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## Regulations and other Acts

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Gouvernement du Québec

**O.C. 185-2015, 18 March 2015**

Natural Heritage Conservation Act  
(chapter C-61.01)

**Réserve de biodiversité des Lacs-Vaudray-et-Joannès  
— Amendments to the conservation plan**

Amendments to the conservation plan of the réserve de biodiversité des Lacs-Vaudray-et-Joannès

WHEREAS, under sections 43 and 44 of the Natural Heritage Conservation Act (chapter C-61.01), the Government established the réserve de biodiversité des Lacs-Vaudray-et-Joannès and approved its conservation plan by Order in Council 1114-2006 dated 6 December 2006;

WHEREAS, in accordance with sections 10 and 11 of the Regulations Act (chapter R-18.1), amendments to the activities framework listed in division 5 of the conservation plan of the réserve de biodiversité des Lacs-Vaudray-et-Joannès were published in the *Gazette officielle du Québec* of 3 January 2007 with a notice that they could be approved by the Government on the expiry of 45 days following that publication;

WHEREAS it is expedient to approve the amendments with adjustments to follow up on the comments received since their publication;

WHEREAS it is also expedient to approve the amendments of other divisions, that have no normative value, of the conservation plan of the réserve de biodiversité des Lacs-Vaudray-et-Joannès;

WHEREAS, under section 45 of the Natural Heritage Conservation Act, the amendments to the conservation plan for land having permanent protection status take effect on the date of publication of the order in the *Gazette officielle du Québec* or on any later date specified in the order;

IT IS ORDERED, therefore, on the recommendation of the Minister of Sustainable Development, Environment and the Fight Against Climate Change:

THAT the amendments to the conservation plan of the réserve de biodiversité des Lacs-Vaudray-et-Joannès, attached hereto, be approved;

THAT the amended plan take effect on the fifteenth day following the date of the publication in the *Gazette officielle du Québec* of this Order in Council.

JUAN ROBERTO IGLESIAS,  
*Clerk of the Conseil exécutif*

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Protected areas  
in Québec:

A Lifelong Heritage

## Réserve de biodiversité des Lacs-Vaudray- et-Joannès



CONSERVATION PLAN

Québec 

Cover page photos: Marc-André Bouchard

Reference:

Québec, Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques, Direction générale de l'écologie et de la conservation. 2015. Conservation plan, Réserve de biodiversité des Lacs-Vaudray-et-Joannès. Québec: Gouvernement du Québec.

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## Introduction

By granting the Réserve de biodiversité des Lacs-Vaudray-et-Joannès permanent status as a conservation area, the Government of Quebec is taking definitive action to protect representative samples of the biological diversity of the natural province of the Abitibi and James Bay lowlands, and more specifically the representative ecosystems of the natural region of Lake Témiscamingue's lowlands. This biodiversity reserve joins a network of representative and exceptional conservation areas covering various Quebec ecosystems.

The Réserve de biodiversité des Lacs-Vaudray-et-Joannès was chosen principally for its range of vegetation, particularly its forests of black spruce, mixed stands and birch, but also for its pine forests and barrens, which are relatively uncommon in the region. Several mature forests and larch stands are present as well as sandy eolian dunes. The biodiversity reserve protects part of an esker, which hosts six kettles including four small kettle lakes. It also protects aquatic and shoreline ecosystems, particularly those of Vaudray and Joannès Lakes, whose eastern shores are densely populated and used.

The biodiversity reserve is unique for its location within a populated area. Its proximity to the urban perimeter of Rouyn-Noranda requires management that balances biodiversity conservation with recreational land use and occupation.

### 1. Official toponym

The biodiversity reserve's official name is "Réserve de biodiversité des Lacs-Vaudray-et-Joannès", referring to the two main lakes within its territory.

### 2. Plan and description

#### 2.1 Location, boundary and dimensions

The boundaries and location of the Réserve de biodiversité des Lacs-Vaudray-et-Joannès appear on the map in Appendix 1.

The reserve is located within the municipal jurisdiction of the City of Rouyn-Noranda, in the Abitibi-Témiscamingue administrative region, between 48°01'30" and 48°13'00" latitude north, and 78°35'30" and 78°47'30" longitude west. Downtown Rouyn-Noranda is less than 20 kilometres west of the reserve, which can be accessed via Route 117. The reserve covers an area of 193.07 km<sup>2</sup>.

The Réserve de biodiversité des Lacs-Vaudray-et-Joannès is bounded to the east by Norbord Road, to the northeast by the Canadian National railway, to the north by a primitive survey line separating the fifth and sixth ranges of the Joannès township, to the northwest by Route 117, to the west by a combination of impassable roads and streams, to the southwest by Picard Brook and the Kinojévis River, and to the south by a nameless stream.

## 2.2 Ecological profile

The Réserve de biodiversité des Lacs-Vaudray-et-Joannès is part of the natural province of the Abitibi and James Bay lowlands. According to Li and Ducruc (1999), this natural province consists of a plain slightly inclined toward James Bay. The reserve protects representative ecosystems of the natural region of the Lake Témiscamingue lowlands and is part of the physiography of Lake Vaudray's hummocky plain.

### 2.2.1. Representative elements

**Geology:** The bedrock within the Réserve de biodiversité des Lacs-Vaudray-et-Joannès is largely sedimentary and more specifically detrital rock such as sandstone, arkose and graywacke. There are also areas of granite (granite, granodiorite, monzonite, syenite) to the east of Vaudray and Joannès Lakes, and an area of ultramafic volcanic rock (komatiite, magnesian basalt) to the west of Joannès Lake. This rock system belongs to the geological sub-province of the Pontiac. The sub-province is bounded to the north by the Cadillac fault, north of which is the sub-province of the Abitibi. The Pontiac and Abitibi sub-provinces belong to the Superior geological province, which forms the central part of the Canadian Shield and whose basement is Archean (more than 2.5 billion years old). The Canadian Shield contains rock systems among the oldest on earth.

**Geomorphology:** When the former Ojibway-Barlow glacial lake melted about 8500 years ago, the rock basement was covered with a thick layer of poorly drained glaciolacustrine (silt and clay) and glaciofluvial (sand and gravel) sediments. A subglacial river left a long and sinuous trail of sand and gravel to form the esker, and glacial deposits formed a moraine of no particular morphology. A series of thin, moderately drained hummocks of till surround the depression holding Vaudray and Joannès Lakes. Erosion from the waves of Barlow-Ojibway Lake created the highest buttes of silt (Veillette, 2000). Only the finest sediments were carried where the current was strongest, and sand is all that remains. When the glacial lake dropped, stretches of sand were revealed. West winds then carried the lighter sand particles of the esker into dunes. Once active but now fixed, the sand dunes are an uncommon deposit across the natural region. They are located to the east of Vaudray and Joannès Lakes.

Today, the landscape features a rolling plain of low permeable silty clay soil, punctuated by low, rocky hills. This series of till buttes hems in the depression holding Vaudray and Joannès Lakes. Ombrotrophic peat bogs have developed in the poorly drained hollows, with the peat covering fine clay deposits. The relief varies from 267 to 412 metres, and the average altitude is 316 metres.

Six kettles are found within the reserve's limits, consisting of cauldron-shaped depressions in glaciofluvial deposits such as eskers. Some of the depressions are deeper than the esker's body of groundwater. Such kettles are therefore filled with water, forming kettle lakes. Other kettles are also full of water even though no stream feeds them and their bottom is much higher than the level at which the esker's waters circulate. These are perched lakes, since their water level is higher than the esker's. Among the reserve's four kettle lakes one is a perched lake.

**Hydrography:** The biodiversity reserve is part of the Outaouais River watershed; Vaudray and Joannès Lakes are among the river's headwaters. The reserve includes about 140 lakes covering an area of 14 km<sup>2</sup>, which represents 7.3 % of the reserve's total area. The lakes have not significantly been affected by acid rain. Many of the bodies of water were created by beaver dams.

Formed in a fracture of the earth's crust, Vaudray and Joannès Lakes both run north-south. The two sandy bottomed lakes differ from other Abitibi region lakes, whose bottoms are often composed of clay, by their significant depth and greater transparency (1.5 to 2.5 m).

The well-developed drainage system consists mainly of intermittent bodies of water. The Vaudray River, which winds through the territory over roughly 6 kilometres, is the largest watercourse. The imperviousness of the water-laid clay and the low relief foster wetlands in the low-lying areas: such wetlands cover 12.6 km<sup>2</sup>, or 7.1% of the reserve's terrestrial surface.

**Climate:** The Réserve de biodiversité des Lacs-Vaudray-et-Joannès is found at the junction of two continental climates: the southwest sector (2/3 of the territory) is under the influence of a mild, subhumid subpolar climate with a long growing season, while the northeastern part (1/3) is subhumid subpolar with an average growing season. The territory belongs to the balsam fir-white birch bioclimatic domain. Overall, the reserve's climate features relatively hard winters, fairly hot summers, heavier precipitation during the summer and no dry season.

**Vegetation:** The forest occupies 75% of the biodiversity reserve, and consists mainly of softwood stands (47%) in the higher elevations and mixed stands on the slopes (23%). Black spruce (*Picea mariana*) is the dominant species. It is most often accompanied by white spruce (*Picea glauca*), balsam fir (*Abies balsamea*), white birch (*Betula papyrifera*), and aspen poplar (*Populus tremuloides*). American black ash (*Fraxinus nigrus*) and cedar (*Thuja occidentalis*) grow along certain shorelines. Black spruce groves (about 62% of the forest), mixed stands (about 23%) and white birch stands (about 16%) are the most abundant. Rarer are those of the jack pine (*Pinus banksiana*) and tamarack (*Larix laricina*). Only 1% of the reserve is covered with pure jack pine forests, and another 1% have a certain proportion of the species. Less than 1% of the reserve has forests with tamarack. Mature and old-growth forests – having stands of 90 years or older –

represent 17% of the forest cover; they are most common in the western side of the Vaudray and Joannès lakes. Such old forests provide habitat for species not found elsewhere in the protected area since the quantity of coarse woody debris increases as a function of a forest's maturity. Insects and mushrooms associated with dead wood are more abundant and diversified than those associated with live trees.

The imperviousness of the water-laid clay and the low-lying relief foster the development of numerous wetlands and alder groves in the troughs. The depressions covered in poorly drained organic matter are occupied by peat bogs. An acidic ecosystem, these peat bogs feature deposits between two and five metres thick consisting entirely of preserved organic debris, including black spruce and tamarack, from underwater decomposition. Roughly 120 wetlands in the reserve cover a total area of about 20 km<sup>2</sup>. Barrens and forest barrens occupy less than half a percent of the reserve's surface area (0.8 km<sup>2</sup>), with the heaths growing on rocky areas and thin tills on the buttes. These sparsely wooded habitats are dominated by ericaceous plants and lichens.

**Wildlife:** Joannès Lake holds at least 14 species of fish: yellow walleye, sauger, perch, monk fish, rock bass, northern pike, slimy sculpin, lake herring, log perch, whitefish, white sucker, trout-perch, spottail shiner and shorthead redhorse. Vaudray Lake holds only eight species, two of which are not found in Joannès Lake: mottled sculpin and black johnny darter.

The reserve's mammals include black bear, American porcupine, long-tailed weasel, Canadian beaver, coyote, red squirrel, snowshoe hare, grey wolf, river otter, Canadian lynx, American marten, fisher, striped skunk, muskrat, red fox, ermine, American mink, moose, and northern flying squirrel.

Among 118 species of birds identified, 98 nest in the reserve (SLOA, 2004a). The rare sandhill crane (*Grus canadensis*) is occasionally seen. Thanks to its many wetlands, the reserve provides good habitat for nesting waterfowl. Beaver ponds, which tend to breed cattails, are considered highly productive, with as many as 2.4 broods of duck per hectare. The following species nest in the reserve: American black duck, green-winged teal, common merganser, ring-necked duck and common goldeneye. Other species of waterfowl are observed in the reserve, but are considered potential nesters only: blue-winged teal, hooded merganser, bufflehead and American wigeon (S. Gagnon, CIC, comm. pers.).

Many species associated with mature and overmature forests are present, among them the northern goshawk and pileated woodpecker in hardwood stands, and the brown creeper in the softwood forests.



### 2.3 Occupation and land use

The various forms of occupation and land use within the Réserve de biodiversité des Lacs-Vaudray-et-Joannès appear on the map in Appendix 2.

The territory includes 45 land rights, distributed as follows:

- 1 cottage lease;
- 41 rough shelter leases;
- 1 telecommunications tower;
- 1 lease for a community vacation camp (Centre éducatif forestier du lac Joannès);
- 1 right of way for a network of hiking trails (Centre éducatif forestier du lac Joannès).

The site of the Centre éducatif forestier (CEF) du lac Joannès is governed by the charter of a private organization, the Association forestière de l'Abitibi-Témiscamingue inc., and is recognized as a protected area.

The entire reserve land is part of the fur-animal management unit 04 (unité de gestion des animaux à fourrure – UGAF 04). It covers 12 trapping lands.

A canoe-kayak route begins at Le Jeune Lake, travelling via Joannès Lake to its end at Bousquet Lake, which is outside the reserve. A historic portage route is located at the reserve's southern limit, linking Gendron Lake to the Kinojévis River.

There is also a small network of bicycle trails under the management of the Centre éducatif forestier du lac Joannès, which use existing unpaved roads.

There is a major network of trails that run through the reserve, mainly for all-terrain vehicles, which are used to access hunting camps.

### 3. Conservation and development of the Réserve de biodiversité des Lacs-Vaudray-et-Joannès

This section describes the specific conservation and development priorities and goals which are unique to the Réserve de biodiversité des Lacs-Vaudray-et-Joannès.

### **Protecting the biodiversity**

The goal of the biodiversity reserve's management shall be to protect the ecosystems and species which depend on the reserve, in other words, the processes governing their lives shall be maintained. This also means that currently disrupted ecosystems shall be allowed to return to their natural characteristics and balance.

Biodiversity protection also seeks to safeguard the landscape and current occupation and land use which are compatible with the conservation goals of the biodiversity reserve and protected areas. The goal of managing current occupation and activities shall be to ensure minimal negative impact on the biodiversity.

#### **Specific goals:**

##### **1. To re-establish natural balance in disrupted forest ecosystems:**

Forest ecosystems in the Réserve de biodiversité des Lacs-Vaudray-et-Joannès were subject to diverse logging activities in the 1990s. Such sectors cover 8% (15 km<sup>2</sup>) of the reserve's land area, located mainly in the eastern sector near Norbord Road and to the south near Gendron Lake. By forbidding logging, the establishment of the biodiversity reserve will foster a return to these forests' natural balance. However, other anthropogenic impacts from recreational activities should be subject to controls.

##### **2. To rationalize the trail network:**

There are many trails in the reserve, totalling approximately 370 linear kilometres, most of which are located in the eastern sector. This represents about 1.9 linear kilometres of trail per square kilometre. However, not all routes are necessarily used and some have already grown over. The highly developed trail network and its use by all-terrain vehicles affect the natural environment by fragmenting it, facilitating erosion, leaving traces on sensitive environments, and potentially disrupting wildlife. The trail network should be streamlined to minimize disruption of the natural environment and lowered the fragmentation of the territory. Rationalization would also be an opportunity to give certain trails a specific vocation to avoid conflicts in their use. A rationalization exercise (inventory, vocation, prioritization, signposting) shall be implemented by the reserve manager and regional partners.

##### **3. To protect lake ecosystems and shorelines and preserve water quality in Vaudray and Joannès Lakes:**

There are more than 200 vacation cottages on Vaudray and Joannès Lakes, almost entirely located on their eastern shores. About 250 motorized boats and 100 anglers have been estimated. Cottages affect the aquatic and littoral environments when their sanitary facilities function improperly, when shorelines are deforested beyond legal limits, and when chemical products (fertilizers, pesticides) are

used to maintain properties. The Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques seeks to protect the lacustrine and riparian ecosystems, improve water quality in Vaudray and Joannès Lakes, and prevent acceleration of the lakes' eutrophication. The goals shall be accomplished by promoting good practices (in terms of motorboat and personal watercraft use, ecological property maintenance, shoreline landscaping and deforestation, and maintenance of sanitary facilities) and by applying current regulations. Cottagers and all other users of the shorelines, lakes and rivers should have adequate information and conduct themselves in accordance with existing regulations.

### **Research and monitoring of the natural environment**

Acquiring new knowledge and information about the reserve allows the monitoring of and reporting on its biodiversity, and contributes significantly to its specific natural heritage conservation goals. New knowledge also fosters discovery, education and awareness activities. Knowledge helps managers analyze development projects and encourages a common understanding with other stakeholders of the issues at hand.

Ecological knowledge, particularly regarding the environment's support capacity, and information on the impact of recreational and tourism activities on the natural environment should be developed to better appreciate the reserve's wealth and to provide the data and resources required for sound management, which fosters conservation of the reserve's biodiversity.

In addition, the territory is a control site for the natural evolution of ecosystems in the natural province of the Abitibi and James Bay lowlands. Its scientific value is therefore significant. Given the intense industrial use of the Abitibi region, scientific research, knowledge and monitoring in the biodiversity reserve offers comparisons with similar ecosystems subject to intense anthropogenic impacts.

#### **Specific goal:**

##### **1. To monitor the natural environment:**

The natural environment shall be monitored to determine if the biodiversity reserve and its management model achieve the biodiversity protection goal. The Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques shall make periodic reports about the condition of the ecosystems and their components. The initial report is due seven years from the date when management of the biodiversity reserve begins, with subsequent reports coming every ten years. Monitoring will begin with a description of the state of the natural environment and identification of indicators concerning ecological integrity and ecological imprints. Evolution of the biodiversity can then be measured using the indicators. Protection and management methods and goals shall be reviewed following the reports.

### **Sustainable development through educational activities**

Since the biodiversity reserve's level of occupation and use is relatively high, sustainable development is possible if limited and supervised. New activities and facilities must therefore not conflict with existing ones nor must their impact surpass the natural environment's support capacity. Development of the reserve must also be such that increased visits do not modify the environment's natural balance – to prevent damage to the ecological and landscape integrity and to maintain the quality of the wilderness experience sought by visitors and users. Activities must therefore be designed to maintain or improve the quality of the natural structure and harmonious interaction between humans and nature.

Given the current high level of use and occupation of the territory, the Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques shall not encourage new activities. However, if projects are presented, the Ministry shall favour educational activities and shall strictly control projects that may affect the natural environment.

#### **Specific goal:**

##### **1. To offer educational activities:**

The Centre éducatif forestier du lac Joannès already provides educational, discovery and recreational activities in part of the biodiversity reserve. The educational centre could fulfill the role of reception and information centre and be the ideal source of knowledge, interpretation and education on the reserve's biodiversity and for general discovery of the natural environment. The Centre éducatif forestier du lac Joannès could provide the public and school groups with discovery, interpretation and education activities regarding the natural elements of this territory as well as the role of the biodiversity reserve.

### **Integrated management and stakeholder participation**

The high level of occupation and use in and around the biodiversity reserve requires integrated management of activities. This will be accomplished by involving stakeholders in management choices and decisions focusing on conservation of the biodiversity reserve and in accordance with the Natural Heritage Conservation Act (chapter C-61.01).

#### **Specific goal:**

##### **1. To implement a cooperative and participatory management approach:**

The inhabited nature of the biodiversity reserve and adjacent territories requires government management supported by the participation of local and regional stakeholders. The common goal is natural heritage conservation and the harmonious management of recreational activities. The Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques shall identify stakeholders in the reserve's conservation and development, who will be invited to participate in management planning. Problems and conflicts regarding use and

development projects shall be discussed. An action plan shall be developed by the Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques in cooperation with the stakeholders identified. The plan will determine actions to be undertaken, preferred methods, those who are to carry out each action, timeframes and results assessments.

#### **4. Zoning**

The Réserve de biodiversité des Lacs-Vaudray-et-Joannès is located in an area that includes heavily populated and developed resort enclaves. The vacation sectors are excluded from the reserve. Since the reserve is also close to the urban perimeter of Rouyn-Noranda, and since a high proportion of natural environments within the reserve are at risk, the management of activities and development of new activities and projects shall be tightly controlled. The biodiversity reserve has been subdivided into four zones based on the current state of the natural environment and protection and management goals. Each zone has similar protection levels and activities, but conservation and development measures are adapted where necessary. Zone boundaries are illustrated on the map in Appendix 3. The Minister's management of the reserve and authorizations regarding activities and developments shall take into consideration the characteristics of each zone.

##### **Zone I**

Covering 127.44 km<sup>2</sup> west of the esker and excluding Vaudray and Joannès Lakes, Zone I represents 66% of the biodiversity reserve. It is characterized by a soil cover largely susceptible to erosion, a fairly low level of occupation and use, and relatively undisturbed old forests. The objective for the zone is to maintain the natural balance of existing ecosystems, ensuring that anthropogenic disruption remains the lowest. Current occupations and local recreational use which existed prior to establishment of the reserve shall be maintained. Among such activities, those using motorized vehicles will be controlled through the rationalization of the trail network. Preferred development activities shall be those based on nature interpretation, eco-tourism and any other activity whose goal is to appreciate nature without taking away from it and without using motorized vehicles.

##### **Zone II**

Covering 38.63 km<sup>2</sup>, which is close to 20% of the biodiversity reserve, this zone represents the area to the east of the esker. It is characterized by significant use (hunting and trails) and occupation (rough shelters) by local populations prior to creation of the reserve. The zone has also been subject to significant recent forest modifications through many forestry cuts. While existing activities and occupations will be maintained, the objective for this zone shall be to manage activities in such a way as to restore the natural balance in ecosystems highly disrupted by previous logging and to limit human recreational activities.

**Zone III**

Covering 25.90 km<sup>2</sup>, or about 13% of the reserve, Zone III is the most used and disturbed part of the biodiversity reserve, bordering on the vacation areas. It includes the esker (13.78 km<sup>2</sup>) as well as Vaudray and Joannès Lakes (12.12 km<sup>2</sup>). The lakes are used by vacationers for various recreational activities, including fishing and water sports. The esker supports a series of public roads, all-terrain vehicle trails and vacation resort infrastructure. The high level of fragmentation and use of the lakes by water-sport activities and equipment is such that management of this zone shall seek to minimize the impact of anthropogenic activities, on land and water. The presence of kettles in this zone gives it special interest in terms of nature conservation and interpretation.

**Zone IV**

This reception and service area of the biodiversity reserve covers 1.10 km<sup>2</sup> or 0.6% and includes the Centre éducatif forestier du lac Joannès as well as its trails for education and recreation purposes. It has the dual vocation of serving visitors and providing natural discovery activities. The Centre éducatif forestier shall serve as a reception centre and information resource for the biodiversity reserve. Nature interpretation, education and recreation activities offered by the Centre éducatif forestier in the surrounding area will allow visitors to discover the biodiversity reserve's natural elements. In this zone, hunting is prohibited in accordance with the Regulation respecting hunting (chapter C-61.1, r. 12).

**5. Activities framework that applies to the biodiversity reserve****5.1. Activities framework established by the Natural Heritage Conservation Act**

Activities carried on within the biodiversity reserve are governed mainly by the provisions of the Natural Heritage Conservation Act.

Under the Act, the main activities prohibited in an area to which status as a biodiversity reserve has been assigned are

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

Subject to measures in this conservation plan authorizing the activities and specifying the conditions on which they may be carried on:

- any allocation of a right to occupy land for vacation resort purposes;
- earthwork, backfilling or construction work; and
- commercial activities.

## **5.2. Activities framework established by this conservation plan**

§ 1. — Prohibitions, prior authorizations and other conditions governing activities in the biodiversity reserve

### § 1.1. Protection of resources and the natural environment

5.2.1. Subject to the prohibition in the second paragraph, no person may establish in the reserve any specimens or individuals of native or non-native species of fauna into the reserve, 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 reserve a non-native species of flora, unless the person has been authorized by the Minister.

5.2.2. No person may use fertilizer or fertilizing material in the 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).

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

5.2.4. 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 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

(a) 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);

(b) for carrying out another type of structure, infrastructure or works, for the benefit of a natural person who has a lease for resort purposes or another right of occupation allowing the person to stay in the reserve, where the intervention in the water, riparian or floodplain environment is the subject of an authorization from the competent municipal authority and the project is carried out in compliance with the Protection Policy for Lakeshores, Riverbanks, Littoral Zones and Floodplains;

(5) carry on any activity other than those referred to in the preceding subparagraphs 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 the biochemical characteristics of aquatic or riparian environments or wetland areas in the reserve, including by discharging or dumping waste or pollutants into those areas;

(6) carry out soil development work, including any burial, earthwork, removal or displacement of surface materials or vegetation cover, for any purpose;

(7) install or erect any new structure, infrastructure or works;

(8) reconstruct or demolish an existing structure, infrastructure or works;

(9) carry on an activity that is likely to severely degrade the soil or a geological formation or damage the vegetation cover, such as stripping, the digging of trenches or excavation work;

(10) use a pesticide, although no authorization is required for the use of personal insect repellent;

(11) 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

(12) hold a sports event, tournament, rally or other organized event, other than an activity of the Centre éducatif forestier du Lac Joannès in Area IV of the reserve, if more than 15 persons are likely to participate in the activity and have access to the reserve at the same time; no authorization may be issued by the Minister if the activity involves motor vehicle traffic, unless it has been shown to the Minister that it is impossible to organize the activity elsewhere or that bypassing the reserve is highly unfeasible.



5.2.5. Despite paragraphs 6, 7, 8 and 9 of section 5.2.4, 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 an existing 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 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 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 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; and

(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.

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.

5.2.6. 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, no authorization is required concerning the Centre éducatif forestier to use an elimination facility or a disposal site, in compliance with the Environment Quality Act (chapter Q-2) and its regulations, if it was already used on the date of coming into force of the protection status as a biodiversity reserve.

#### §1.2. Rules of conduct for users

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

5.2.8. No person may enter, carry on an activity or travel in a vehicle in a given sector of the 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.

#### §1.3. Activities requiring an authorization

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

No authorization is required if a person

(1) on the effective date of the protection status as a 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;

(2) in accordance with the applicable provisions of law, has entitlement under a sublease, an assignment of a lease or a transfer of a right or authorization referred to in paragraph 1, and whose right to occupy the land is renewed or extended on the same conditions, subject to possible changes in fees;  
or

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

For the purposes of this section,

(1) the occupation or use of a site includes

(a) staying or settling in the reserve, including for vacation purposes;

- (b) installing a camp or shelter in the reserve; and
- (c) installing, burying or leaving property in the reserve, including equipment, any device or a vehicle;

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

5.2.10. 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.

Despite the first paragraph, the authorization of the Minister under this conservation plan is not required if a person staying or residing in the reserve collects wood to make a campfire. An authorization is also not required if a person collects firewood to meet domestic needs if the wood is collected to supply a trapping camp or a rough shelter permitted within the reserve on the following conditions:

- (1) 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;
- (2) the quantity of wood collected does not exceed 7 apparent cubic metres per year.

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

- (1) clearing permitted harvested areas, maintaining them or creating visual openings, and 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
- (2) 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 subparagraph 2 of the third paragraph 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 5.2.12 and 5.2.14.

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

- (1) operate a store, restaurant, counter or other premises or facility for the sale, rental or production of goods or services; or
- (2) sell or rent goods in the reserve, elsewhere than in a location referred to in paragraph 1.

Although an authorization is not required for the sale or rental of goods or services carried out pursuant to a contract entered into with the Minister or carried out by the Centre éducatif forestier du lac Joannès within the scope of its mission.

#### §1.4. Authorization exemptions

5.2.12. Despite the preceding provisions, an authorization is not required for an activity or other form of intervention within the 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.

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

5.2.14. 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 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 (chapter Q-2), 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;
- (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; and
- (4) any activity or intervention required for the development and reopening of an access road to existing facilities of the Société for the maintenance and repair of the road.

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 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 purpose of access, construction or equipment movement incidental to the work.

## 6. Activities governed by other statutes

Certain activities likely to be carried on within the Réserve de biodiversité des Lacs-Vaudray-et-Joannès are also governed by other legislative and regulatory provisions applicable within the biodiversity reserve, including provisions that require the issue of a permit or authorization or the payment of certain fees. Certain activities may also be prohibited or limited by other Acts or regulations that are applicable within the biodiversity reserve.

A special legal framework may govern permitted activities within the biodiversity reserve in connection with the following matters:

- **Environmental protection:** measures set out in particular in the Environment Quality Act (chapter Q-2) and its regulations;
- **Archaeological discoveries and research:** measures set out in particular in the Cultural Heritage Act (chapter P-9.002);
- **Development and conservation of wildlife resources:** measures set out in the Act respecting the conservation and development of wildlife (chapter C-61.1), including the provisions regarding licences for the transportation and stocking of live fish, those pertaining to threatened or vulnerable wildlife species, outfitting operations and beaver reserves, and the measures contained in applicable federal legislation and regulations, in particular the fishery legislation and regulations;
- **Designated threatened or vulnerable flora species:** measures prohibiting the removal of such species under the Act respecting threatened or vulnerable species (chapter E-12.01);
- **Access and land rights related to the domain of the State:** measures set out in particular in the Act respecting the lands in the domain of the State (chapter T-8.1) and the Watercourses Act (chapter R-13);
- **Issue and control of permits for forest development activities** (harvest of firewood for domestic purposes, wildlife and recreational development) **and issue of authorizations** (forest roads): measures set out in the Sustainable Forest Development Act (chapter A-18.1);
- **Operation of vehicles:** measures set out in particular in the Act respecting the lands in the domain of the State and in the regulation on motor vehicle traffic in certain fragile environments made under the Environment Quality Act;
- **Construction and development standards:** regulatory measures adopted by regional and local municipal authorities under the Acts applicable to them.

## **7. Management**

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

Management of the Réserve de biodiversité des Lacs-Vaudray-et-Joannès is a responsibility of the Minister of Sustainable Development, Environment and the Fight against Climate Change. The Minister monitors and controls activities in the reserve and applies the law. In managing the reserve, the Minister enjoys the cooperation and participation of other government agents that have specific responsibilities in or close to the reserve.

### **7.2 Monitoring**

As described in the section entitled “Conservation and development of the Réserve de biodiversité des Lacs-Vaudray-et-Joannès”, the state of the natural environment shall be monitored in cooperation with relevant local and regional partners, such as municipal, environmental, recreational, and educational stakeholders as well as cottagers, hunters, fishers and trappers.

### **7.3 Stakeholder participation**

As described in the section entitled “Conservation and development of the Réserve de biodiversité des Lacs-Vaudray-et-Joannès”, in managing the reserve, the Minister of Sustainable Development, Environment and the Fight against Climate Change shall benefit from the cooperation and participation of stakeholders, as outlined in section 7.2. The Minister shall prepare an action plan guiding management of the biodiversity reserve and respecting its mission to protect the territory and its resources. The Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques shall see to the preparation of the action plan in cooperation with the concerned regional stakeholders. The method for participation and cooperation of community stakeholders shall be determined by the Minister of Sustainable Development, Environment and the Fight against Climate Change, according to local and regional realities.

## **Bibliography**

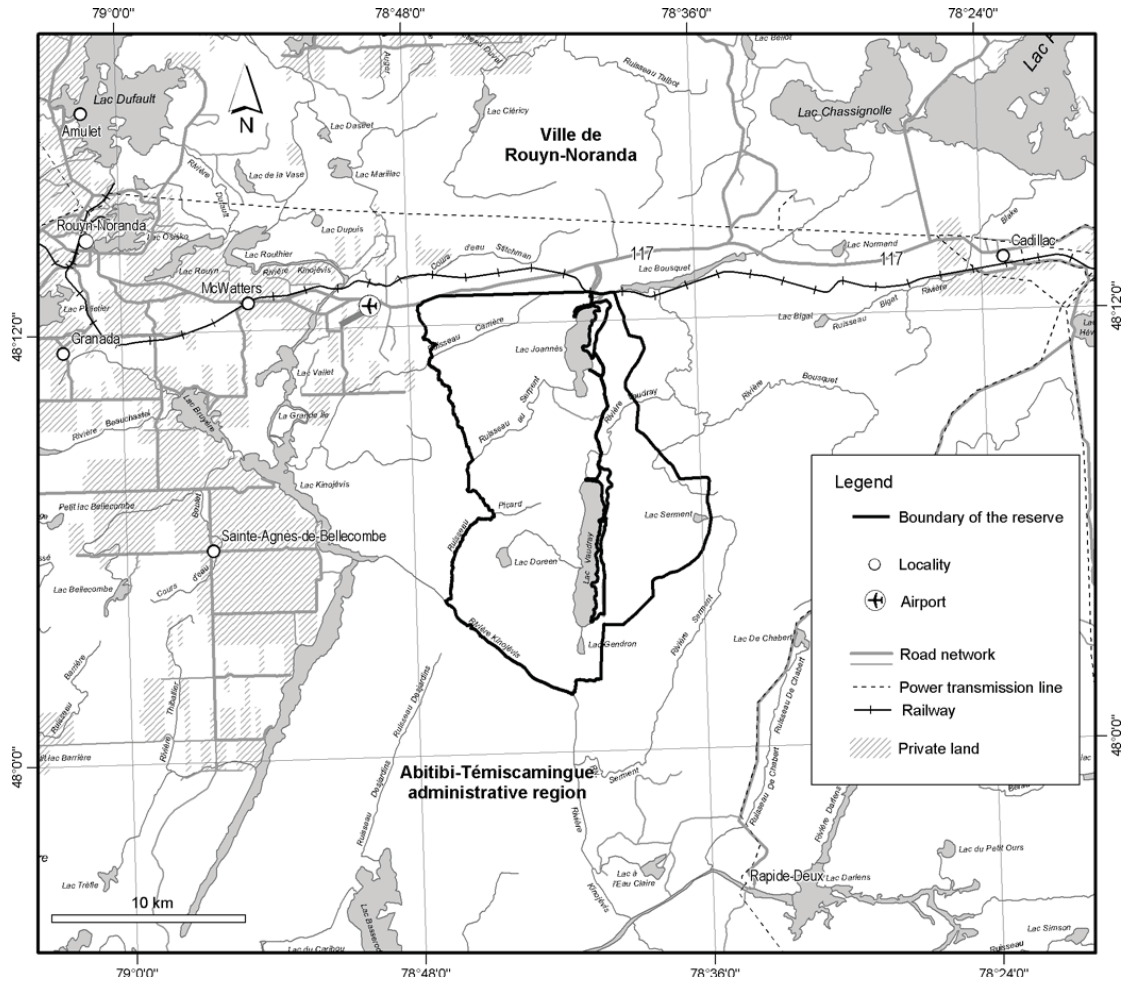
Li, T and J.-P. Ducruc, 1999. Les provinces naturelles. Niveau I du cadre écologique de référence du Québec. Ministère de l'Environnement. 90 pages.

MDDEP, 2004. Les réserves de biodiversité projetées des lacs Vaudray et Joannès et du lac Sabourin: Cadres de protection et de gestion. 227 pages.

SLOA, 2004a. Observations réalisées dans le secteur de la réserve de biodiversité des lacs Vaudray et Joannès. Étude des populations d'oiseaux du Québec (ÉPOQ). Rapport préparé par Louis Imbeau. 22 pages.

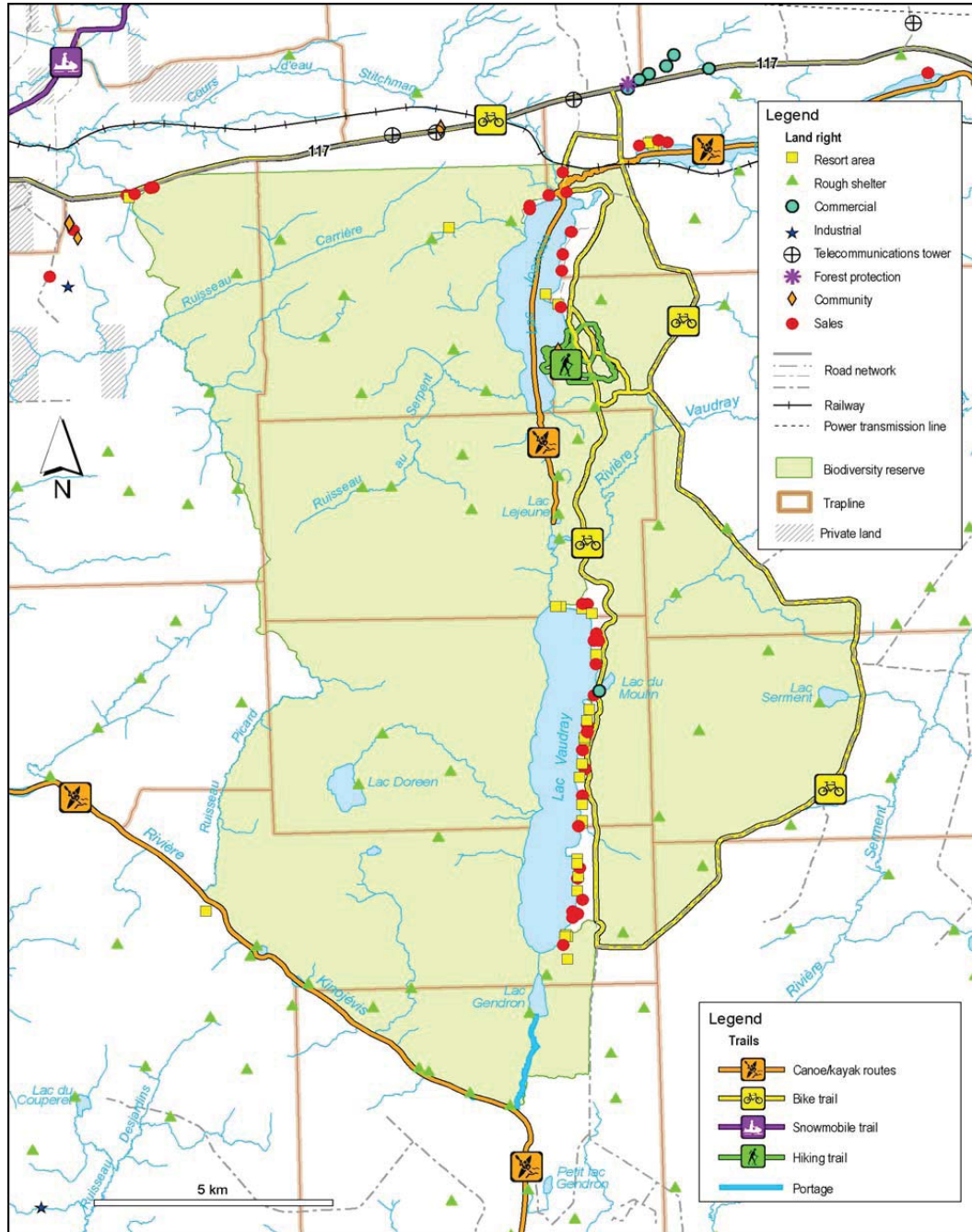
Veillette, J., 2000. « Un roc ancien rajeuni par les glaciers », pages 1-38 in Abitibi-Témiscamingue, de l'emprise des glaces à un foisonnement de vie. Éditions Multimondes.

**Appendix 1 – Réserve de biodiversité des Lacs-Vaudray-et-Joannès: Boundaries and location**





**Appendix 2 – Réserve de biodiversité des Lacs-Vaudray-et-Joannès: Occupation and use**



### Appendix 3 – Réserve de biodiversité des Lacs-Vaudray-et-Joannès: Zoning

