



Vaudray and Joannès lakes biodiversity reserve

Conservation plan



March 2003

1. Plan and description

1.1. Geographic location, boundaries and dimensions

The plan of the proposed Vaudray and Joannès lakes biodiversity reserve and its location are shown on the maps in Schedules A.1 and A.2.

The proposed Vaudray and Joannès lakes biodiversity reserve is located in the Abitibi-Témiscamingue administrative region, between 48°01' and 48°13' latitude north and 78°36' and 78°45' longitude west. It is situated to the south of Highway 117, roughly 37 km east of Rouyn-Noranda.

It lies within the territory of municipalité de Rouyn-Noranda, which is also the territory of the regional county municipality of the same name.

The proposed biodiversity reserve covers a total area of 181 km². It includes the watersheds of both Vaudray and Joannès lakes, which represent respectively 33.5% and 24% of the total area. To the north, the proposed biodiversity reserve borders on the Canadian National railway linking Rouyn-Noranda to Val-d'Or.

1.2. Ecological overview

The area is in the natural province of the Abitibi and James Bay Lowlands. It protects ecosystems representative of the natural region of the Lake Témiscamingue Lowlands.

1.2.1. Representative elements

Climate: The watersheds of Vaudray and Joannès lakes are at the interface of two types of continental climate: the western sector is characterized by a mild subpolar, subhumid climate with a long growing season, while the eastern sector is characterized by a subpolar, subhumid climate with a medium growing season. The proposed reserve belongs to the bioclimatic field of fir stands with white birch.

Geology and geomorphology: The proposed reserve is part of the Abitibi geologic sub-province, attached to the Superior geologic province, whose bedrock is archean (> 2.5 billion years). The substratum is mainly formed by silicic rock, with some felsic rock, such as tonalite. When the Ojibway-Barlow glacial lake melted, around 8,500 years ago, the bedrock was covered by a thick layer of glacial lacustrine sediments (silt and clay), poorly drained. An esker lies parallel to Vaudray and Joannès lakes. A group of till hummocks, moderately well drained, encircles the depression where Vaudray and Joannès lakes are situated. The average altitude is 318 m, varying between 268 m and 402 m.

Hydrography: The proposed biodiversity reserve is part of the watershed of the Outaouais river. It includes 28 lakes, which occupy 7% of the total area. The lakes are kettle lakes, in other words they

occupy pits of glaciofluvial origin. Vaudray and Joannès lakes are the two largest, covering a respective area of 7.6 and 4.5 km². They lie along a generally north-south line. The drainage system is well developed, and is made up mainly of intermittent watercourses. The Vaudray river which runs through the area over a distance of around 12 km is the main watercourse. The impermeability of the lacustrine clay and the low relief have led to the development of wetlands on the lower-lying ground; they cover 8.6 km², or roughly 5% of the area of the proposed reserve.

Vegetation: Over three-quarters of the proposed reserve is forest-covered, mainly by softwood stands on the high ground and mixed stands on the slopes. Black spruce (*Picea mariana*) is the dominant species, often accompanied by white spruce (*Picea glauca*), balsam fir (*Abies balsamea*), white birch (*Betula papyrifera*) and trembling aspen (*Populus tremuloides*). Stands over 90 years in age represent 12% of the forest cover. The depressions, poorly drained, are occupied by peat bogs and alder groves. One-tenth of the area has been logged.

1.2.2. Outstanding elements

Joannès lake is a potentially favourable nesting site for the red-necked grebe (*Podiceps grisegena*). This web-footed species, common in central and western Canada, has recently begun nesting in Québec. Most of the nesting sites have been observed on lakes in the Abitibi-Témiscamingue region, including Joannès lake. Because of its rarity, the red-necked grebe is likely to be designated as a threatened or vulnerable species under the *Act respecting threatened or vulnerable species* (R.S.Q., c. E-12.01).

1.3. Land occupation and use

The land occupations and uses in the proposed Vaudray and Joannès lakes biodiversity reserve are shown on the map in Schedule A.3.

The road network is the only human disturbance. It comprises 98% of unpaved roads suitable for road vehicles, and has a total length of 114 km.

Land rights have been granted on 101 sites:

- 25 private cottages;
- 37 cottage leases;
- 37 leases for rough shelters;
- 1 telecommunications tower;
- 1 holiday camp (Centre récréatif du Lac Joannès).

The Centre récréatif forestier du lac Joannès operates under the authority of a private charter.

The whole proposed biodiversity reserve lies within management unit 04 for fur-bearing animals (UGAF 04). It covers a total of twelve traplines.

The head of the Vaudray river is classified as a wildlife habitat, under "water fowl gathering area". The zone concerned has an area of 0.3 km².

2. Protection status

The proposed biodiversity reserve safeguards several lakes in the head of the watershed of the Ouataouais river, including Vaudray and Joannès lakes. The proposed reserve offers a forest landscape of great interest, both from an ecological perspective and for its beauty.

Biodiversity reserve status would allow the pursuit of the following conservation objectives:

- ✓ the preservation of kettle lakes and the esker at Vaudray and Joannès lakes, representative of the natural region of the Lake Témiscamingue Lowlands;
- ✓ ongoing biodiversity in lake and forest ecosystems;
- ✓ the promotion of remarkable landscapes;
- ✓ the acquisition of new knowledge concerning natural heritage.

3. Activities within the reserve

All activities carried on within the proposed Vaudray and Joannès lakes biodiversity reserve are governed by the provisions of the *Natural Heritage Conservation Act* (S.Q. 2002, c. 74).

This conservation plan does not specify any prohibited activity other than those prohibited in biodiversity reserves by the Act; nor does it authorize any other activities, or set any additional constraints on the activities permitted by the Act.

3.1. Prohibited activities

For reference purposes, it is important to note that under the *Natural Heritage Conservation Act*, the main activities prohibited in an area designated as a proposed biodiversity reserve are:

- mining, and gas or petroleum development;
- mining, gas or petroleum exploration, brine and underground reservoir exploration, prospecting, and digging or boring, where such activities necessitate stripping, the digging of trenches, excavation or deforestation;
- forest management activities within the meaning of section 3 of the *Forest Act* (R.S.Q., c. F-4.1);

- the development of hydraulic resources and any production of energy on a commercial or industrial basis;
- any new allocation of a right to occupy land for vacation resort purposes;
- earthwork, backfilling or construction work.

3.2. Activities governed by other Acts

All activities carried on within the boundaries of the proposed Vaudray and Joannès lakes biodiversity reserve remain governed by the other applicable legislative and regulatory provisions, including those that require the issue of a permit or authorization or the payment of fees. The carrying on of certain activities may also be prohibited or limited by other Acts or regulations applicable within the boundaries of the proposed biodiversity reserve.

In particular, within the boundaries of the proposed biodiversity reserve, special legal rules may govern permitted and prohibited activities in connection with:

- **Archaeological research** (especially the measures contained in the *Cultural Property Act* [R.S.Q., c. B-4]);
- **Utilisation of wildlife resources** (especially the measures contained in the *Act respecting the conservation and development of wildlife* [R.S.Q., c. C-61.1], and, where applicable, the measures contained in any applicable federal legislation);
- **Access** (especially the measures contained in the *Act respecting the lands in the domain of the State* [R.S.Q., c. T-8.1]);
- **Land rights** (especially the measures contained in the *Act respecting the lands in the domain of the State* [R.S.Q., c. T-8.1] and in leases issued by the Minister of Natural Resources).

3.3. Supervision of activities

The Minister of the Environment is responsible for the application of the *Natural Heritage Conservation Act*, and is also responsible for the proposed biodiversity reserves established under that Act. The Minister will supervise and monitor the measures contained in the Act with regard to permitted activities in protected areas.

All other government departments and bodies will retain their responsibilities as set out in all the legislative and regulatory texts that apply within a proposed biodiversity reserve.

The Minister of Natural Resources will supervise all activities subject to the Minister's authority within the territory of the proposed Vaudray and Joannès lakes biodiversity reserve, in particular as regards permitted forms of land occupation.

The Société de la faune et des parcs du Québec (FAPAQ) remains responsible for supervising the activities relating to wildlife protection and management that are under its responsibility.

4. Permanent protection status

The permanent protection status envisaged for the reserve is "biodiversity reserve" status under the *Natural Heritage Conservation Act*.

Schedules

A.1. Plan of the proposed Vaudray and Joannès lakes biodiversity reserve (provisional name)



[Click to enlarge](#)

A.2. Map showing the location of the proposed Vaudray and Joannès lakes biodiversity reserve (provisional name)



[Click to enlarge](#)

A.3. Map showing land occupation and use in the proposed Vaudray and Joannès lakes biodiversity reserve (provisional name)



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