

QUÉBEC STRATEGY FOR PROTECTED AREAS



**Réserve de  
biodiversité  
projetée  
Samuel-De  
Champlain**

**Conservation plan**



May 2011



# 1. Protection Status and Toponym

The protection status of the territory described below is that of proposed biodiversity reserve under the *Natural Heritage Conservation Act* (R.S.Q. c. C-61.01).

The permanent protection status planned is that of “biodiversity reserve” under the *Natural Heritage Conservation Act*.

The provisional toponym is “Réserve de biodiversité projetée Samuel-De Champlain”. The official toponym will be determined when the territory is given permanent protection status.

The status sought for the proposed reserve will advance the following conservation objectives:

- conservation of exceptional wetland environments in the St. Lawrence Lowlands province;
- maintenance of biodiversity in wetland environments;
- increased protection of wildlife and plant habitats;
- acquisition of additional knowledge about the natural heritage.

## 2. Plan and Description

### 2.1. Geographical location, boundaries and dimensions

The location and boundaries of the proposed reserve appear in the map attached as Schedule 1.

Located in the administrative region of Montérégie, Réserve de biodiversité projetée Samuel-De Champlain is comprised of 18 sectors scattered between 45°0'36" and 45°12'12" north latitude and 73°14'32" and 73°21'38" west longitude. It lies approximately 11 km south of Saint-Jean-sur-Richelieu and 11 km west of Napierville, with the southernmost sector abutting the American border. The proposed reserve covers an area of 4.87 km<sup>2</sup> (487 ha) here and there in the municipalities of Sainte-Anne-de-Sabrevois, Henryville, Saint-Paul-de-l'Île-aux-Noix and Lacolle. All of the municipalities belong to the regional municipality of Haut-Richelieu in Montérégie. Five landlocked parcels with a total area of 10 050 m<sup>2</sup> are excluded from the boundaries of the proposed biodiversity reserve.

### 2.2. Ecological portrait

The réserve de biodiversité projetée Samuel-De Champlain lies in the natural region of the Upper St. Lawrence Plain, in the heart of the St. Lawrence Lowlands natural province. More precisely, most of it is in the Champlain Valley physiographic complex, while a small portion of the northern section is in the Plaine de St-Jean-Beauharnois physiographic complex. The réserve de biodiversité projetée Samuel-De Champlain is intended to protect the wetland environments along parts of the Rivière Richelieu.

### 2.2.1. Representative elements

**Climate:** The territory is influenced by a continental climate of moderate average temperature (4.5°C to 6.6°C), sub-humid annual precipitation (800 to 1359 mm) and a long growing season (180 to 209 days).

**Geology and geomorphology:** The territory of the proposed reserve is in the St. Lawrence Platform geological province. The geologic foundation consists primarily of metamorphosed Ordovician sedimentary rocks in the Stony Point formation (shale, slate, dolomite, mudstone, dolomitic siltstone and calcareous mudstone). In terms of geomorphology, the dominant feature is the presence of organic deposits typical of wetland environments in the flood plain. Clayey marine deposits from the ancient Champlain Sea are also found in the proposed reserve, along with river deposits from ancient meanders near the present-day river. There is little topographic relief, the altitude varying from 28 to 33 m.

**Hydrography:** The proposed biodiversity reserve protects nearly 48 ha of shallow open water, 171 ha of marsh and 192 ha of swamp. The reserve will also protect 573 m of Ruisseau Paquette and more than 1.6 km of streams flowing into the major bed of the Rivière Richelieu. All of the protected area lies within the drainage basin of the Rivière Richelieu.

**Flora:** The bioclimatic domain of the area is that of maple-bitternut hickory stands in the deciduous forest subzone. On 29% (143 ha) of the proposed reserve the vegetation consists of deciduous wetland forest. These treed swamps are primarily composed of stands of silver maple (*Acer saccharinum*), together with black ash (*Fraxinus nigra*), bitternut hickory (*Carya cordiformis*), American elm (*Ulmus americana*) and swamp white oak (*Quercus bicolor*). As for age, 39% (55 ha) of the forest environment consists of old uneven-aged stands.

**Fauna:** The wetland environments found in the proposed biodiversity reserve are an important habitat for a wide variety of species of amphibian, birds and mammals. The protected areas contain designated wildlife habitats such as muskrat habitats, a heronry and wildfowl gathering areas. Several areas in the region are particularly exceptional in terms of wildlife, and are partially included in the proposed biodiversity reserve. Examples include Baie des Anglais, the marsh adjacent to the mouth of Rivière du Sud and the Ruisseau Bleury sector. The latter has been identified as a reproductive area for slow-water species and is a spawning ground for northern pike. A wildfowl gathering area and a muskrat habitat are also found here. The Ruisseau Bleury wildlife site presents a mosaic of wetland environments including aquatic plant communities, marshes, swamps, wet meadows and farmland. Also of interest for its reptiles and amphibians, the area is recognized as having a high potential to contain spiny softshell turtle. As well, the local flood plains and the aquatic plant communities in the major bed of the Richelieu are important spawning areas for warm-water fish. The mouth of Ruisseau Faddentown and the flood plain south of Pointe du Gouvernement are other sectors identified as fish reproduction areas. Fifty-six species of fish have been identified in the Rivière Richelieu.

## 2.2.2. Outstanding elements

**Flora:** A number of rare or protected species of plants are found within the boundaries of the proposed biodiversity reserve. Some are considered likely to be designated as threatened or vulnerable in Québec, including yellow-fruited sedge (*Carex annectens*), swamp white oak (*Quercus bicolor*), lowland yellow loosestrife (*Lysimachia hybrida*), Virginia water-horehound (*Lycopus virginicus*), slender bulrush (*Scirpus heterochaetus*) and southern wild rice (*Zizania aquatica* var. *aquatica*). One plant designated as threatened in Québec, false hop sedge (*Carex lupuliformis*), is also found there.

**Fauna:** Turning to wildlife in the proposed reserve, there is one species of fish considered likely to be designated as threatened or vulnerable, the river redhorse (*Moxostoma carinatum*). Two species designated as vulnerable are also found, the northern map turtle (*Graptemys geographica*) and the least bittern (*Ixobrychus exilis*), while there is one species designated as threatened, the spiny softshell turtle (*Apalone spinifera*).

## 2.3. Land occupation and uses

Five parcels of land were excluded from the proposed reserve so as to regularize the situation of certain occupants pursuant to the *Loi concernant la délimitation du domaine hydrique de l'État et la protection de milieux humides le long d'une partie de la rivière Richelieu* (2009, c. 31).

Several communication routes permit access and circulation within and around the proposed reserve. Route 223 and connecting roads provide access to the western parts of the proposed reserve, while Chemin du Bord-de-l'eau and connecting roads provide access to the eastern parts. Though excluded from the proposed reserve, Route 202 crosses Île Ash and links the western and eastern sectors. Easements of passage and maintenance will be granted to allow ground access to a permanent residence and three cottages. Easements will be granted to allow the passage and maintenance of private electrical lines connecting a permanent residence and three cottages to the Hydro-Québec network.

Since the Richelieu is a navigable waterway, numerous motor boats ply its waters, causing erosion and considerable disturbance to the plants and wildlife along its banks.

The wetland environments in the proposed reserve are used by many hunters, trappers and fishers. The swamps, marshes and aquatic plant communities lend themselves particularly well to the hunting of waterfowl and the trapping of fur-bearing animals such as common muskrat (*Ondatra zibethicus*) and American mink (*Mustela vison*). The territory lies in fur-bearing animal management unit 84 and hunting zones 8 east, 8 south and 8 north.

Farm drainage ditches are also present in the proposed biodiversity reserve. The maintenance and cleaning of these ditches will be permitted in accordance with applicable legislative and regulatory

measures. Before permanent protection status is obtained, a committee will be formed representing the principal stakeholders (the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation; the Ministère du Développement durable, de l'Environnement et des Parcs; Fisheries and Oceans Canada; the regional country municipalities concerned; the Ministère des Ressources naturelles et de la Faune; and the Union des producteurs agricoles) to determine how best to limit the frequency of maintenance on the ditches and reduce its impact on the environment.

### **3. Activities framework**

#### *§1. Introduction*

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

This Division prohibits activities in addition to those prohibited under section 34 of the Act and provides the framework for the various activities permitted so as to better protect the natural environment in keeping with the conservation principles and other management objectives established for the proposed reserves. Accordingly, certain activities require the prior authorization of the Minister and compliance with the conditions determined by the Minister. The permitted and prohibited activities considered for the period that follows the assignment of permanent status by the Government are the same with the necessary adjustments to take into account the application of section 46 of the Act.

As provided in the Natural Heritage Conservation Act, the main activities prohibited in an area to which status as a proposed biodiversity or aquatic reserve has been assigned 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); and
- the development of hydraulic resources and any production of energy on a commercial or industrial basis.

#### *§2.— Prohibitions, prior authorizations and other conditions governing activities in the proposed reserve*

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

3.1. 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 into the reserve, including by stocking, unless the person has been authorized by the Minister and complies with the conditions the Minister determines.

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 and complies with the conditions the Minister determines.

Before issuing an authorization under this section, the Minister is to take into consideration, in addition to the characteristics and the number of species involved, the risk of biodiversity imbalance, the importance of conserving the various ecosystems, the needs of the species in the ecosystems, the needs of rehabilitating degraded environments or habitats within the proposed reserve, and the interest in reintroducing certain species that have disappeared.

3.2. No person may use fertilizer or fertilizing material in the proposed reserve.

3.3. No person may, unless the person has been authorized by the Minister and carries on the activity in compliance with the conditions the Minister determines,

- (1) intervene in a wetland area, including a marsh, swamp or bog;
- (2) modify the reserve's natural drainage or water regime;
- (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;
- (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 biochemical characteristics or quality of aquatic or riparian environments or wetland areas in the proposed reserve, including by discharging or dumping waste or pollutants into the watercourse or body of water;
- (6) carry out soil development work, including any burial, earthwork, removal or displacement of surface materials or vegetation cover, for any purpose including recreational and tourism purposes such as trail development;
- (7) install or erect any structure, infrastructure or new 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;
- (12) hold a gathering, sports event, tournament, rally or similar event if more than 15 persons are likely to participate in the activity and have access to the proposed 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 proposed reserve is highly unfeasible; or

(13) light a campfire; no authorization is required for a lessor who wishes to light a campfire on the land subject to a lease.

The conditions determined by the Minister for the authorization may pertain to the location of the authorized activity, the methods used, the areas that may be cleared or deforested, the types of material that may be used including on-site materials, and the presence of ancillary works or facilities. The conditions may also include a requirement to ensure periodic follow-up or to report to the Minister, in particular as regards the results obtained from the research to which subparagraph 11 of the first paragraph refers.

3.4. Despite section 3.1 and subparagraphs 1, 2, 3 and 6 of the first paragraph of section 3.3, 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) the maintenance of an agricultural drainage watercourse; and
- (b) the cleaning of an agricultural drainage watercourse.

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

3.5. Despite subparagraphs 1, 6, 7, 8 and 9 of the first paragraph of section 3.3, 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 proposed 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 (R.S.Q., c. 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.

3.6. 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 and in compliance with the conditions the Minister determines.

#### §2.2. Rules of conduct for users

3.7. Every person staying, carrying on an activity or travelling in the proposed reserve is required to maintain the premises in a satisfactory state and before leaving, return the premises to their natural state to the extent possible.

3.8. In the proposed reserve, no person may

(1) cause any excessive noise;

(2) behave in a manner that unduly disturbs other users or interferes with their enjoyment of the proposed reserve; or

(3) harass wildlife.

For the purposes of subparagraphs 1 and 2 of the first paragraph, behaviour that significantly disturbs other persons and constitutes unusual or abnormal conditions for the carrying on of an activity or for the permitted use of property, a device or an instrument within the proposed reserve is considered excessive or undue.

3.9. No person may enter, carry on an activity or travel in 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 and complies with the conditions the Minister determines.

It is prohibited to enter or travel in the area situated around the private lands enclosed within the proposed biodiversity reserve (Area 1 Schedule 2). The buffer zone corresponds to a strip of 200 m around the private lands enclosed within and excluded from the proposed biodiversity reserve (refer to Schedule 2). The occupants of those lands, their guests, the persons who enter the area to carry on work specified in section 3.4, public utilities and persons authorized by the Minister may enter or travel in that area.

3.10. 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.

#### §2.3. Activities requiring an authorization

3.11. No person may occupy or use a site in the proposed reserve unless the person has been authorized by the Minister and complies with the conditions the Minister determines. An authorization is not required for a lessor on the land subject to a lease.

For the purposes of the first paragraph, 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.

3.12. 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 and carries on the activities in compliance with the conditions the Minister determines. An authorization is not required for a lessor who wishes to carry on forest management activities on the land subject to a lease.

The conditions determined by the Minister for the authorization may pertain, among other things, to species of trees or shrubs, the size of the stems that may be cut, the quantities authorized and the places where the activities may be carried on.

#### § 2.4 Authorization exemptions

3.13. 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.

3.14. 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.

3.15. 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 (R.S.Q., c. 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 by the Société, if the conditions for the carrying out of the activity or intervention have been determined in an agreement between the Minister and the Société and the activity or intervention is carried out in compliance with those conditions.

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.

#### §2.5. General provisions

3.16. Every person who applies to the Minister for an individual authorization or an authorization for a group or a number of persons must provide all information or documents requested by the Minister for the examination of the application.

3.17. The Minister's authorization, which is general or for a group, may be communicated for the benefit of the persons concerned by any appropriate means including a posted notice or appropriate signage at

the reception centre or any other location within the proposed reserve that is readily accessible to the public. The Minister may also provide a copy to any person concerned.

### **§3. *Activities governed by other statutes***

Certain activities likely to be carried on within the proposed reserve are also governed by other legislative and regulatory provisions, including provisions that require the issue of a permit or authorization or the payment of fees. Certain activities may also be prohibited or limited by other Acts or regulations that are applicable within the proposed reserve.

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

- Environmental protection: measures set out in particular in the Environment Quality Act (R.S.Q., c. Q-2) and its regulations;
- Species of flora designated as threatened or vulnerable: measures prohibiting the removal of such 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), including the provisions pertaining to outfitting operations and beaver reserves and the measures contained in applicable federal legislation, in particular the fishery regulations;
- Archaeological research: measures set out in particular in the Cultural Property Act (R.S.Q., c. B-4);
- Access and land rights related to the waters in the domain of the State: measures set out in the Watercourses Act (R.S.Q., c. R-13) and in the Act respecting the lands in the domain of the State (R.S.Q., c. T-8.1);
- Construction and development standards: regulatory measures adopted by regional and local municipal authorities under the Acts applicable to them.

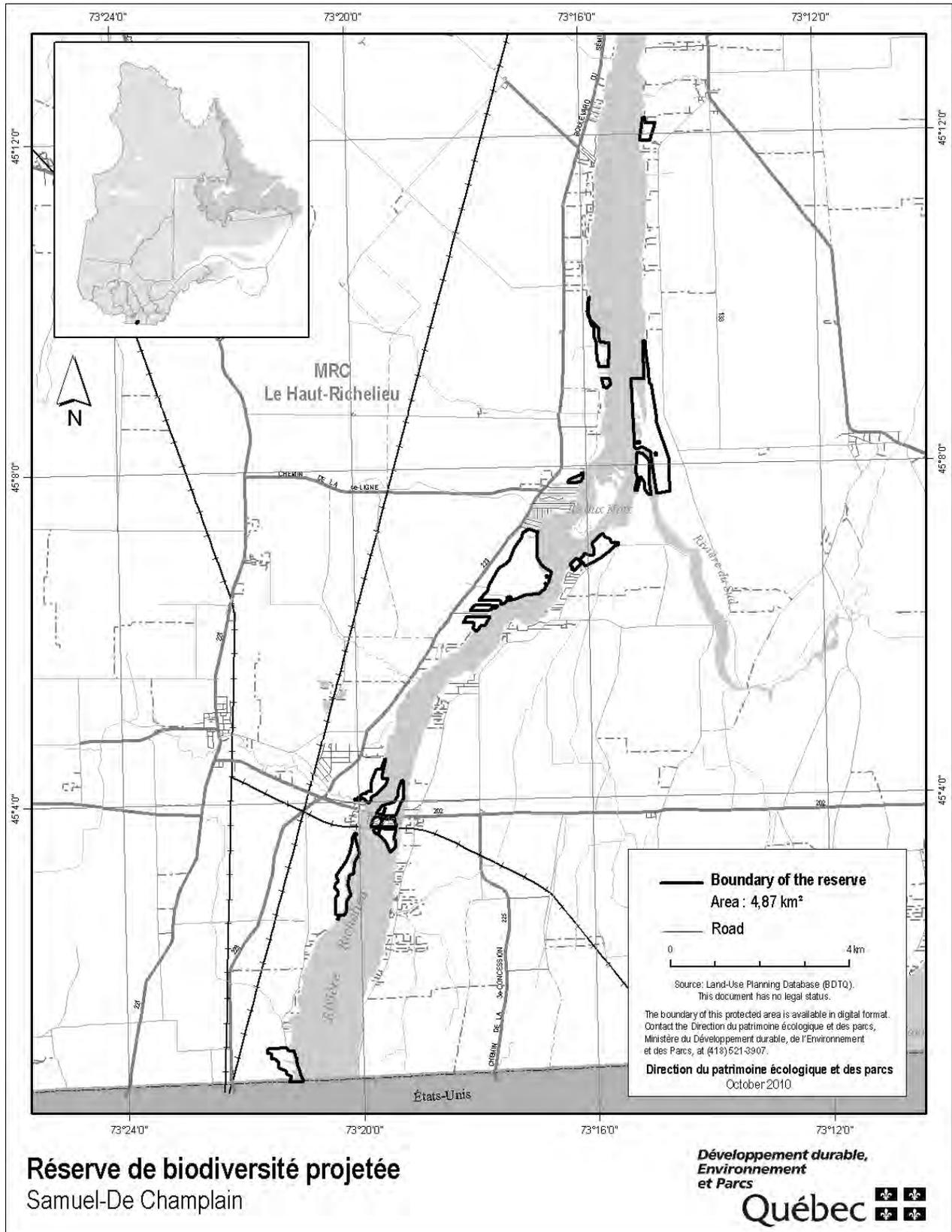
## **4. Responsibilities of the Minister of Sustainable Development, Environment and Parks**

The Minister of Sustainable Development, Environment and Parks is responsible for the conservation and management of Réserve de biodiversité projetée Samuel-De Champlain. The Minister supervises and monitors the activities that may take place there. In managing the reserve the Minister enjoys the collaboration and participation of other government partners, such as the Minister of Natural Resources

and Wildlife, who have specific responsibilities regarding this land or lands adjoining it. In the exercise of their powers the Ministers will take into consideration the protection sought for this natural environment and the protection status it has been granted. No additional conservation measure is envisaged at this stage. With regard to zoning, the proposed biodiversity reserve consists of two zones (Schedule 2): zone 1, in which access and circulation are restricted to the owners of private property that is landlocked in the proposed reserve, along with their guests, public utility companies and other authorized persons; and zone 2, in which access and circulation are not restricted. The zoning of zone 2 may be specified before the granting of permanent protection status.

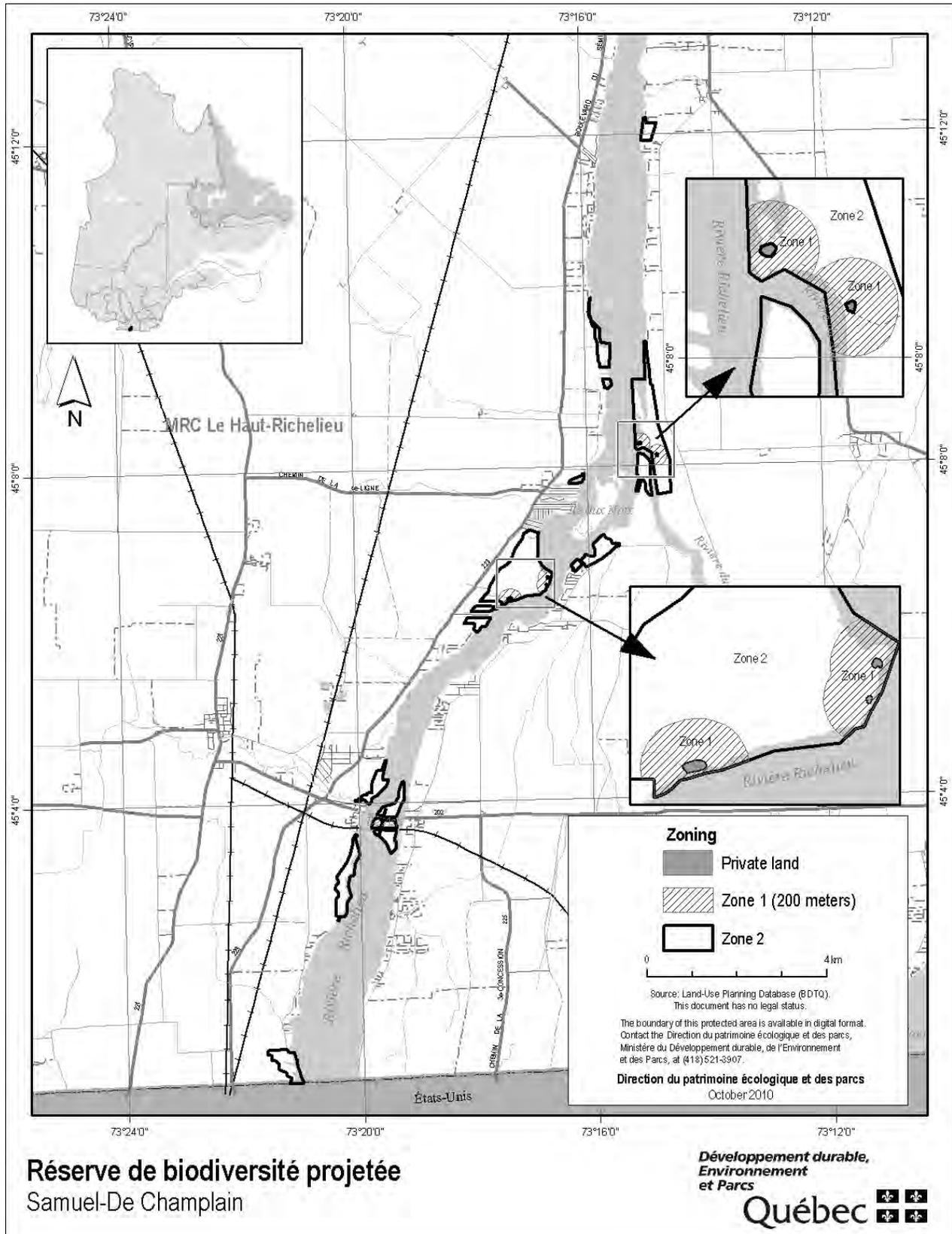
# Schedule 1

## Map of the réserve de biodiversité projetée Samuel-De Champlain



## Schedule 2

### Zoning map of the réserve de biodiversité projetée Samuel-De Champlain



Réserve de biodiversité projetée  
Samuel-De Champlain