
Regulations and other acts

Gouvernement du Québec

O.C. 81-2007, 6 February 2007

Natural Heritage Conservation Act
(R.S.Q., c. C-61.01)

Authorization to assign temporary protection status as a proposed biodiversity reserve to five areas, and approval of the plans and conservation plans

WHEREAS, under the first paragraph of section 27 of the Natural Heritage Conservation Act (R.S.Q., c. C-61.01), for the purpose of protecting land to be established as a new protected area, the Minister of Sustainable Development, Environment and Parks may, with the approval of the Government, prepare the plan of that area, establish a conservation plan and assign temporary protection status to the area as a proposed aquatic reserve, biodiversity reserve, ecological reserve or man-made landscape;

WHEREAS, to promote the maintenance of biodiversity, it is desirable to assign legal protection status as a proposed biodiversity reserve to the Anneaux-Forestiers, Esker-Mistaouac, Dunes-de-la-Rivière-Attic, Plateau-du-Lac-des-Huit-Chutes and Albanel-Témiscamie-Otish areas, to prepare a plan of each area and to establish a conservation plan for the duration of the temporary protection, those plans being attached to this Order in Council;

IT IS ORDERED, therefore, on the recommendation of the Minister of Sustainable Development, Environment and Parks:

THAT the Minister of Sustainable Development, Environment and Parks be authorized to assign the status of proposed biodiversity reserve to the Anneaux-Forestiers, Esker-Mistaouac, Dunes-de-la-Rivière-Attic, Plateau-du-Lac-des-Huit-Chutes and Albanel-Témiscamie-Otish areas, and that the plans of the areas and the proposed conservation plan for each area be approved, those plans being attached to this Order in Council.

GÉRARD BIBEAU,
Clerk of the Conseil exécutif

QUÉBEC STRATEGY FOR PROTECTED AREAS



Proposed Anneaux- Forestiers biodiversity reserve

Conservation plan



November 2006

1. Protection status and toponym

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

The provisional name is “Réserve de biodiversité projetée des Anneaux-Forestiers”. The official toponym will be determined at the time of assignment of permanent protection status to the land.

2. Plan and description

2.1. Geographic location, boundaries and dimensions

The boundaries and location of the proposed Anneaux-Forestiers biodiversity reserve are shown on the map attached as a Schedule.

The proposed Anneaux-Forestiers biodiversity reserve is located in the Nord-du-Québec administrative region, between 49°37' and 49°43' north latitude and 79°18' and 79°30' west longitude. It is situated some 50 km to the north of Village de Val-Paradis and 120 km to the west of Ville de Matagami. It covers an area of 133.9 km² and lies within the territory of Municipalité de Baie-James which is outside the regional county municipality.

2.2. Ecological overview

The proposed Anneaux-Forestiers biodiversity reserve is in the Abitibi and James Bay Lowlands natural province, in the Turgeon River Plain natural region and in the Wawagasic River Plain physiographic unit.

The proposed biodiversity reserve is a glacial plain mostly covered by peat bogs (44%). These organic deposits are replaced by glacial till deposits particularly along the Turgeon river and Garneau stream. Near the northeastern boundary of the proposed biodiversity reserve, recent fluvial alluviums are present where the Turgeon river forms a meander. These sandy-textured deposits were formed in the plain by the river overflow during spring floods.

The elevation of the plain varies little, between 255 m and 301 m, with an average elevation of 266 m.

The proposed biodiversity reserve protects a special ecological phenomenon that has not yet been explained, namely forest rings that appear on aerial photos as giant rings in stands of black spruce (*Picea mariana*). More than 600 rings are present in the southwest sector of James Bay. The whitish colour comes from an opening

up of the forest cover. The diameter of the rings varies between 300 m and 2 km and the rings are visible on aerial photos at a scale of 1: 15,000 or from flights at an altitude of several hundred meters. Studies seem to indicate that the rings correspond to a round zone of lower productivity of black spruce. To date, there is no scientific explanation for the low productivity.

The proposed biodiversity reserve is in the black-spruce domain. Trembling aspen (*Populus tremuloides*) and balsam fir (*Abies balsamea*) are present with black spruce on the banks of the Turgeon river, particularly in the steeper riparian portions. Nearly 25% of the forest in the proposed biodiversity reserve has been recently logged and 70% of the forest cover consists of old-growth black-spruce stands that are nearly all 120 years old or older.

The proposed biodiversity reserve is part of the Turgeon river watershed.

2.3. Occupation and land uses

One lease for vacation resort purposes is located on the banks of the Turgeon river and three rough shelter leases are located near the Turgeon river. The Turgeon river is a recognized canoe-kayak route.

The proposed biodiversity reserve lies entirely within the Abitibi beaver reserve. It lies within fur-bearing animal management unit 06 and is part of hunting area 16.

The land of the proposed biodiversity reserve is classified as Category III land under the James Bay and Northern Québec Agreement signed in 1975 and the Act respecting the land regime in the James Bay and New Québec territories (R.S.Q., c. R-13.1).

A moderately developed network of forest roads serves the proposed biodiversity reserve.

3. Activities framework

Activities carried on within the proposed Anneaux-Forestiers biodiversity reserve are governed by the provisions of the Natural Heritage Conservation Act (R.S.Q., c. C-61.01).

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

3.1. Prohibited activities

As provided in the Natural Heritage Conservation Act, the main activities prohibited in an area to which status as a proposed biodiversity reserve has been assigned are

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

3.2. Activities governed by other statutes

Certain activities likely to be carried on within the proposed biodiversity 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 biodiversity reserve.

A special legal framework may govern permitted and prohibited 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);
- Archaeological research: measures set out in particular in the Cultural Property Act (R.S.Q., c. B-4);
- Development of wildlife resources: measures set out in particular 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, including the fishery regulations;

— Removal of species of fauna or flora that are threatened or vulnerable or are likely to be designated as such: measures prohibiting the removal of the species under the Act respecting threatened or vulnerable species (R.S.Q., c. E-12.01);

— Access and land rights: measures set out in particular in the Act respecting the lands in the domain of the State (R.S.Q., c. T-8.1);

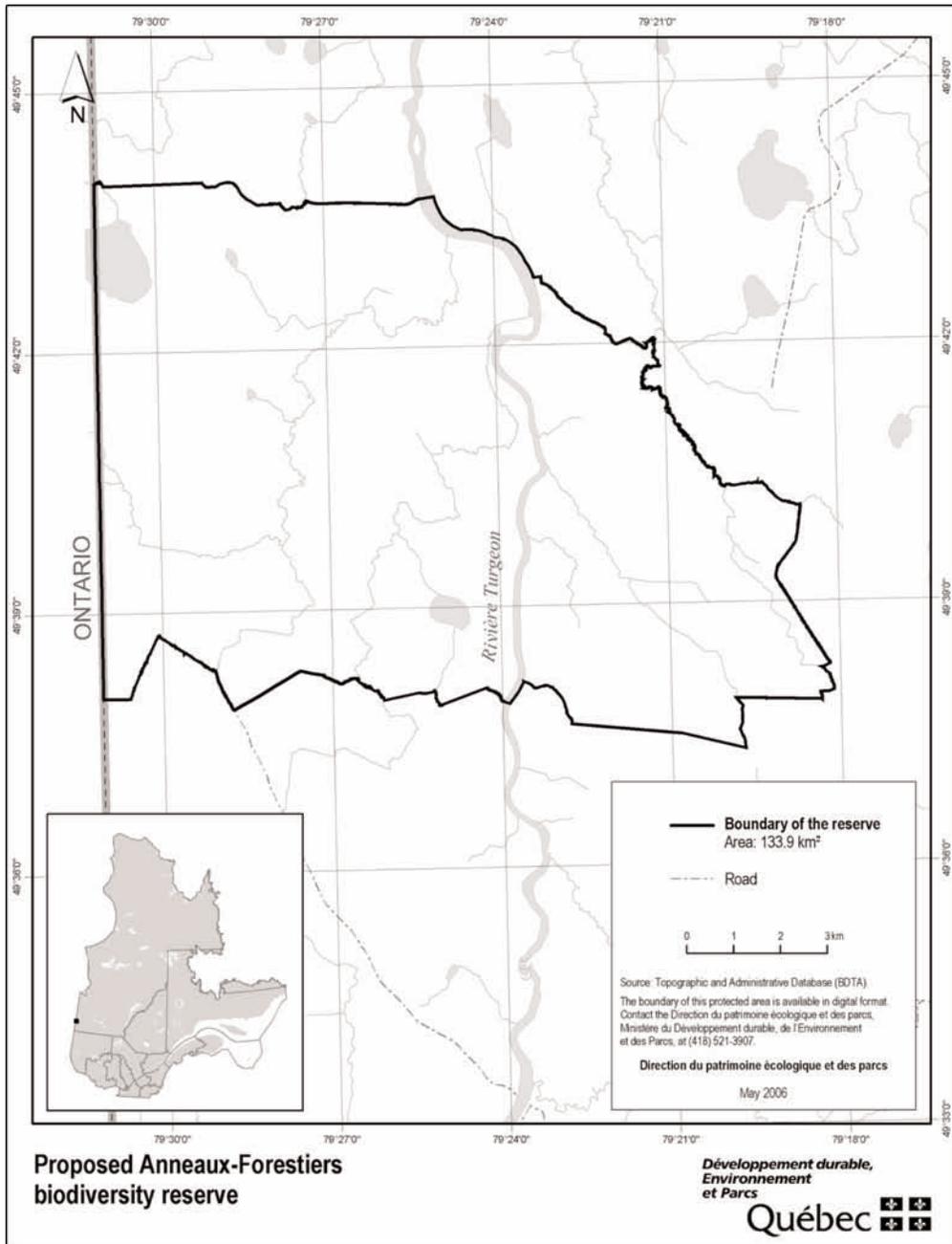
— Operation of vehicles: measures set out in particular in the Act respecting the lands in the domain of the State (R.S.Q., c. T-8.1) and in the regulation on motor vehicle traffic in certain fragile environments made under the Environment Quality Act (R.S.Q., c. Q-2).

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

The Minister of Sustainable Development, Environment and Parks is responsible for conservation and management of the proposed Anneaux-Forestiers biodiversity reserve and is therefore responsible for supervising and monitoring the activities allowed in the reserve. The Minister in the management of the reserve works collaboratively with other government representatives having specific responsibilities in or adjacent to the reserve, such as the Minister of Natural Resources and Wildlife. In the exercise of their powers and functions, the Ministers will take into consideration the protection sought for these natural environments and the protection status that has been granted.

SCHEDULE

Map of the proposed Anneaux-Forestiers biodiversity reserve



QUÉBEC STRATEGY FOR PROTECTED AREAS



Proposed Esker- Mistaouac biodiversity reserve

Conservation plan

November 2006

1. Protection status and toponym

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

The provisional name is “Réserve de biodiversité projetée de l’Esker-Mistaouac”. The official toponym will be determined at the time of assignment of permanent protection status to the land.

2. Plan and description

2.1. Geographic location, boundaries and dimensions

The boundaries and location of the proposed Esker-Mistaouac biodiversity reserve are shown on the map attached as a Schedule.

The proposed Esker-Mistaouac biodiversity reserve is located in the Nord-du-Québec administrative region, between 49°06’ and 49°31’ north latitude and 78°31’ and 78°59’ west longitude. It is situated some 22 km to the west of Village de Joutel and 35 km to the east of Village de Villebois. It covers an area of 456.3 km² and lies within the territory of Municipalité de Baie-James which is outside the regional county municipality.

Several forest road segments still in use have been excluded from the boundaries of the proposed biodiversity reserve over a width of 40 metres. A forest camp along the esker road and eight sand and gravel extraction sites have also been excluded. Those sites are: SMS 32E07-17, SMS 32E07-05, SMS 32E07-04, SMS 32E07-03, SMS 32E07-02, SMS 32E07-01, SMS 32E02-06 and SMS 32E02-09.

2.2. Ecological overview

The proposed Esker-Mistaouac biodiversity reserve is in the Abitibi and James Bay Lowlands natural province. It covers two natural regions, namely the Abitibi Plain natural region in the Turgeon Lake Plain physiographic unit and the Turgeon Lake Plain natural region in the Wawagasic River Plain physiographic unit.

The proposed biodiversity reserve is a glacio-lacustrine plain crossed by a large esker. The eastern portion of the proposed biodiversity reserve on either side of the esker consists of clay loam glacio-lacustrine deposits. The northwestern portion of the proposed biodiversity reserve is characterized by a significant presence of ombrotrophic and minerotrophic bogs dotted by clay silt of glacio-lacustrine origin. The esker, the product of a fluvio-glacial phenomenon, is one of the largest in western Québec

and is the main point of interest in the proposed biodiversity reserve. The esker has a total length of 120 km with portions located in the municipalities of Berry and Saint-Mathieu to the south. The portion within the proposed biodiversity reserve is some 48 km long. The southern portion of the proposed biodiversity reserve has some glacio-lacustrine deposits along the esker. The southeastern portion is represented by Mont Plamondon reaching an elevation of 552 m with rock outcrops washed by glacial lake waters, and some glacial till deposits. The sector has been bare of vegetation ever since. The elevation of the flat plain varies little, between 270 m and the peak of Mont Plamondon, with an average elevation of some 284 m.

The area around Mont Plamondon is of great ecological and geomorphological interest. The raised beaches on the slopes of Mont Plamondon represent one of the best developed and more complete sequences of glacial lake beach ridges in Eastern Canada. The Mont Plamondon beaches cover a vertical section of more than 100 m and include several levels clearly showing the gradual decrease of the water levels of the glacial Barlow-Ojibway lake when it receded. This site, unique with its beaches arranged in tiers on several levels, is a complete record of the last phase of Ojibway lake, maybe the last 500 to 1,000 years of its existence.

Some 50% of the proposed biodiversity reserve is covered by forests because of the large proportion of unwooded bogs and the Mistaouac and Wawagasic lakes. The portions under plant cover are mostly softwood. Black spruce (*Picea mariana*) is widely present in the proposed biodiversity reserve (55%). Some white birch stands (*Betula papyrifera*) and poplar stands (*Populus* sp.) are present around Mistaouac lake and in the southern portion near Mont Plamondon. Jack pine (*Pinus banksiana*, 8% of the forest cover) grows mostly in the southern portion of the proposed biodiversity reserve, particularly in the sandy deposits, including the esker, in addition to being present to the east of Mistaouac lake. Mont Plamondon is covered by white birch. Mixed stands make up some 5% of the forest cover of the proposed biodiversity reserve. Most of the forest cover (65%) is composed of young forests resulting from recent logging operations that are located on Mesic sites and 34% of the forest cover is 90 years old or older.

A heronry is located on the western shore of Mistaouac lake.

The proposed biodiversity reserve adjoins three watersheds, the Wawagasic river, the Mistaouac river, a subbasin of the Wawagasic river, and the Plamondon river.

2.3. Occupation and land uses

There are five leases for vacation resort purposes, mostly on the shores of the Wawagasic river, and sixteen rough shelter leases. Two public interest rights for forest conservation and protection (SOPFEU radiocommunications tower) including one on the summit of Mont Plamondon where a few related buildings have been built. There is a trapping camp on the eastern shore of Wawagasic lake.

The proposed biodiversity reserve is entirely within the Abitibi beaver reserve and the fur-bearing animal management unit 06 and hunting area 16. The “Club de chasse et pêche Mistawac” outfitting operation with exclusive rights is located almost entirely within the proposed biodiversity reserve.

The land in the proposed biodiversity reserve is classified as Category III land under the James Bay and Northern Québec Agreement signed in 1975 and the Act respecting the land regime in the James Bay and New Québec territories (R.S.Q., c. R-13.1).

A little developed network of forest roads is located in the northeastern and the southern portions of the proposed biodiversity reserve. Some unpaved roads suitable for vehicles run through the proposed biodiversity reserve, particularly along the esker.

A snowmobile trail crosses the proposed biodiversity reserve in an east-west direction to the south of Wawagasic lake.

3. Activities framework

Activities carried on within the proposed Esker-Mistaouac biodiversity reserve are governed by the provisions of the Natural Heritage Conservation Act (R.S.Q., c. C-61.01).

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

3.1. Prohibited activities

As provided in the Natural Heritage Conservation Act, the main activities prohibited in an area to which status as a proposed biodiversity reserve has been assigned are

— mining, and gas or petroleum development;

— mining, gas and petroleum exploration, brine and underground reservoir exploration, prospecting, and digging or boring where the activities necessitate stripping, the digging of trenches, excavation or deforestation;

— 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;

— any new allocation of a right to occupy land for vacation resort purposes; and

— earthwork or construction work.

3.2. Activities governed by other statutes

Certain activities likely to be carried on within the proposed biodiversity 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 biodiversity reserve.

— A special legal framework may govern permitted and prohibited 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);

— Archaeological research: measures set out in particular in the Cultural Property Act (R.S.Q., c. B-4);

— Development of wildlife resources: measures set out in particular 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, including the fishery regulations;

— Removal of species of fauna or flora that are threatened or vulnerable or are likely to be designated as such: measures prohibiting the removal of the species under the Act respecting threatened or vulnerable species (R.S.Q., c. E-12.01);

— Access and land rights: measures set out in particular in the Act respecting the lands in the domain of the State (R.S.Q., c. T-8.1);

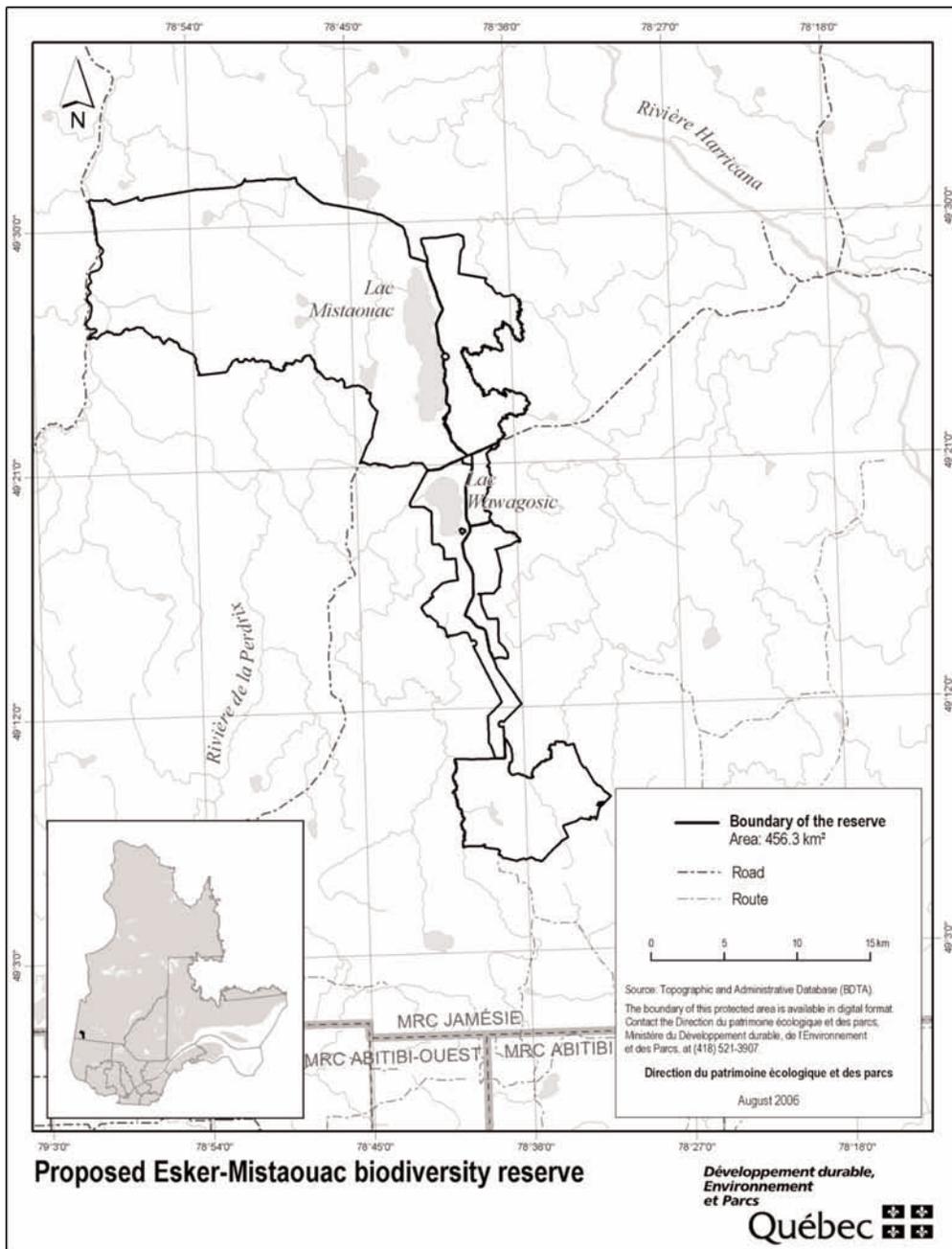
— Operation of vehicles: measures set out in particular in the Act respecting the lands in the domain of the State (R.S.Q., c. T-8.1) and in the regulation on motor vehicle traffic in certain fragile environments made under the Environment Quality Act (R.S.Q., c. Q-2).

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

The Minister of Sustainable Development, Environment and Parks is responsible for conservation and management of the proposed Esker-Mistaouac biodiversity reserve and is therefore responsible for supervising and monitoring the activities allowed in the reserve. The Minister in the management of the reserve works collaboratively with other government representatives having specific responsibilities in or adjacent to the reserve, such as the Minister of Natural Resources and Wildlife. In the exercise of their powers and functions, the Ministers will take into consideration the protection sought for these natural environments and the protection status that has been granted.

SCHEDULE

Map of the proposed Esker-Mistaouac biodiversity reserve



QUÉBEC STRATEGY FOR PROTECTED AREAS



Proposed Dunes-de-la-Rivière-Attic biodiversity reserve

Conservation plan



November 2006

1. Protection status and toponym

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

The provisional name is “Réserve de biodiversité projetée des Dunes-de-la-Rivière-Attic”. The official toponym will be determined at the time of assignment of permanent protection status to the land.

2. Plan and description

2.1. Geographic location, boundaries and dimensions

The boundaries and location of the proposed Dunes-de-la-Rivière-Attic biodiversity reserve are shown on the map attached as a Schedule.

The proposed Dunes-de-la-Rivière-Attic biodiversity reserve is located in the Abitibi-Témiscamingue administrative region, between 48°09' and 48°14' north latitude and 76°40' and 76°53' west longitude. It is situated some 32 km to the southeast of Ville de Senneterre and some 38 km to the northeast of the Lac-Simon Algonquin village. It covers an area of 77.7 km² and lies within the territory of Ville de Senneterre. The northwest boundary runs along the highwater mark of the Mégiscane river.

2.2. Ecological overview

The proposed Dunes-de-la-Rivière-Attic biodiversity reserve is located almost entirely (90%) in the Abitibi and James Bay Lowlands natural province, in the Abitibi Plain natural region and in the Sabourin Lake Plain physiographic unit. A portion of the proposed biodiversity reserve is located in the Mistassini Highlands natural province, in the Mégiscane Lake Hills natural region and in the Buttes du Lac Faillon physiographic unit.

The proposed biodiversity reserve is a plain formed by sandy deposits of various origins. The depressions and very poorly drained sectors are covered by organic deposits forming ombrotrophic bogs that represent nearly half of the area of the proposed biodiversity reserve. Thick sandy glacio-lacustrine deposits and a small proportion of glacial till without morphology are also present. The northeast boundary of the proposed biodiversity reserve is the confluence of two large glaciofluvial valleys, one from the east, the valley of the Attic river, and the other from the north where Cacamackipato lake is located. The convergence of these two quaternary events explains the significant presence of sandy deposits. An esker runs north-south between the Attic and Assup rivers and an esker borders the glaciofluvial depression along the eastern boundary of the proposed biodiversity reserve. Dunal deposits between the two

main reaches of the Attic river in the proposed biodiversity reserve are fixed dunes produced by the transportation of glaciofluvial sands after deglaciation. These dune ecosystems are rare and constitute the main interest in protecting the area. Sandy deposits, namely subactual fluvial alluviums, are present along the Attic river. The elevation of the flat plain varies little, between 339 m and 384 m, with an average elevation of 342 m.

On hydric sites, the vegetation consists of stands of black spruce (*Picea mariana*) of varying density covering some 65% of the forest area. The xeric sites, in particular sandy glacio-lacustrine deposits, dunes and eskers, are mostly covered by jack pine (*Pinus banksiana*) consisting in some 35% of the forest area. A few small stands of white birch and trembling aspen are present, especially on the glacial till and alluviums. In general, 80% of the forest is middle-aged, between 50 and 70 years old, and less than 10% of the forest is 90 years old or older.

The proposed biodiversity reserve includes part of two wildlife habitats, a muskrat habitat and an aquatic bird concentration area.

The proposed biodiversity reserve is part of two watersheds, namely the Attic river in the eastern portion. That watershed and the remaining territory of the proposed biodiversity reserve belong to the Mégiscane river watershed.

2.3. Occupation and land uses

One right for vacation resort purposes and 11 rough shelter leases have been granted within the proposed biodiversity reserve. There is also a landing strip that was built some 30 years ago.

The proposed biodiversity reserve adjoins five traplines and lies within fur-bearing animal management unit 05 and is part of hunting area 13.

The land in the proposed biodiversity reserve is classified as Category III land under the James Bay and Northern Québec Agreement signed in 1975 and the Act respecting the land regime in the James Bay and New Québec territories (R.S.Q., c. R-13.1).

A little developed network of unpaved roads is located near the northern and eastern boundaries of the proposed biodiversity reserve. The Attic river is a recognized canoe-kayak route. One snowmobile trail runs along several kilometres of the boundaries of the proposed biodiversity reserve and another crosses the proposed biodiversity reserve in its northeastern portion.

3. Activities framework

Activities carried on within the proposed Dunes-de-la-Rivière-Attic biodiversity reserve are governed by the provisions of the Natural Heritage Conservation Act (R.S.Q., c. C-61.01).

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

3.1. Prohibited activities

As provided in the Natural Heritage Conservation Act, the main activities prohibited in an area to which status as a proposed biodiversity reserve has been assigned are

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

3.2. Activities governed by other statutes

Certain activities likely to be carried on within the proposed biodiversity 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 biodiversity reserve.

A special legal framework may govern permitted and prohibited 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);

— Archaeological research: measures set out in particular in the Cultural Property Act (R.S.Q., c. B-4);

— Development of wildlife resources: measures set out in particular 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, including the fishery regulations;

— Removal of species of fauna or flora that are threatened or vulnerable or are likely to be designated as such: measures prohibiting the removal of the species under the Act respecting threatened or vulnerable species (R.S.Q., c. E-12.01);

— Access and land rights: measures set out in particular in the Act respecting the lands in the domain of the State (R.S.Q., c. T-8.1);

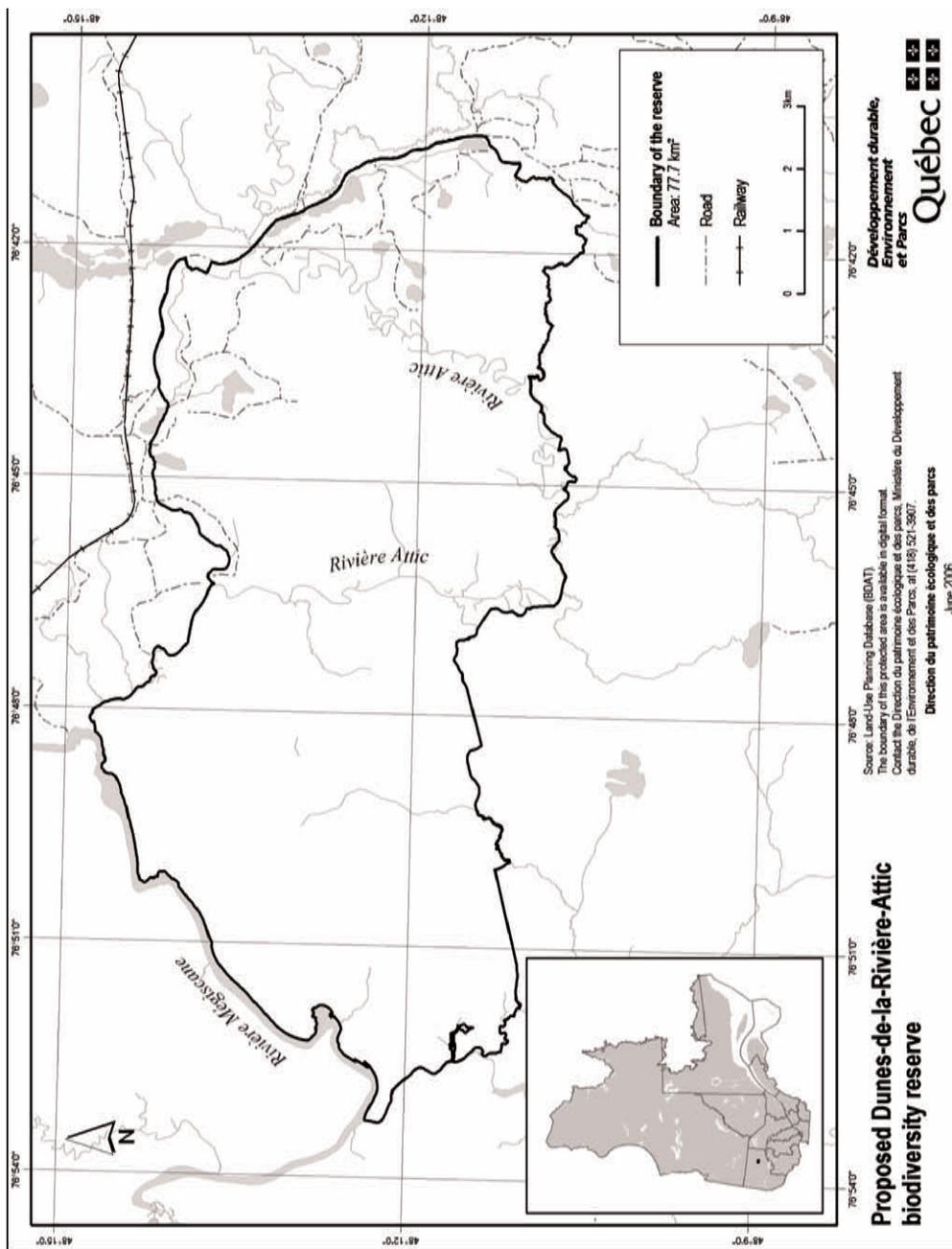
— Operation of vehicles: measures set out in particular in the Act respecting the lands in the domain of the State (R.S.Q., c. T-8.1) and in the regulation on motor vehicle traffic in certain fragile environments made under the Environment Quality Act (R.S.Q., c. Q-2).

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

The Minister of Sustainable Development, Environment and Parks is responsible for conservation and management of the proposed Dunes-de-la-Rivière-Attic biodiversity reserve and is therefore responsible for supervising and monitoring the activities allowed in the reserve. The Minister in the management of the reserve works collaboratively with other government representatives having specific responsibilities in or adjacent to the reserve, such as the Minister of Natural Resources and Wildlife. In the exercise of their powers and functions, the Ministers will take into consideration the protection sought for these natural environments and the protection status that has been granted.

SCHEDULE

Map of the proposed Dunes-de-la-Rivière-Attic biodiversity reserve



QUÉBEC STRATEGY FOR PROTECTED AREAS



**Proposed
Plateau-du-Lac-
des-Huit-Chutes
biodiversity
reserve**

Conservation plan



November 2006

1. Protection status and toponym

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

The provisional name is “Réserve de biodiversité projetée du Plateau-du-Lac-des-Huit-Chutes”. The official toponym will be determined at the time of assignment of permanent protection status to the land.

2. Plan and description

2.1. Geographic location, boundaries and dimensions

The boundaries and location of the proposed Plateau-du-Lac-des-Huit-Chutes biodiversity reserve are shown on the map attached as a Schedule.

The proposed Plateau-du-Lac-des-Huit-Chutes biodiversity reserve is located in the Saguenay–Lac-Saint-Jean administrative region, between 48°50' and 48°57' north latitude and 70°44' and 70°54' west longitude. It is situated some 45 km to the north of the borough of Chicoutimi in Ville de Saguenay, 15 km to the north of Municipalité de Saint-David-de-Falardeau. It covers an area of 102.7 km² and lies within the unorganized territory of Mont-Valin in Municipalité régionale de comté du Fjord-du-Saguenay. An unpaved road suitable for vehicles crosses the proposed biodiversity reserve but is excluded from the protected area over a total width of 40 metres, as are two surface material extraction sites (SMS 22D15-50 and SMS 22D15-51).

2.2. Ecological overview

The proposed Plateau-du-Lac-des-Huit-Chutes biodiversity reserve is in the Central Laurentian natural province, in the Monts Valin natural region and in the Lac Moncouche Plateau physiographic unit. The elevation of the plateau is higher than the adjoining region, varying between 624 m and 835 m, with an average elevation of 722 m. The topography is a complex of mounds in which numerous lakes occupy the depressions. The plateau with its characteristics is a rare element in the Central Laurentian natural province.

The area of the proposed biodiversity reserve was formed mainly by glacial phenomena and therefore consists almost exclusively of morainic deposits without morphology, composed of till. A disintegration moraine is present to the north of Dobe lake. Small peat bogs in certain depressions and some ice-contact glaciofluvial sandy deposits are also present.

Three species dominate the predominantly softwood forest in the proposed biodiversity reserve, namely balsam fir (*Abies balsamea*, 65%), black spruce (*Picea mariana*, 28%) and white birch (*Betula papyrifera*, 1%). Tree stands and areas of regeneration represent 81% of the territory and are uniformly distributed. Of the remaining 19%, water occupies 17.5% of the land and the remainder consists of wetlands (1%), islands and alder groves. Recently logged, some 20% of the forest cover consists of young forests and a little over 40% of the forest cover consists of forests 90 years old or older.

The proposed biodiversity reserve is next to the watersheds of the Shipshaw, À la Tête Blanche and Aux Sables rivers.

2.3. Occupation and land uses

Thirty-nine leases for vacation resort purposes and a supplementary establishment have been granted within the proposed biodiversity reserve. Three trapping camps and fifteen launching ramps are also present in the proposed biodiversity reserve. There are no trails with land rights in the proposed biodiversity reserve and the snowmobile trail is excluded from the reserve.

The proposed biodiversity reserve covers part of seven traplines and lies within the fur-bearing animal management unit 53 and hunting area 28. It is entirely within the boundaries of the Onatchiway-Est controlled zone.

A very developed and dense network of unpaved roads and roads not suitable for vehicles (forest roads) runs through the proposed biodiversity reserve.

3. Activities framework

Activities carried on within the proposed Plateau-du-Lac-des-Huit-Chutes biodiversity reserve are governed by the provisions of the Natural Heritage Conservation Act (R.S.Q., c. C-61.01).

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

3.1. Prohibited activities

As provided in the Natural Heritage Conservation Act, the main activities prohibited in an area to which status as a proposed biodiversity reserve has been assigned are

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

3.2. Activities governed by other statutes

Certain activities likely to be carried on within the proposed biodiversity 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 biodiversity reserve.

A special legal framework may govern permitted and prohibited 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);
- Archaeological research: measures set out in particular in the Cultural Property Act (R.S.Q., c. B-4);
- Development of wildlife resources: measures set out in particular 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, including the fishery regulations;

— Removal of species of fauna or flora that are threatened or vulnerable or are likely to be designated as such: measures prohibiting the removal of the species under the Act respecting threatened or vulnerable species (R.S.Q., c. E-12.01);

— Access and land rights: measures set out in particular in the Act respecting the lands in the domain of the State (R.S.Q., c. T-8.1);

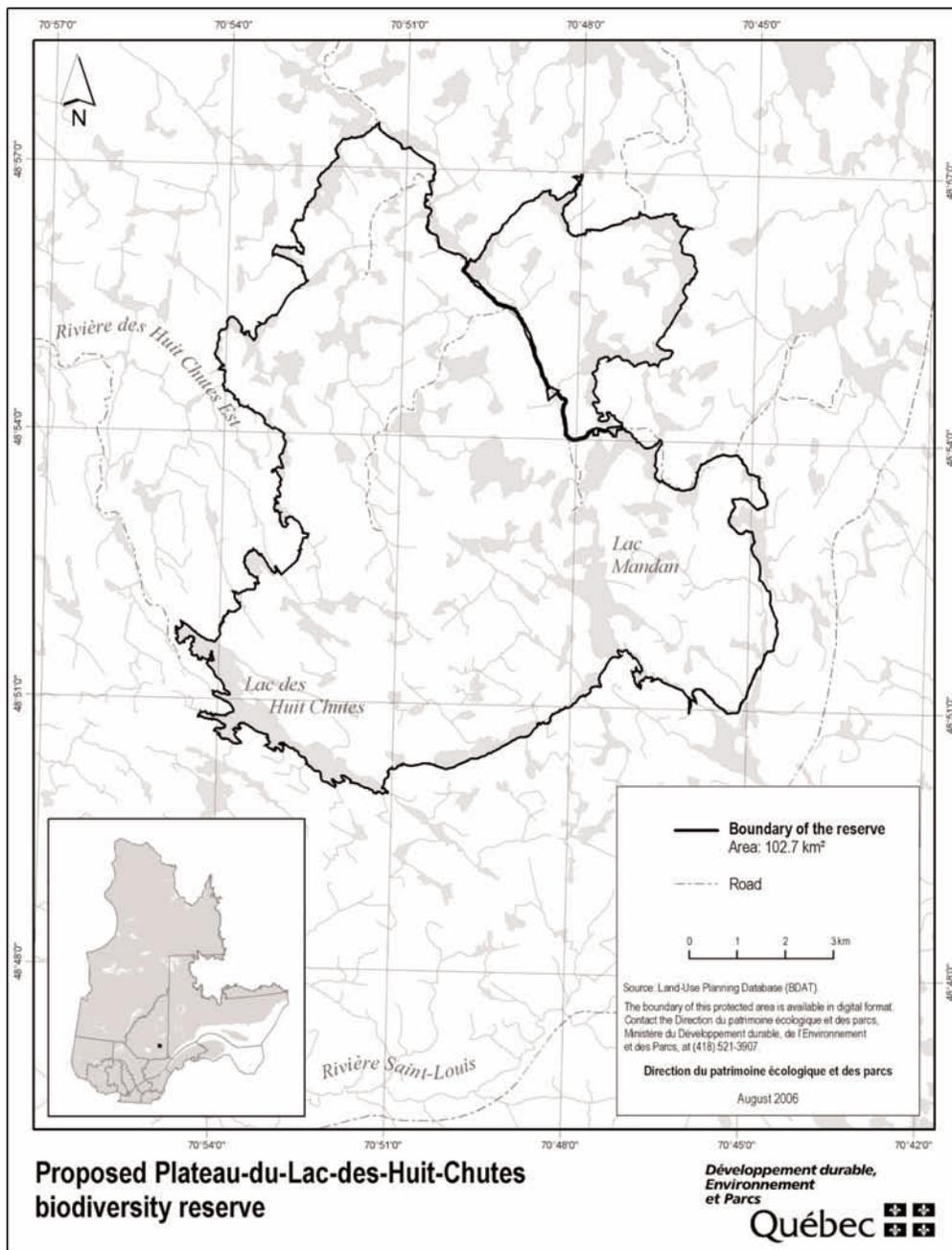
— Operation of vehicles: measures set out in particular in the Act respecting the lands in the domain of the State (R.S.Q., c. T-8.1) and in the regulation on motor vehicle traffic in certain fragile environments made under the Environment Quality Act (R.S.Q., c. Q-2).

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

The Minister of Sustainable Development, Environment and Parks is responsible for conservation and management of the proposed Plateau-du-Lac-des-Huit-Chutes biodiversity reserve and is therefore responsible for supervising and monitoring the activities allowed in the reserve. The Minister in the management of the reserve works collaboratively with other government representatives having specific responsibilities in or adjacent to the reserve, such as the Minister of Natural Resources and Wildlife. In the exercise of their powers and functions, the Ministers will take into consideration the protection sought for these natural environments and the protection status that has been granted.

SCHEDULE

Map of the proposed Plateau-du-Lac-des-Huit-Chutes biodiversity reserve



QUÉBEC STRATEGY FOR PROTECTED AREAS



**Proposed
Albanel-
Témiscamie-
Otish biodiversity
reserve**

Conservation plan



November 2006

1. Protection status and toponym

The legal status of the reserve 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 sought is to be that of “national park” under the Parks Act (R.S.Q., c. P-9).

The provisional name is “Réserve de biodiversité projetée Albanel-Témiscamie-Otish”. The official toponym will be determined at the time of assignment of permanent protection status to the land.

2. Plan and description

2.1. Geographic location, boundaries and dimensions

The boundaries and location of the proposed Albanel-Témiscamie-Otish biodiversity reserve are shown on the map attached as a Schedule.

The proposed Albanel-Témiscamie-Otish biodiversity reserve covers an area of 10,934.8 km² and is located almost entirely in Municipalité de Baie-James, outside the regional county municipality; a small portion in the sector of À l'Eau Froide lake is situated in Municipalité régionale de comté de Maria-Chapdelaine, and two other small portions to the east cover Municipalité régionale de comté du Fjord-du-Saguenay. The proposed reserve is located between 50° and 52° north latitude and between 70° and 74° west longitude, northeast of Ville de Chibougamau and the Mistissini Cree community.

Two roads give access to the reserve. Route 167 runs north from Chibougamau to Village de Mistissini, the northeast shore of Albanel lake and the mouth of the Témiscamie river. There is also a road on the northwest shore of Mistassini lake, by way of Route du Nord.

A little developed network of forest roads is located in the part of the proposed biodiversity reserve leading to Cosnier lake from Route 167.

Two corridors have been excluded from the portion of the reserve from the Témiscamie river to À l'Eau Froide lake to allow access to significant timber supply areas.

Hydro-Québec uses the data from a meteorological station within the boundaries of the proposed biodiversity reserve. The station has been excluded from the proposed biodiversity reserve.

2.2. Ecological overview

The proposed Albanel-Témiscamie-Otish biodiversity reserve represents chiefly the Mistassini River Highlands natural province and to a lesser extent the Central Laurentian, Grande-Rivière Low Hills and Nord-du-Québec Central Plateau natural provinces. The proposed biodiversity reserve is the hydrographic hub of central Québec and the source of the Rupert, Eastmain and La Grande rivers that flow into James Bay, and of the Péribonka, Aux Outardes and Manicouagan rivers that feed the St. Lawrence River.

The proposed biodiversity reserve is characteristic of three major vegetation zones typical of Northern Québec. The northern limit of the boreal forest is approximately 60 km northwest of the Témiscamie river. At the foot of the Otish mountains, the forest is gradually replaced by taiga, open woodland dominated by black spruce, lichens and heaths. Vast tundra areas characterize the high peaks of the Otish mountains. A sizeable array of northern Québec components are to be found in the proposed biodiversity reserve.

With an area of 2,336 km², Mistassini lake is the largest natural lake in Québec and the source of the Rupert river. The Mistassini and Albanel lakes region is characterized by large limestone formations isolated within the Canadian Shield. This sedimentary bed supports calcicole flora unusual in a boreal forest. To date, 497 different species of vascular plants and more than 400 species of non-vascular plants have been listed. This special geology also explains the presence of a number of species of plants, bryophytes and lichens that are currently vulnerable in Québec.

The Rupert river starts its course toward James Bay, dividing into three branches and creating huge islands surrounded by interlacing lakes traversed by long eskers from which round hills emerge in the vast plain forming the spillway of Mistassini lake on the perimeter of the Sakami frontal moraine some 630 kilometres long. Large sand beaches form the bed of the downstream portion of the Témiscamie over 40 kilometres. Old-growth white spruce stands are interspersed on its shores and other old-growth forest ecosystems are home to woodland caribou along the historic canoe route linking Saint-Jean lake and the James Bay territory through À l'Eau Froide lake.

The Otish mountains massif comprises a number of summits over 1,000 metres high, including Mont Yapeitso at 1,135 metres. The mountains are characterized by Proterozoic sedimentary formations with cuesta topography. The massif is one of the last regions in Québec to be freed from the ice after the Wisconsin continental glaciation 7,000 years ago. The tundra flora composed of lichens, moss and stunted shrub is characteristic of Arctic Québec landscapes. South slopes are home to old-growth white spruce forests over a hundred years old, which are rare at this latitude.

Naococane lake with its indefinite contour in the northern part of the proposed biodiversity reserve near the Caniapiscou reservoir contains numerous islands of all sizes that are remains of the submergence of one of the largest disintegration moraine in the world. It is a landscape typical of the Nord-du-Québec Central Plateau with as much water as land. Open woodlands are characteristic of the taiga and the islands have remains of the last balsam firs to take shelter there before disappearing in more northerly areas.

The area of the proposed Albanel-Témiscamie-Otish biodiversity reserve protects nine vascular plants that may be designated as threatened or vulnerable. In the south, Mistassini and Albanel lakes and the Témiscamie river are home to seven of those species, namely *Amerorchis rotundifolia*, *Calypso bulbosa* var. *americana*, *Carex petricosa* var. *misandroides*, *Drosera linearis*, *Salix arbusculoides*, *Salix maccaliana* and *Salix pseudomonticola*. In the north, the Otish mountains have colonies of two of those species, *Agoseris aurantiaca* and *Gnaphalium norvegicum*. The southern part of the proposed biodiversity reserve is the habitat of three species of animals likely to be designated as threatened or vulnerable, namely the caribou (ecotype woodland), the hoary bat and the southern bog lemming.

2.3. Occupation and land uses

There is one outfitting facility and two campgrounds on the shores of Mistassini and Albanel lakes and at the mouth of the Rupert river. Three eco-tourism shelters for hikers are located northeast of the Otish mountains. An outfitting camp is situated at Pluto lake, at the southern piedmont of the Otish mountains, and there is a vacation resort lease at Naococane lake. Four commercial leases have been issued for the southern portion of the proposed biodiversity reserve, three of the sites (land rights) being in the same sector. Two of the sites have a floatplane base, one of which is beside the Témiscamie river bridge near Albanel lake to provide the only access currently possible to the Otish mountains.

Cree hunters and trappers have over one hundred camps throughout the region used to continue their traditional activities.

The proposed biodiversity reserve is on Category II and Category III land in the trapping territories of the Mistissini nation under the James Bay and Northern Québec Agreement signed in 1975 and the Act respecting the land regime in the James Bay and New Québec territories (R.S.Q., c. R-13.1). It also touches upon the Roberval beaver reserve and includes part of the Lacs-Albanel-Mistassini-et-Waconichi wildlife sanctuary.

The proposed Albanel-Témiscamie-Otish biodiversity reserve has more than fifty listed archaeological sites, mainly along the Témiscamie river (nearly thirty sites), Albanel lake (about ten sites) and Mistassini lake (about ten sites), as well as the Colline-Blanche archaeological sites including a Mistassini quartzite quarry and the Antre du Lièvre or “Wapushakamikw”. Those sites were classified in 1976 by the Ministère des Affaires culturelles (current Ministère de la Culture et des Communications). Other archaeological sites may be discovered in the proposed Albanel-Témiscamie-Otish biodiversity reserve. Such is the case with the Uupiichun portage sector between Albanel and Mistassini lakes where three French establishments dating to the contact period mentioned in the archives have not yet been located: Louis Jolliet’s house, Dorval house and the Sainte-Famille mission.

3. Activities framework

Activities carried on within the proposed Albanel-Témiscamie-Otish biodiversity reserve are governed by the provisions of the Natural Heritage Conservation Act (R.S.Q., c. C-61.01).

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

3.1. Prohibited activities

As provided in the Natural Heritage Conservation Act, the main activities prohibited in an area to which status as a proposed biodiversity reserve has been assigned are

— mining, and gas or petroleum development;

— mining, gas and petroleum exploration, brine and underground reservoir exploration, prospecting, and digging or boring where the activities necessitate stripping, the digging of trenches, excavation or deforestation;

— 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;

— any new allocation of a right to occupy land for vacation resort purposes; and

— earthwork or construction work.

3.2. Activities governed by other statutes

Certain activities likely to be carried on within the proposed biodiversity 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 biodiversity reserve.

A special legal framework may govern permitted and prohibited 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);

— Archaeological research: measures set out in particular in the Cultural Property Act (R.S.Q., c. B-4);

— Development of wildlife resources: measures set out in particular 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, including the fishery regulations;

— Removal of species of fauna or flora that are threatened or vulnerable or are likely to be designated as such: measures prohibiting the removal of the species under the Act respecting threatened or vulnerable species (R.S.Q., c. E-12.01);

— Access and land rights: measures set out in particular in the Act respecting the lands in the domain of the State (R.S.Q., c. T-8.1);

— 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).

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

The Minister of Sustainable Development, Environment and Parks is responsible for conservation and management of the proposed Albanel-Témiscamie-Otish biodiversity reserve and is therefore responsible for supervising and monitoring the activities allowed in the reserve. The Minister in the management of the reserve works collaboratively with other government representatives having specific responsibilities in or adjacent to the reserve, such as the Minister of Natural Resources and Wildlife. In the exercise of their powers and functions, the Ministers will take into consideration the protection sought for these natural environments and the protection status that has been granted.

SCHEDULE

Map of the proposed Albanel-Témiscamie-Otish biodiversity reserve

