



# Réserve aquatique projetée de la Rivière- Croche

**Conservation plan**



January 2017



## **1. Protection status and toponym**

The legal protection status of the territory described below is that of proposed aquatic reserve, a status governed by the *Natural Heritage Conservation Act* (chapter C-61.01).

The permanent protection status proposed for the territory is that of “aquatic reserve”, this status also being governed by the *Natural Heritage Conservation Act*.

The provisional toponym is: Réserve aquatique projetée de la Rivière-Croche. The official toponym will be determined when the territory is given permanent protection status.

## **2. Conservation objectives**

Réserve aquatique projetée de la Rivière-Croche was created primarily to protect and maintain biological diversity and the associated natural and cultural resources. Additionally, protection of this territory will augment the representativeness of the regional and national network of protected areas, since it has multiple components of ecological interest that are representative of characteristic ecosystems in the La Tuque depression natural region (see section 3.2). Protection of these ecosystems will allow the Aboriginal communities that frequent the territory to continue to pursue their traditional activities, while also allowing recreational and tourism activities.

Réserve aquatique projetée de la Rivière-Croche will protect the central section of the Rivière Croche watershed, where it enters the La Tuque depression natural region. The south and central parts of the proposed reserve will protect the valley and immediate watershed of the Rivière Croche, with its numerous meanders. The northern part is broader, and will protect a representative sample of the various types of vegetation and physical environments in ecological region 4c (Ministère des Forêts, de la Faune et des Parcs).

## **3. Plan and description**

### **3.1. Geographical location, boundaries and dimensions**

The boundaries and location of Réserve aquatique projetée de la Rivière-Croche are illustrated in Appendix 1.

Réserve aquatique projetée de la Rivière-Croche is located in the agglomeration of La Tuque, in the administrative region of Mauricie, between 47° 41' and 47° 59' north latitude and between 72° 31' and 72° 46' west longitude. It is about 30 km north of downtown La Tuque, some 80 km east of the indian reserve of Wemotaci, and 75 km south of the indian reserve of Mashteuiatsh.

Covering an area of 163.8 km<sup>2</sup>, Réserve aquatique projetée de la Rivière-Croche straddles Rivière Croche up to the mouth of Petite rivière Croche, where the protected area expands to include the higher land between the valleys of the two rivers.

Two private properties are excluded from the territory of the proposed reserve: lease #407510 for forest/blueberry production on forest development land, and experimental forest #596 (Chasseur C).

A major road provides access to the proposed aquatic reserve, along with four passable roads, of which two enter from the northeast, one from the centre, and one from the south. An extensive network of forest roads (passable and not) may also provide access to resort sites in the proposed reserve.

### **3.2. Ecological portrait**

Réserve aquatique projetée de la Rivière-Croche is in the southern Laurentian natural province. More precisely, nearly all the protected territory is in the La Tuque depression natural region, except for the small northeastern part around biological refuge #04251R198, which is in the Windigo massif natural region. Most of the proposed reserve is in the Lac Devenyns mounds physiographic complex, while the small northeastern part is in the Lac des Commissaires mounds physiographic complex.

The relief of the proposed reserve is one of low hills and mounds, the elevation ranging from 170 to 450 m, with an average elevation of about 350 m.

The geological foundation is mostly composed of a complex of granitic and tonalitic gneiss, with quartz-plagioclase grey gneiss, biotite and/or hornblende. At the northwest extremity one even finds marble and lime silicate rocks.

Till covers the slopes and hilltops to varying depths, while in valley bottoms there are numerous sandy deposits of fluvio-glacial origin, old and recent fluvial deposits, and organic deposits.

Most of the territory of the proposed reserve is subject to a mild continental subarctic climate, subhumid with a long growing season. The average annual temperature is 1.9°C to 4.5°C, total annual precipitation is 800 mm to 1359 mm, and the average growing season is 180 to 209 days.

Rivière Croche flows for about 150 km in a narrow valley oriented in a north-south direction, forming a string of lakes and meanders before spilling into Rivière Saint-Maurice, 4 km north of the city of La Tuque. The watershed of Rivière Croche consists of numerous streams and tributaries that feed into the river. There also numerous wetlands, with many shrub swamps, a few flooded swamps, bogs/fens, undifferentiated marshes, and rich to very poor coniferous swamps, primarily in the Petite Rivière Croche and Ruisseau Savane sections.

The proposed reserve is in the balsam fir-yellow birch bioclimatic domain, although stands of balsam fir-white birch-mountain maple are frequent on mesic sites. The woodlands present are primarily mixed forest, conifer stands being more abundant in the outer parts of the proposed reserve, while there are few hardwood stands.

The forest cover is relatively young, most stands being less than 80 years old, though there are also a few very rare forests of over 110 years.

The present woodlands of the proposed reserve are highly diverse. Balsam fir stands and black spruce stands dominate, along with yellow birch stands. There are also stands of white birch, jack pine, sugar maple, red maple, white spruce, white pine, and aspen, along with stands of mixed conifers and shade-intolerant hardwoods.

In terms of wildlife, there are northern pike (*Esox lucius*), walleye (*Sander vitreus*) brook trout (*Salvelinus fontinalis*), and in one lake, lake trout (*Salvelinus namaycush*). Brook trout is the main species in the lakes of the proposed reserve. Just outside the proposed aquatic reserve, in Lac au Pin Blanc, there is one occurrence of Arctic char *oquassa* (*Salvelinus alpinus oquassa*), a species likely to be designated threatened or vulnerable. Two occurrences of bald eagle (*Haliaeetus leucocephalus*) have been noted at the Tourouvre reservoir, ten kilometres from the proposed reserve. This vulnerable species requires a large home range, so it is highly probable that it frequents the proposed reserve to feed or reproduce.

The territory of the proposed reserve includes two wildlife refuges (#04251R198 and #04251R088), a proposed exceptional forest ecosystem (#1409, Lac Écureuil), a conservation zone (High Conservation Value Forest) proposed under the Mauricie TRIAD project, and several sites of wildlife interest (lakes Slide, Michaux, De la Courge, De la Guilloche). Additionally, 25 km north of the proposed aquatic reserve there is a proposed biodiversity reserve, Réserve de biodiversité projetée des Buttes-et-Buttons-du-Lac-Panache, which protects part of the upstream portion of Rivière Croche, in the Windigo massif natural region, at the head of the watershed.

### **3.3. Land occupation and uses**

There are 23 resort leases, 2 leases for temporary forest shelters, and 5 trapping grounds in the proposed reserve. Also, in the excluded portion at the centre of the proposed reserve there is an active lease for forest/blueberry production on forest development land. Management of the protected territory should take into account the potential effects of this operation on nearby natural environments.

The southwest portion of the proposed reserve overlaps small sections of ZEC de la Croche (less than 3%) and ZEC Borgia (14%). The southeast portion overlaps part of the territory of an outfitter with exclusive rights, Domaine touristique La Tuque Inc. The proposed reserve touches on fur-bearing animal

management units 33 and 34. Most of the territory of the proposed reserve is in hunting and fishing zone 26, while the strip of land west of Rivière Croche is in hunting and fishing zone 28. The Innu and Attikamek communities of the area are likely to frequent the proposed reserve for their traditional activities of hunting, fishing, trapping and gathering.

There is a marked canoe-kayak route on Rivière Croche, traversing the proposed aquatic reserve in a north-south direction.

In the northwest, northeast and south-central parts of the proposed reserve, there is significant fragmentation due to a major road and a network of passable and non-passable forest roads. However, use of these roads may continue subject to the Activities framework described in section 4.

## **4. Activities framework**

### ***§ Introduction***

The purpose of the proposed aquatic reserve is to protect natural environments and their components. Activities that may have a significant impact on ecosystems and biodiversity, particularly industrial activities, are prohibited therein. This type of protected area allows the pursuit of less damaging activities and occupancies, namely recreational, wildlife, ecotourism and educational activities and occupancies.

The proposed aquatic reserve must be considered to be a territory dedicated to the protection of the natural environment, the discovery of nature and recreation.

Activities carried on within the reserve are governed mainly by the provisions of the Natural Heritage Conservation Act (chapter C-61.01).

As provided in the Act, the main activities prohibited in an area to which status as a proposed aquatic reserve has been assigned are

- mining, and gas or petroleum development;
- forest development activities within the meaning of section 4 of the Sustainable Forest Development Act (chapter A-18.1);
- the development of hydraulic resources and any production of energy on a commercial or industrial basis.

Although fundamental for the protection of the territory and ecosystems therein, the prohibitions do not cover all the standards deemed to be desirable to ensure the good management of the proposed aquatic reserve and the conservation of the natural environment. The Natural Heritage Conservation Act makes it

possible to specify in the conservation plan the legal framework applicable in the territory of the proposed aquatic reserve.

The provisions in this section provide for prohibitions in addition to those already prescribed by law and regulate certain activities allowed to better ensure the protection of the natural environment, in conformity with the principles of conservation and other objectives of management of the proposed aquatic reserve. Thus certain activities are subject to the prior authorization from the Minister.

The measures contained in this section concern in particular the new interventions in the territory and do not generally call into question existing facilities or certain activities already under way in the territory, thereby preserving a number of existing uses. Lastly, the measures also contain, for certain activities, exemptions from the requirement to obtain an authorization.

The measures do not distinguish, among all the activities subject to an authorization, those that are considered to be compatible from those that are considered to be incompatible with the vocation of the proposed aquatic reserve. This last status (temporary) is managed in a manner very similar to the permanent status and basic information concerning the compatibility or incompatibility of each type of activity may be found in the document *Activity Framework for Biodiversity Reserves and Aquatic Reserves*, available on the website of the MDDELCC at

[http://www.mddelcc.gouv.qc.ca/biodiversite/aires\\_protegees/regime-activites/regime-activite-reserve-bio-aqua-en.pdf](http://www.mddelcc.gouv.qc.ca/biodiversite/aires_protegees/regime-activites/regime-activite-reserve-bio-aqua-en.pdf).

## **§ Prohibitions, prior authorizations and other conditions governing certain activities in the proposed aquatic reserve**

### *§ Protection of resources and the natural environment*

**4.1.** Subject to the prohibition in the second paragraph, no person may establish in the proposed reserve any specimens or individuals of a native or non-native species of fauna, including by stocking, unless the person has been authorized by the Minister.

No person may stock a watercourse or body of water for aquaculture, commercial fishing or any other commercial purpose.

No person may establish in the proposed reserve a non-native species of flora, unless the person has been authorized by the Minister.

**4.2.** No person may use fertilizer or fertilizing material in the proposed reserve. Compost for domestic purposes is permitted if used at least 20 metres from a watercourse or body of water measured from the high-water mark.

The high-water mark means the high-water mark defined in the Protection Policy for Lakeshores, Riverbanks, Littoral Zones and Floodplains (chapter Q-2, r. 35).

**4.3.** No person may remove species of flora, small fruits or any other non-timber product by mechanical means.

**4.4.** No person may, unless the person has been authorized by the Minister,

- (1) intervene in a wetland area, including a marsh, swamp or bog;
- (2) modify the proposed reserve's natural drainage or water regime, including by creating or developing watercourses or bodies of water;
- (3) dig, fill, obstruct or divert a watercourse or body of water;
- (4) install or erect any structure, infrastructure or new works in or on the bed, banks, shores or floodplain of a watercourse or body of water, although no authorization is required for minor works such as a wharf, platform or boathouse erected for private purposes and free of charge under section 2 of the Regulation respecting the water property in the domain of the State (chapter R-13, r. 1);
- (5) carry on any activity other than those referred to in the preceding paragraphs that is likely to degrade the bed, banks or shores of a body of water or watercourse or directly and substantially affect the quality or biochemical characteristics of aquatic or riparian environments or wetland areas in the proposed reserve, including by discharging or dumping waste or pollutants into those areas;
- (6) carry out soil development work or carry on an activity that is likely to degrade the soil or a geological formation or damage the vegetation cover, such as stripping, the digging of trenches or excavation work, including any burial, earthwork, removal or displacement of surface materials or vegetation cover, for any purpose;
- (7) install or erect any structure, infrastructure or new works;
- (8) reconstruct or demolish a structure, infrastructure or works;
- (9) use a pesticide, although no authorization is required for the use of personal insect repellent;
- (10) carry on educational or research-related activities if the activities are likely to significantly damage or disturb the natural environment, in particular because of the nature or size of the samples taken or the invasive character of the method or process used; or
- (11) hold a sports event, tournament, rally or any other similar event where
  - (a) fauna or flora species are taken or are likely to be taken; or
  - (b) motor vehicles or craft are used.



**4.5.** Despite paragraphs 6, 7 and 8 of section 4.4, no authorization is required to carry out work referred to in subparagraph 1 of this section when the requirements of subparagraph 2 are met.

(1) The work involves

(a) work to maintain, repair or upgrade a structure, infrastructure or works such as a camp, cottage, road or trail, including ancillary facilities such as lookouts or stairs;

(b) the construction or erection of

i. an appurtenance or ancillary facility of a trapping camp, rough shelter, shelter or cottage such as a shed, well, water intake or sanitary facilities; or

ii. a trapping camp, rough shelter, shelter or cottage if such a building was permitted under the right to use or occupy the land but had not been constructed or installed on the effective date of the status as a proposed aquatic reserve; or

(c) the demolition or reconstruction of a trapping camp, rough shelter, shelter or cottage, including an appurtenance or ancillary facility such as a shed, well, water intake or sanitary facilities.

(2) The work is carried out in compliance with the following requirements:

(a) the work involves a structure, infrastructure or works permitted within the proposed reserve;

(b) the work is carried out within the area of land or right of way subject to the right to use or occupy the land in the proposed reserve, whether the right results from a lease, servitude or other form of title, permit or authorization;

(c) the nature of the work or elements erected by the work will not operate to increase the area of land that may remain deforested beyond the limits permitted under the provisions applicable to the sale, lease and granting of immovable rights under the Act respecting the lands in the domain of the State (chapter T-8.1) and, if applicable, the limits allowed under an authorization for the structure, works or infrastructure;

(d) the work is carried out in compliance with the conditions of a permit or authorization issued for the work or in connection with the structure, infrastructure or works involved, and in accordance with the laws and regulations that apply; and

(e) for roads in the forest, the work must not operate to alter or exceed the existing right of way, widen the roadway or convert the road to a higher class.

For the purposes of this section, repair and upgrading work includes work to replace or erect works or facilities to comply with the requirements of an environmental regulation.

**4.6.** No person may bury, abandon or dispose of waste, snow or other residual materials elsewhere than in waste disposal containers, facilities or sites determined by the Minister or in another place with the authorization of the Minister.

Despite the first paragraph, an outfitting operation, an agency managing a controlled zone or an outfitter holding an operating lease does not require an authorization to use a disposal facility or site in compliance with the Environment Quality Act (chapter Q-2) and its regulations if the outfitting operation, agency or outfitter was already using the facility or site on the effective date of the protection status as a proposed aquatic reserve.

### **§ Rules of conduct for users**

**4.7.** No person may enter, carry on an activity or operate a vehicle in a given sector of the proposed reserve if the signage erected by the Minister restricts access, traffic or certain activities in order to protect the public from a danger or to avoid placing the fauna, flora or other components of the natural environment at risk, unless the person has been authorized by the Minister.

**4.8.** No person may destroy, remove, move or damage any poster, sign, notice or other types of signage posted by the Minister within the proposed reserve.

### **§ Activities requiring an authorization**

**4.9.** No person may occupy or use the same site in the proposed reserve for a period of more than 90 days in the same year, unless the person has been authorized by the Minister.

(1) For the purposes of the first paragraph,

(a) the occupation or use of a site includes

i. staying or settling in the proposed reserve, including for vacation purposes;

ii. installing a camp or shelter in the proposed reserve; and

iii. installing, burying or leaving property in the proposed reserve, including equipment, any device or a vehicle;

(b) "same site" means any other site within a radius of 1 kilometre from the site;

(2) Despite the first paragraph, no authorization is required if a person,

(a) on the effective date of the protection status as a proposed aquatic reserve, was a party to a lease or had already obtained another form of right or authorization allowing the person to legally occupy the land under the Act respecting the lands in the domain of the State or, if applicable, the Act respecting

the conservation and development of wildlife (chapter C-61.1), and whose right to occupy the land is renewed or extended on the same conditions, subject to possible changes in fees;

(b) in accordance with the law, has entitlement under a sublease, an assignment of a lease or a transfer of a right or authorization referred to in subparagraph a, and whose right to occupy the land is renewed or extended on the same conditions, subject to possible changes in fees; or

(c) elects to acquire land the person legally occupies on the effective date of the protection status as a proposed aquatic reserve, pursuant to the Act respecting the lands in the domain of the State.

**4.10.** (1) No person may carry on forest management activities to meet domestic needs or for the purpose of maintaining biodiversity, unless the person has been authorized by the Minister.

(2) Despite subsection 1, the authorization of the Minister is not required if a person staying or residing in the proposed reserve collects wood to make a campfire.

An authorization is also not required if a person collects firewood to meet domestic needs in the following cases and on the following conditions:

(a) the wood is collected to supply a trapping camp or a rough shelter permitted within the proposed reserve if

i. the wood is collected by a person in compliance with the conditions set out in the permit for the harvest of firewood for domestic purposes issued by the Minister of Forests, Wildlife and Parks under the Sustainable Forest Development Act (chapter A-18.1);

ii. the quantity of wood collected does not exceed 7 apparent cubic metres per year;

(b) in all other cases if

i. the wood is collected within a sector designated by the Minister of Forests, Wildlife and Parks as a sector for which a permit for the harvest of firewood for domestic purposes under the Sustainable Forest Development Act may be issued, and for which, on the effective date of the protection status as a proposed aquatic reserve, a designation as such had already been made by the Minister;

ii. the wood is collected by a person who, on the effective date of the protection status as a proposed aquatic reserve or in any of the 3 preceding years, held a permit for the harvest of firewood for domestic purposes allowing the person to harvest firewood within the proposed reserve;

iii. the wood is collected by a person in compliance with the conditions set out in the permit for the harvest of firewood for domestic purposes issued by the Minister of Forests, Wildlife and Parks under the Sustainable Forest Development Act.

(3) Despite subsection 1, an authorization to carry on a forest management activity is not required if a person authorized by lease to occupy land within the proposed reserve in accordance with this conservation plan carries on the forest management activity for the purpose of

(a) clearing, maintaining or creating visual openings, or any other similar removal work permitted under the provisions governing the sale, lease and granting of immovable rights under the Act respecting the lands in the domain of the State, including work for access roads, stairs and other trails permitted under those provisions; or

(b) clearing the necessary area for the installation, connection, maintenance, repair, reconstruction or upgrading of facilities, lines or mains for water, sewer, electric power or telecommunications services.

If the work referred to in paragraph *b* of subsection 3 is carried on for or under the responsibility of an enterprise providing any of those services, the work requires the prior authorization of the Minister, other than in the case of the exemptions in sections 4.12 and 4.14.

(4) Despite subsection 1, an authorization to carry on a forest management activity is not required to maintain a sugar bush operation and collect maple products to meet domestic needs if the activity is

(a) carried on by a person who, on the effective date of the protection status as a proposed aquatic reserve or in any of the 3 preceding years, held a permit for the operation of a sugar bush issued by the Minister of Forests, Wildlife and Parks under the Sustainable Forest Development Act allowing the person to carry on sugar bush activities in the territory of the proposed reserve;

(b) carried on within an area that, under the permit received, was already the subject of sugar bush activities on the effective date of the protection status as a proposed aquatic reserve or in any of the 3 preceding years;

(c) carried on by a person in conformity with the conditions of the permit for a sugar bush operation issued by the Minister of Forests, Wildlife and Parks under the Sustainable Forest Development Act.

**4.11.** No person may carry on commercial activities in the proposed aquatic reserve, unless the person has been authorized by the Minister.

Despite the first paragraph, no authorization is required

(a) if the activity does not imply sampling for fauna or flora resources or the use of a motor vehicle;

(b) to carry on commercial activities which, on the effective date of the protection status as a proposed aquatic reserve, was the subject of a right to use the land for such a purpose, whether the right results from a lease or other form of title, permit or authorization, within the limits of the right.

## **§ Authorization exemptions**

**4.12.** Despite the preceding provisions, an authorization is not required for an activity or other form of intervention within the proposed reserve if urgent action is necessary to prevent harm to the health or safety of persons, or to repair or prevent damage caused by a real or apprehended disaster. The person concerned must, however, immediately inform the Minister of the activity or intervention that has taken place.

**4.13** The members of a Native community who, for food, ritual or social purposes, carry on an intervention or an activity within the proposed reserve are exempted from obtaining an authorization.

**4.14** Despite the preceding provisions, the following activities and interventions carried out by Hydro-Québec (Société) or by any other person for Hydro-Québec do not require the prior authorization of the Minister under this conservation plan:

(1) any activity or intervention required within the proposed reserve to complete a project for which express authorization had previously been given by the Government and the Minister, or only by the Minister, in accordance with the Environment Quality Act, if the activity or intervention is carried out in compliance with the authorizations issued;

(2) any activity or intervention necessary for the preparation and presentation of a pre-project report for a project requiring an authorization under the Environment Quality Act; and

(3) any activity or intervention relating to a project requiring the prior authorization of the Minister under the Environment Quality Act if the activity or intervention is in response to a request for a clarification or for additional information made by the Minister to the Société, and the activity or intervention is carried out in conformity with the request.

The Société is to keep the Minister informed of the various activities or interventions referred to in this section it proposes to carry out before the work is begun in the proposed reserve.

For the purposes of this section, the activities and interventions of the Société include but are not restricted to pre-project studies, analysis work or field research, work required to study and ascertain the impact of electric power transmission and distribution line corridors and rights of way, geological or geophysical surveys and survey lines, and the opening and maintenance of roads required for the purposes of access, construction or traffic incidental to the work.

## 5. Activities governed by other laws

Certain activities that could potentially be practised in the proposed aquatic reserve are also governed by other applicable legislative and regulatory provisions, and some require a permit or authorization or the payment of certain fees. Certain activities could be prohibited or limited under other laws or regulations applicable on the territory of the proposed reserve.

In the proposed aquatic reserve, a particular legal framework may govern permitted activities under the following categories:

- **Protection of the environment:** measures stipulated by the *Environment Quality Act* (chapter Q-2) and its regulations;
- **Protection of exceptional forest ecosystems and biological refuges:** measures stipulated by the *Sustainable Forest Development Act* (chapter A-18.1);
- **Plant species designated as threatened or vulnerable:** measures prohibiting the harvesting of such species under the *Act respecting threatened or vulnerable species* (chapter E-12.01);
- **Exploitation and conservation of wildlife resources:** measures stipulated by the *Act respecting the Conservation and Development of Wildlife* (chapter C-61.1) and its regulations, including provisions related to threatened or vulnerable wildlife species, outfitters and beaver reserves, and measures in the applicable federal laws and regulations, including the legislation and regulations on fisheries;
- **Archeological research and discoveries:** measures stipulated by the *Cultural Heritage Act* (chapter P-9.002);
- **Access and property rights related to the domain of the State:** measures stipulated by the *Act Respecting the Lands in the Domain of the State* (chapter T-8.1) and by the *Watercourses Act* (chapter R-13);
- **Issuance and oversight of forest development permits** (harvesting of firewood for domestic purposes, wildlife development, recreational development); and **delivery of authorizations** (forest roads): measures stipulated by the *Sustainable Forest Development Act* (chapter A-18.1);
- **Travel:** measures stipulated by the *Act Respecting the Lands in the Domain of the State* and by the regulations on motor vehicle travel in fragile environments, under the *Environment Quality Act*;

- **Construction and development standards:** regulatory measures adopted by local and regional municipal authorities in accordance with the applicable laws.

## **6. Responsibilities of the Minister of Sustainable Development, Environment and the Fight against Climate Change**

The Minister of Sustainable Development, Environment and the Fight against Climate Change is responsible for the management of Réserve aquatique projetée de la Rivière-Croche. Among other things, the Minister sees to the control and supervision of activities that may be practised there. In his management, the Minister enjoys the collaboration and participation of other government representatives that have specific responsibilities in or adjacent to the territory, including the Minister of Energy and Natural Resources and the Minister of Forests, Wildlife and Parks, and their delegates. In performing their functions they will take into account the protection desired for these natural environments and the protection status they are now granted.

