

QUÉBEC STRATEGY FOR PROTECTED AREAS



**Réserve
écologique
projetée de
la Tourbière-
de-Shannon**

Conservation plan



February 2008

1. Description of the territory

The Réserve écologique projetée de la Tourbière-de-Shannon is located in the territory of Municipalité de Shannon, Municipalité régionale de comté (MRC) de la Jacques-Cartier, in the Capitale-Nationale administrative region (region 03), approximately 30 km northwest of Ville de Québec. The Tourbière de Shannon covers an area of approximately 250 hectares at an altitude of 180 metres, on the northern flanks of the Jacques-Cartier river. The proposed ecological reserve will allow the major part of the Tourbière de Shannon's ecosystem to be integrally preserved. The area of the Réserve écologique projetée de la Tourbière-de-Shannon is 165.77 hectares. The map of the proposed ecological reserve, prepared by land surveyor Denis Vaillancourt, is shown at the end of this document.

The Tourbière de Shannon is mainly ombrotrophic (Buteau, 1989). This type of bog has a convex shape and is characterized by an acid pH between 3.5 and 4.6 and a water and mineral intake that comes solely from precipitation (Gorham & Janssens, 1992). The sphagnum contributes heavily to the acidity of the environment (Clymo, 1964). The seasonal recovery profile of this type of bog is strictly a function of precipitation, except for the summertime when evapotranspiration is significant, and in winter, when the surface of the bog is frozen (Bastien, 2007). A lagg¹ exists on the periphery of the bog and acts as a junction with the surrounding mineral soil. The water intake, after having run through the adjacent mineral soil, flows towards the margin of the bog and enriches it with available minerals. The lagg is characterized by the simultaneous presence of minerotrophic, facultative or even ombrotrophic species.

The proposed ecological reserve is located within the natural province of the Southern Laurentians in the Saint-Joseph Lake Low Hills ecological district. The territory is within the sugar maple-basswood bioclimatic domain. It is characterized by a subpolar and continental climate, subhumid annual precipitation and a long growing season.

The basement rocks below the Tourbière de Shannon is principally composed of gneiss and paragneiss (gneiss whose origin is sedimentary rock) (Grondin P., Leboeuf P., Noël J., Hotte D., 2003).

An administrative document of the Ministère du Développement durable, de l'Environnement et des Parcs entitled *Portrait of territory* groups the ecological information concerning the Réserve écologique projetée de la Tourbière-de-Shannon and is updated according to the state of knowledge of the territory.

2. Proposed permanent protection status

The permanent protection status proposed for the territory is "ecological reserve"; the status is governed by the *Natural Heritage Conservation Act*.

¹ Lagg: the depressed and minerotrophic margin of a raised bog.

3. Conservation measures and zoning

The Minister of Sustainable Development, Environment and Parks is responsible for the application of the *Natural Heritage Conservation Act* and is therefore responsible for proposed ecological reserves and those established under the Act and has authority over these lands, which form part of the domain of the State. The Minister supervises and monitors the measures contained in the Act with regard to activities permitted in protected areas. In the management of the reserve, the Minister works collaboratively with other government partners, such as the Minister of Natural Resources and Wildlife and Municipalité de Shannon, who have specific responsibilities with respect to the reserve or adjoining lands. In the exercise of their powers, the ministers and the municipality will take into consideration the protection sought for these natural environments and the protection status that has been granted. No additional conservation measure is envisaged at this stage. As for zoning, its application does not seem appropriate in a protected area for which integral protection is intended.

4. Activities framework

Activities carried on within the Réserve écologique projetée de la Tourbière-de-Shannon are governed by the provisions of the *Natural Heritage Conservation Act* (R.S.Q., c. C-61.01) and include in particular activities for scientific study and educational purposes. Those activities will be subject to the written authorization of the Minister of Sustainable Development, Environment and Parks.

This conservation plan does not prohibit activities in addition to the activities already prohibited in proposed ecological reserves under the Act. It also does not authorize activities or add restrictions to activities permitted under the Act.

4.1. Prohibited activities

It is important to note that under the *Natural Heritage Conservation Act*, the main activities prohibited in an area designated as a proposed ecological reserve are

- mining, and gas or petroleum development;
- forest management 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;
- mining, gas and petroleum exploration, brine and underground reservoir exploration, prospecting, and digging or boring where those activities necessitate stripping, the digging of trenches, excavation or deforestation;
- any new allocation of a right to occupy land for vacation resort purposes; and
- earthwork or construction work.

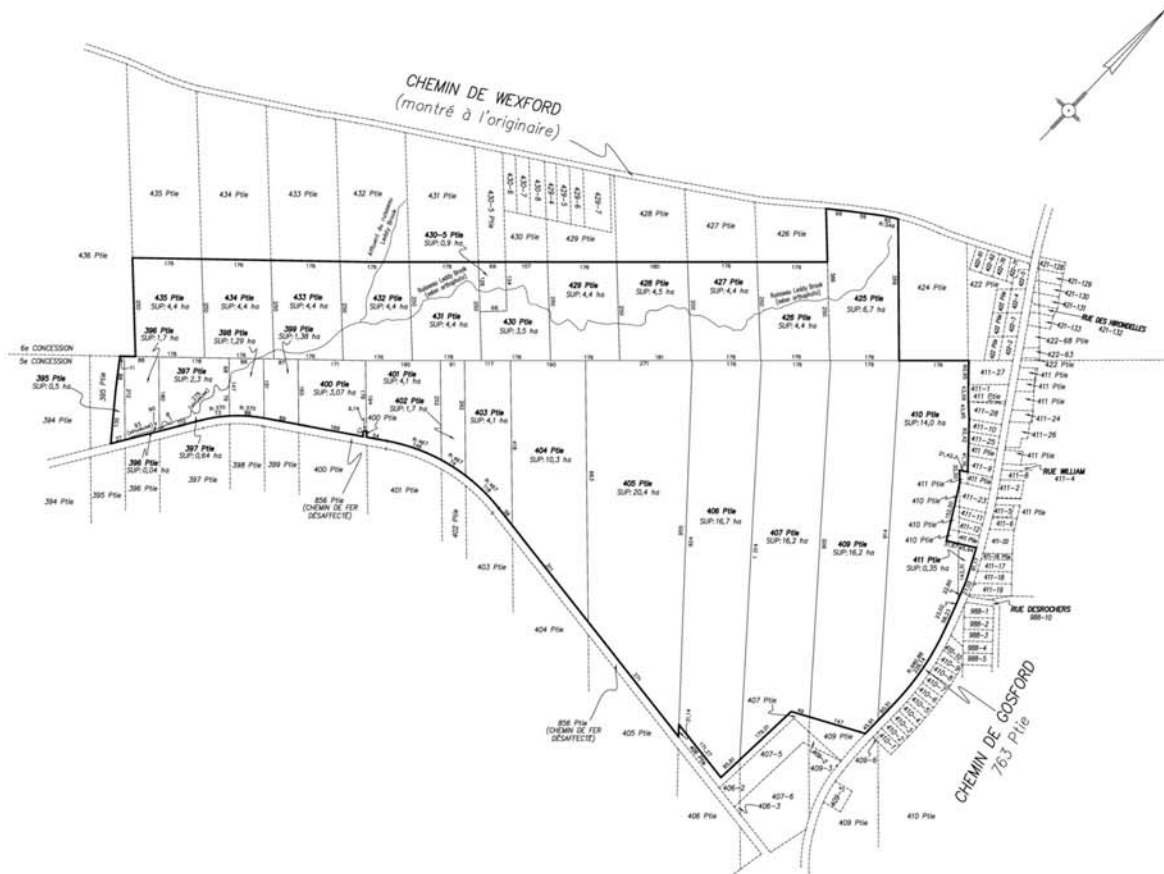
4.2. Activities governed by other statutes

Activities likely to be carried on within the Réserve écologique projetée de la Tourbière-de-Shannon are also governed by other applicable legislative and regulatory provisions, including those that require the issue of a permit or authorization or the payment of fees.

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

- Archaeological research: measures set out in particular in the *Cultural Property Act* (R.S.Q., c. B-4);
- Environmental protection: measures set out in particular in the *Environment Quality Act* (R.S.Q., c. Q-2) and its regulations;
- Threatened or vulnerable plant species: measures prohibiting the removal of the species under the *Act respecting threatened or vulnerable species* (R.S.Q., c. E-12.01);
- Development and conservation of wildlife resources: measures set out in the *Act respecting the conservation and development of wildlife* (R.S.Q., c. C-61.1) and its regulations;
- Access and land rights related to the domain of the State: measures set out in the *Act respecting the lands in the domain of the State* (R.S.Q., c. T-8.1) and the *Watercourses Act* (R.S.Q., c. R-13);
- Operation of vehicles: measures set out in particular in the *Act respecting the lands in the domain of the State* (R.S.Q., c. T-8.1) and in the regulation on motor vehicle traffic in certain fragile environments made under the *Environment Quality Act* (R.S.Q., c. Q-2).

**MAP OF THE
RÉSERVE ÉCOLOGIQUE PROJETÉE
DE LA TOURBIÈRE-DE-SHANNON**



Area of the proposed ecological reserve:
165.77 hectares (1.66 km²)

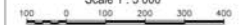
LEGEND

— Boundary of the proposed ecological reserve

NOTE

Measures in the map expressed in the International System of Units (SI).

Scale 1 : 5 000



Développement durable,
Environnement et Parcs
Québec

MAP OF THE

**RÉSERVE ÉCOLOGIQUE PROJETÉE DE
LA TOURBIÈRE-DE-SHANNON**

Municipality : Shannon
Regional county municipality : La Jacques-Cartier
Administrative region : Capitale-Nationale
Registration division : Portneuf
Cadastré : Paroisse de Sainte-Catherine

Prepared in accordance with section 27 of the Natural Heritage Conservation Act (R.S.Q., c. C-61.81)

Prepared at Québec, 4 December 2007

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Land Surveyor

Minute : 10 072

Our record: 5141-03-03 (3.25)

COPY CONFORM TO THE ORIGINAL

DATE: _____ BY: _____ L.S.