnes of ore. The ore will be transported daily on trains marshalled with up to 250 cars and five locomotives (annual capacity of 35 to 70 million tonnes of ore) on a rail distance up to 550 km. The ore will be unloaded from the trains by tandem car dumpers in Pointe-Noire terminal and will be transferred to stockpiles using conveyors before being loaded to ships by the Port of Sept-Îles shiploading facility. Administrative buildings, railway maintenance facilities and equipment are also planned in Pointe-Noire.

The required construction activities will include site clearing and grading, excavation and infilling, construction of access roads and yards as well as construction of the handling and storage facility and buildings.

Various solids, liquids and gases will be generated during the railway project construction and operation. These products are presented in Table 2-1.

More detail on that subject will be included in the environmental impact statement.

**Table 2-1: Waste and Emissions to be Potentially Generated**

Facility/Activity	Waste/Emission			
	Solid	Liquid	Gaseous	Hazardous
<b>Handling and storage terminal</b>				
Construction	<ul style="list-style-type: none"> <li>Residual material (various)</li> </ul>		<ul style="list-style-type: none"> <li>Greenhouse gas from machinery and explosive uses</li> <li>Dust from machinery movements</li> </ul>	<ul style="list-style-type: none"> <li>Contaminated soils from spills/leaks</li> <li>Used oil</li> <li>Lubricants</li> </ul>
Operation	<ul style="list-style-type: none"> <li>Contaminated soils from spilled iron ore</li> <li>Dust from piles and conveyor</li> </ul>	<ul style="list-style-type: none"> <li>Stormwater</li> <li>Waste water from the dock facility</li> </ul>	<ul style="list-style-type: none"> <li>Greenhouse gas from train, vehicle and heavy equipment movements</li> <li>Dust from handling activities and machinery movements</li> </ul>	<ul style="list-style-type: none"> <li>Contaminated soils from spills/leaks</li> <li>Used oil</li> <li>Lubricants</li> </ul>
Office building	<ul style="list-style-type: none"> <li>Domestic residual material</li> </ul>	<ul style="list-style-type: none"> <li>Sanitary water from sanitary installations</li> </ul>		
Rail Construction	<ul style="list-style-type: none"> <li>Wood</li> <li>Soil</li> <li>Rock material</li> <li>Concrete particles</li> </ul>	<ul style="list-style-type: none"> <li>Used oil</li> <li>Lubricants</li> <li>Sanitary water</li> </ul>	<ul style="list-style-type: none"> <li>Greenhouse gas from machinery and explosive uses</li> <li>Dust from machinery movements</li> </ul>	<ul style="list-style-type: none"> <li>Contaminated soils from spills/leaks</li> <li>Used oil</li> <li>Lubricants</li> </ul>
Construction camps	<ul style="list-style-type: none"> <li>Domestic residual material</li> </ul>	<ul style="list-style-type: none"> <li>Sanitary water</li> </ul>	<ul style="list-style-type: none"> <li>Dust from machinery movements</li> </ul>	<ul style="list-style-type: none"> <li>Contaminated soils from spills/leaks</li> <li>Used oil</li> <li>Lubricants</li> </ul>
Train	<ul style="list-style-type: none"> <li>Domestic residual material</li> </ul>		<ul style="list-style-type: none"> <li>Greenhouse gas from train traffic</li> <li>Dust from train traffic</li> </ul>	
Crew bunkhouses	<ul style="list-style-type: none"> <li>Domestic residual material</li> </ul>	<ul style="list-style-type: none"> <li>Sanitary water</li> </ul>		<ul style="list-style-type: none"> <li>Contaminated soils from spills/leaks</li> <li>Used oil</li> <li>Lubricants</li> </ul>
Yards/ repair shops	<ul style="list-style-type: none"> <li>Batteries</li> <li>Brake shoes</li> <li>General refuse</li> <li>Metal products</li> <li>Wood waste</li> </ul>	<ul style="list-style-type: none"> <li>Sanitary water</li> <li>Stormwater</li> <li>Hydrocarbons</li> </ul>	<ul style="list-style-type: none"> <li>Greenhouse gas from train traffic</li> <li>Dust from machinery movements</li> </ul>	<ul style="list-style-type: none"> <li>Used oil</li> <li>Lubricants</li> <li>Anti-freeze/glycol</li> <li>Solvents</li> <li>Contaminated soils from spills/leaks</li> </ul>

The environmental assessment process leading to project authorization and permit issuance is expected to extend until early 2014. The construction phase of the railway and handling and storage facilities should begin in early 2014 by the construction of access roads and site preparation and is believed to require between one year and a half to three years. The operation phase is expected to be progressive, starting in 2016. The railway and the handling and storage facility are expected to be under perpetual operation.

### 3 PROJECT LOCATION

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The railway right-of-way (ROW) will extend between Sept-Îles in Quebec and Wabush/Labrador City area in Labrador, where the ROW will join the Tshiuetin Railway. The handling and storage facilities will be located at the port of Sept-Îles, in Pointe-Noire.

The geographic coordinates localizing the project are presented in Table 3-1.

**Table 3-1: Geographic Coordinates of the Project**

Component of the project	Latitude (dd° mm' ss,sss'')	Longitude (dd° mm' ss,sss'')
Railway – southern end	50° 12' 34.413" N	66° 33' 34.049" W
Railway – northern end	53° 05' 37.044" N	66° 12' 31.028" W
Handling and storage facility - center	50° 10' 38.814" N	66° 33' 44.602" W

### 4 FEDERAL PARTICIPATION

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The Company will be majority owned by CN, and by the Caisse de dépôt et placement du Québec in a minority proportion. No federal government funding is being provided for the completion of this project.

The following federal legislative and regulatory requirements could in particular apply for the implementation of the designated project:

- The CTA will have to grant an approval for the construction of the railway line pursuant to subsection 98 (2) of the *Canada Transportation Act*.
- Fisheries and Oceans Canada (DFO) will issue an authorization pursuant to subsection 35 (2) of the *Fisheries Act* (R.S.C., 1985, c. F-14), given the potential impact of the project on fish habitat.
- Transport Canada (TC) should grant an approval relating to bridge construction pursuant to paragraph 5 (1)a) of the *Navigable Waters Protection Act* (R.S.C., 1985, c. N-22), and possibly also pursuant to subsection 10 (1) of the *Railway Safety Act* (R.S.C., 1985, c. 32 (4th Supp.)).
- Natural Resources Canada (NRCan) should issue a permit under subsection 7 (1) of the *Explosives Act* (R.S.C., 1985, c. E-17), given that explosives will be used and stored for the construction of the railway project.

## 5 ENVIRONMENTAL EFFECTS

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### Receiving environment description

The study area consists of all the options shown at Figure 1, including a 5 km buffer zone on each side of the options and most of the Pointe-Noire territory. The entire territory covered by the project is presented in more details in Figures 2 to 4.

The climate in the study zone is cold and moderately humid. Near the St. Lawrence River climatic conditions are milder than in the northern end of the study zone. There is no air quality monitoring stations in the project's vicinity. In Sept-Îles, especially in the Pointe-Noire area and Port-Cartier there are extensive industrial zones where atmospheric emissions like particular matter, carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), sulfur (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and polycyclic aromatic hydrocarbons (PAH) occur. In the northern section, few settlements are found and industrial activities are rare. However, near Fermont, Wabush and Labrador City, mining sites in operation can produce atmospheric emissions.

The project is primarily located within the Quebec's Central Laurentides mountains and the Nord-du-Québec central plateau natural provinces and Labrador's Smallwood reservoir – Michikamau ecoregion. These boreal forest regions are rich in wetlands, extensively covered by the hydrographic networks. The project crosses three bioclimatic zones which are from south to north: balsam fir – white birch, spruce-moss and spruce-lichen. The Pointe-Noire area vegetation is mainly influenced by the maritime climate. The presence of shorelines and beaches increases the floristic diversity that can be found. Large peatlands are mainly located in the Pointe-Noire area and in the northern end of the study zone. The study area likely contains up to 34 flora listed species at risk under provincial regulations. However, none of those species are listed under the federal *Species at Risk Act*.

The project's study zone is likely to be frequented by 13 amphibian and 2 reptile species. None of those species have been given a specific conservation status by provincial or federal authorities. The Sept-Îles area with its bay and archipelago is an Important Bird Area (IBA) for both breeding and migrating birds. Over 100 species are likely to breed in the study area including 14 species at risk (11 are federally listed). A total of 45 mammal species could be observed. Moose and woodland caribou are the main big game species in the study area. The latter is threatened in Canada. Marine mammals could be observed near the Pointe-Noire area, including 4 species at risk (Fin whale, Blue whale, Common porpoise and Beluga). Concerning fishes, up to 18 species are likely to be present in the waterbodies near the railway section and nearly 30 species in the Baie des Sept Îles. The American eel, the Atlantic wolfish and the Spotted wolfish are three federally-listed species at risk that could be observed near the Pointe-Noire area. No federally-listed fish species at risk are expected within the freshwater component of the study area.

There are various protected areas near the proposed railway options. In the Pointe-Noire area, the railway crosses the Plaine-Checkley natural reserve. The Corossol Island, in the Archipel des Sept Îles, is a migratory bird refuge (Figure 4). Near



Fermont, the railway project crosses the proposed Moisie River aquatic reserve. The proposed Gensart Lake biodiversity reserve is located west of proposed railway options near Fermont (Figure 2). In this region, the Alderon-Emeril and Cliffs-Emeril options are near the Duley Lake Provincial Park in Labrador and the proposed Ménistouc Lake biodiversity reserve in Quebec (Figure 2). Also, between Pointe-Noire and the 52<sup>nd</sup> parallel north, there are some exceptional forest ecosystems and biological refuges found near, or overlapping, the proposed railway options.

Concerning the social components of the project, it is located mainly in the Côte-Nord administrative region in Québec. In Labrador, it is located in the West Labrador region. The cities touched by the project are Sept-Îles (25,686 residents in 2011), Fermont (2,874 residents in 2011), Labrador City (7,367 residents in 2011) and Wabush (1,861 residents in 2011). Most of the railway options are located on public land with the exception of Sept-Îles, Wabush and Labrador City where the land is mainly private. Segments of the land proposed for the railway project may be used for vacationing, hunting, fishing and trapping activities, as well as for snowmobiling. The ZEC Matimek (control zone) is crossed by the Sainte-Marguerite-A and Sainte-Marguerite-B options in their southern portion (Figure 2). Forestry activities are taking place in the southern portion of the territory.

The railway options and various railway segments pass through territories used by members of Aboriginal communities. The railway crosses the Saguenay beaver reserve, used by the Innu community of Uashat Mak Mani-Utenam (reserves in Sept-Îles region) and the Innu community of Matimekush – Lac-John (reserves in Schefferville regions) (Figure 2). The territory crossed by the railway is also likely to be of interest to the members of Innu Nation in Labrador, the Naskapis of Kawawachikamach and the members of the NunatuKavut Community Council. Depending on the option chosen, the railway may also be of interest for the Innu community of Pessamit. The Betsiamites reserve is located 54 km southwest of Baie-Comeau. The actual traditional land use by Aboriginal communities will be documented during the environmental assessment process. Members of the Aboriginal communities will be consulted for this matter, which will include documenting the territories used by the different communities.

The project options are likely to contain archaeological or heritage sites considering the well developed hydrologic network. A study of archaeological/heritage potential will allow the identification of these sites.

### **General impacts and mitigation**

The Table 5-1 presents some potential impact to key environment components that could result from the project completion. The Pointe-Noire handling facility could touch the Port Authority of Sept-Îles (depending on the option selected). A portion of the proposed railway is also located in Labrador. The list of potential impacts applies to the entire study zone including a part of Labrador and Crown lands. A complete list of potential impacts and associated mitigation measures will be presented in the environmental impact statement.





**Railway options**

- South options arrival

**Species at Risk Occurrence**

- Woolly beacheather (GENIVAR)
- Woolly beacheather (MDDEP)

**Forest Stands**

- Coniferous
- Mixed
- Deciduous

**Wetland**

- Alder swamp
- Salt marsh
- Peatland
- Eelgrass

**Others**

- Bareland
- Gravel pit
- Reef
- Fluvial deposit

**Protected Areas**

- Biodiversity reserve
- Migratory bird sanctuary

**CN**

Côte-Nord Mining Railway  
Project Description – Summary

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**Material handling and storage facility area  
Vegetation and protected**

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Sources :  
BDTQ, 1/20 000, MRNF Québec, 2007  
Système d'information écoforestière (SIEF), MRNF Québec, 2010  
Centre de données sur le patrimoine naturel du Québec, MDDEP, 2011  
CCAE, 2M, 2012

Mapping and inventory : GENIVAR 2012  
File : 111\_25089-01\_ANG\_F3\_veg\_120809.mxd

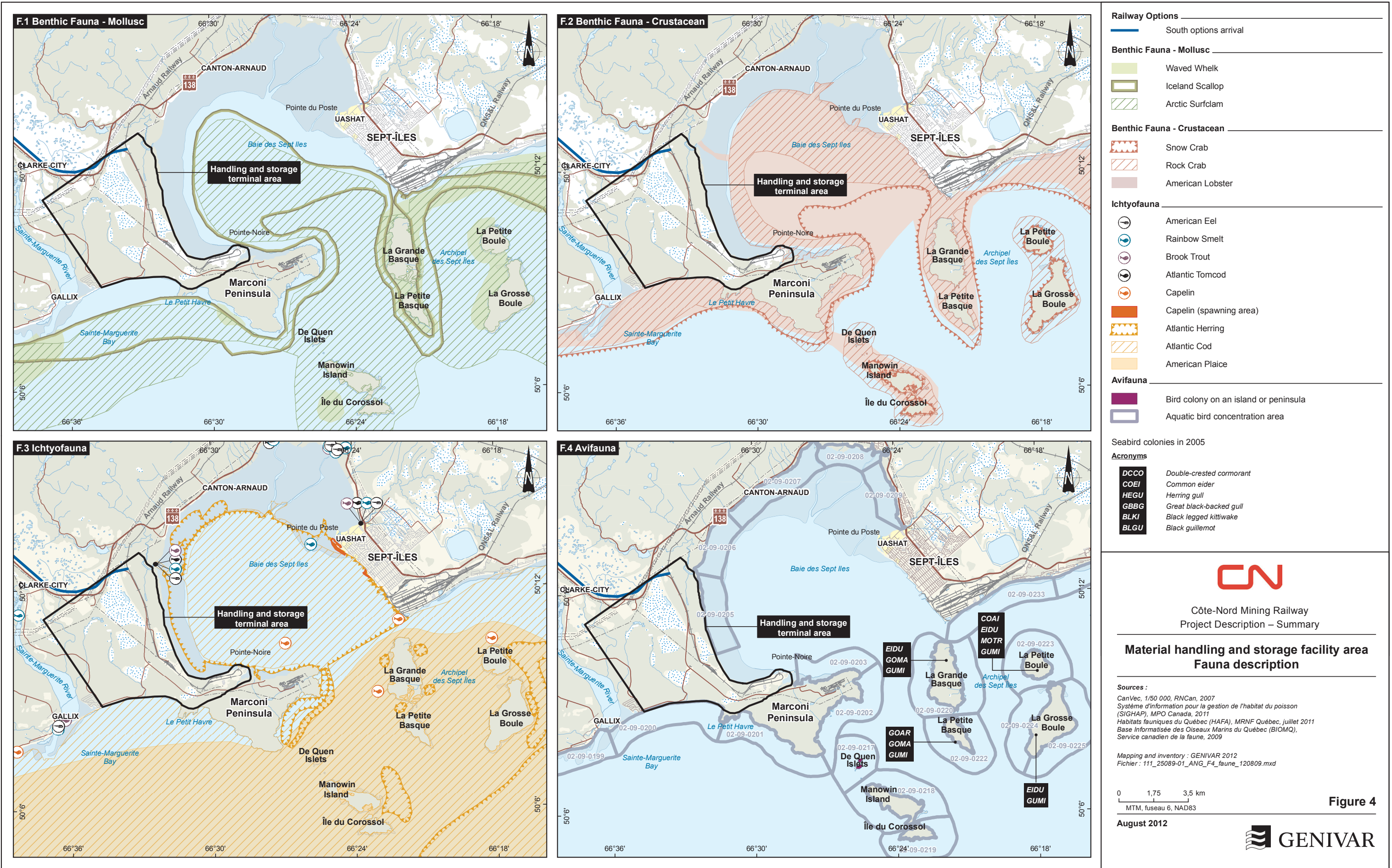
0 750 1 500 m  
MTM, NAD 83, fuseau 6

**Figure 3**

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**GENIVAR**







**Table 5-1 : Potential Impacts on Key Environment Components to be addressed**

Key environment component	Potential impact
Fish and fish habitat	<ul style="list-style-type: none"> <li>• Temporary deterioration of water quality associated with suspension of sediments.</li> <li>• Loss of fish habitat due to the encroachment of water courses during bridge, culvert and additional facility construction and infill activities in marine environment<sup>1</sup>.</li> <li>• Potential introduction of deleterious substances in water.</li> <li>• Disturbance of fish caused by noise and construction activities.</li> <li>• Potential impacts to listed fish species at risk.</li> </ul>
Aquatic species	<ul style="list-style-type: none"> <li>• Temporary deterioration of water quality associated with suspension of sediments.</li> <li>• Loss of habitats for aquatic species due to the encroachment of water courses during bridge, culvert and additional facility construction and infill activities in marine environment.</li> <li>• Potential introduction of deleterious substances in water.</li> <li>• Sensory disturbance during the construction and operation activities.</li> <li>• Potential impacts to listed aquatic species at risk.</li> </ul>
Migratory birds	<ul style="list-style-type: none"> <li>• Habitat loss or alteration, mainly in Pointe-Noire area.</li> <li>• Sensory disturbance during the construction and operation activities.</li> <li>• Potential impacts to listed migratory species at risk</li> </ul>
Aboriginal people	<ul style="list-style-type: none"> <li>• Modification of traditional land use.</li> <li>• Potential impact of archaeological sites.</li> <li>• Job creation and construction related business development.</li> </ul>

<sup>1</sup> Only the potential backfilling works in the marine environment could cause an impact on aquatic species, as defined in subsection 2(1) of the *Species at Risk Act*. These species are: American eel, Atlantic wolfish, Spotted wolfish. The presence of the latter two is possible but their preferential habitat is not found in the Baie des Sept Îles. The American eel uses eelgrass beds and may be impacted by changes to eelgrass in the bay.

**Reference for citation:**

GENIVAR. 2012. *Côte-Nord Mining Railway –Summary Document*. Document produced for the Côte-Nord Mining Railway Company Inc. 15 p.