

Réserve de biodiversité projetée du Lac-Wayagamac

Conservation plan

January 2017



1. Protection status and toponym

The legal protection status of the territory described below is that of proposed biodiversity 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 "biodiversity reserve", this status also being governed by the *Natural Heritage Conservation Act*.

The provisional toponym is: Réserve de biodiversité projetée du Lac-Wayagamac. The official toponym will be determined when the territory is given permanent protection status.

2. Conservation objectives

Réserve de biodiversité projetée du Lac-Wayagamac 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 practice of recreational and tourism activities to continue on the territory.

3. Plan and description

3.1. Geographical location, boundaries and dimensions

The boundaries and location of Réserve de biodiversité projetée du Lac-Wayagamac are illustrated in Appendix 1.

Réserve de biodiversité projetée du Lac-Wayagamac is located in the agglomeration of La Tuque, in the administrative region of Mauricie. More precisely, it is 5 km east of downtown La Tuque, between 47° 18' and 47° 26' north latitude and between 72° 26' and 72° 43' west longitude.

The proposed reserve covers an area of 130.91 km² surrounding Lac Wayagamac and Petit Lac Wayagamac.

The private lands on the northern shores of these two lakes, and the right of way of the Chambord–Grand-Mère gas pipeline through the northwest portion, are excluded from the proposed reserve.

A few passable roads provide access to the proposed reserve, including one, crossing in an east-west direction, that serves the private properties excluded from the boundaries of the proposed reserve. A major road skirts the western boundary.

3.2. Ecological portrait

Réserve de biodiversité projetée du Lac-Wayagamac is in the southern Laurentian natural province, more precisely in the La Tuque depression natural region, in the Lac Wayagamac low hills physiographic complex.

The relief of the proposed reserve is essentially low hills, the elevation ranging from 280 to 470 m, with an average elevation of about 350 m. Nearly a third of the area of the proposed reserve consists of bodies of water.

West of Lac Wayagamac, the geological foundation (Grenville geological province) is composed of a paragneiss-quartzite-amphibolite complex. In the central part the foundation consists of a grey gneiss, plagioclase, biotite and/or hornblende complex, mafic gneiss with hornblende and/or biotite, gneissic amphibolite and ultramafic rocks. As for the eastern part, there the bedrock is essentially a complex of syenite, monzonite, granodiorite and diorite.

The surface deposits of the proposed reserve are glacial in origin, with no particular morphology: primarily undifferentiated tills of medium thickness (50 cm to 1 m) with rare to frequent rocky outcrops. There are also thin to thick fluvioglacial (juxtaglacial) and organic deposits.

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

Lac Wayagamac is the main source of drinking water for the city of La Tuque. Its water is therefore tested on a monthly basis (at three sampling stations) by partners of the MDDELCC. The data show that Lac Wayagamac is an ultra-oligotrophic lake, meaning one with little or no eutrophication. Based on its analyses, the MDDELCC considers that the lake and its water quality should be protected.

The waters of Lac Wayagamac and Petit Lac Wayagamac empty into Rivière Saint-Maurice via Petite rivière Bostonnais. Virtually all the territory of the proposed reserve is in the watershed of these rivers. However, a small northeastern portion of the territory drains into Rivière Jeannotte, which is part of the Rivière Batiscan basin. There are numerous bogs/fens in the protected territory, along with various shrub swamps and flooded swamps, and a few rich or very poor coniferous swamps. Wetlands are much more numerous in the area north of Lac Wayagamac and Petit Lac Wayagamac.

Most of the proposed reserve is at the northern limit of Québec's deciduous forest. A small portion is in the mixed forest, where there is a limited presence of conifer stands. This makes for an exceptional diversity of forest stands, lending particular value to the protected area for the future observation of climate change impacts. All age classes are represented, but based on the available data nearly half the stands are of medium age (40-80 years), with numerous old-growth forests.

By far the greater part of Réserve de biodiversité projetée du Lac-Wayagamac is in the maple-yellow birch bioclimatic domain, except for a small portion on the western side that is in the fir-yellow birch domain. The potential vegetation on mesic sites is as follows: maple-yellow birch stands in mid-slope areas, fir-yellow birch stands on the upper slopes, and maple-yellow birch-beech stands on well-drained hilltops.

At present, the dominant woodlands in the proposed reserve are stands of yellow birch and stands of sugar maple. Stands of white birch, balsam fir, red maple, and stands of black spruce, aspen, red or jack pine, mixed conifers, and tolerant hardwoods, complete the forest cover of Réserve de biodiversité projetée du Lac-Wayagamac.

In terms of wildlife, there are brook trout, Arctic char *oquassa*, white and longnose sucker, yellow perch, fallfish, bullhead, cyprinids, crayfish, great blue heron, double-crested cormorant, black-crowned night heron, and herring gull. Data on wildlife captures in ZEC de la Bessonne highlight the presence of moose, black bear, woodcock, hare, ruffed grouse and spruce grouse. White-tailed deer could also frequent the area.

The proposed reserve encompasses three biological refuges (#04251R174, #04251R196 and #04251R086), and two wildlife habitats, both on Île Steamboat in Lac Wayagamac: a heronry (#03-04-0011-2006) and a bird colony (#04-04-0001-1979). Another biological refuge is just northwest of the proposed reserve. A species likely to be designated threatened or vulnerable, Arctic char *oquassa* (*Salvelinus alpinus* oquassa) has been caught in lakes Wayagamac, Petit lac Wayagamac, Long and Todd/Bordeleau. All four lakes are considered sites of wildlife interest. The same species has also been caught not far from the proposed reserve, at Lac Tom and Lac du Chêne in ZEC de la Bessonne.

3.3. Land occupation and uses

There are 11 resort leases in the proposed reserve, 1 lease for the purpose of recreational, educational or sport activities for non-profit community use (an accommodation site operated by the Commission scolaire de L'Énergie), and a dam (Barrage Wayagamac) on Petite rivière Bostonnais. Based on data from the Ministère des Forêts, de la Faune et des Parcs, there are also 2 trapping camps and 7 trapping grounds.

More than 80% of the territory of Réserve de biodiversité projetée du Lac-Wayagamac is in ZEC de la Bessonne, covering about 20% of it. The proposed reserve overlaps two fur-bearing animal management

units: unit 33 (northwest of Lac Wayagamac) and unit 34 (all the rest of the protected territory). It is also part of hunting and fishing zone 26.

Provincial snowmobile trail TQ73 and regional snowmobile trail TR355 cross the territory of the proposed reserve in an east-west direction, skirting the southern boundary. There are two backcountry campsites, a fish-cleaning site, and two dams operated by the city of La Tuque (Barrage Wayagamac and Barrage de la Pointe-Bostonnais). Additionally, electrical distribution line LAT 222 1Ph enters the proposed reserve to a distance of over 5 km.

Finally, the territory and its ecosystems are fragmented by a number of passable roads and forest roads, chiefly in the north and east. The use and maintenance of these roads, and of all the infrastructures mentioned above (dams, trails, campsites, distribution line, etc.), may continue subject to the Activities Framework described in section 4.

4. Activities framework

§ Introduction

The purpose of the proposed biodiversity 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. To preserve and protect the state and uses of lac Wayagamac and Petit lac Wayagamac, the management of the proposed biodiversity reserve will take into account particularly the need to limit the input of nutrients from human activities into the watershed.

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

Activities carried on within the proposed biodiversity 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 biodiversity 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 biodiversity 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 biodiversity 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 biodiversity 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 biodiversity 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-bioaqua-en.pdf.

§ Prohibitions, prior authorizations and other conditions governing certain activities in the proposed biodiversity 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 forest 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 biodiversity 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 agency managing a controlled zone 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 agency was already using the facility or site on the effective date of the protection status as a proposed biodiversity 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 biodiversity 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 biodiversity 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 biodiversity 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 biodiversity 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 biodiversity 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 biodiversity 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 biodiversity 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 biodiversity 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 biodiversity 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.

Within the proposed biodiversity 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;
- Biological refuges: protection measures stipulated by the Sustainable Forest Development
 Act (chapter A-18.1, sections 27 to 30);
 - 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, wildlife habitat, 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 de biodiversité projetée du Lac-Wayagamac. 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.

Appendix 1

Map of Réserve de biodiversité projetée du Lac-Wayagamac

