

Gouvernement du Québec

O.C. 438-2020, 8 April 2020

Natural Heritage Conservation Act
(chapter C-61.01)

Permanent status of the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes, the Regulation respecting that reserve and its conservation plan

WHEREAS, under the first paragraph of section 43 of the Natural Heritage Conservation Act (chapter C-61.01), the Minister of the Environment and the Fight Against Climate Change may recommend to the Government that all or part of land set aside under section 27 of the Act be assigned a permanent protection status as biodiversity reserve;

WHEREAS, under the second paragraph of section 43 of the Act, the Minister is to submit at the same time to the Government for its approval the conservation plan for the land;

WHEREAS, by Order in Council 81-2007 dated 6 February 2007, the Government authorized the Minister of Sustainable Development, Environment and Parks to assign the status of proposed biodiversity reserve to the territory of the Réserve de biodiversité projetée du Plateau-du-Lac-des-Huit-Chutes and approved the plan of that area and the conservation plan proposed for the area;

WHEREAS, by Minister's Order dated 20 February 2007 (2007, *G.O.* 2, 1192), the Minister of Sustainable Development, Environment and Parks assigned in particular temporary protection status to the territory of the Réserve de biodiversité projetée du Plateau-du-Lac-des-Huit-Chutes, for a term of four years commencing on 7 March 2007;

WHEREAS, by Order in Council 136-2008 dated 20 February 2008, the Government approved the amendments to the conservation plan of that reserve;

WHEREAS the setting aside of the territory was extended for four years under the Order of the Minister of Sustainable Development, Environment and Parks dated 17 February 2011 (2011, *G.O.* 2, 631), and eight years under the Order of the Minister of Sustainable Development, Environment and the Fight Against Climate Change dated 10 February 2015 (2015, *G.O.* 2, 178);

WHEREAS, in accordance with the first paragraph of section 39 of the Natural Heritage Conservation Act, the Minister of Sustainable Development, Environment and Parks entrusted the mandate to hold a public consultation on the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes to the Bureau d'audiences publiques sur l'environnement and its inquiry and public hearing report was made public on 20 November 2012;

WHEREAS the report concludes, among other things, that permanent protection status may be assigned to the territory of the Réserve de biodiversité projetée du Plateau-du-Lac-des-Huit-Chutes;

WHEREAS the limits of the Réserve de biodiversité projetée du Plateau-du-Lac-des-Huit-Chutes are the same as those set in the plan attached to Order in Council 81-2007 dated 6 February 2007;

WHEREAS the plan of the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes, its conservation plan and the technical description of the limits have been prepared;

WHEREAS the land included in the territory forms part of the domain of the State and is not part of a reserved area or an agricultural zone established under the Act respecting the preservation of agricultural land and agricultural activities (chapter P-41.1);

WHEREAS, in accordance with the first paragraph of section 151 of the Act respecting land use planning and development (chapter A-19.1), the Minister of Sustainable Development, the Environment and the Fight Against Climate Change notified an opinion describing the planned intervention to the council of Municipalité régionale de comté du Fjord-du-Saguenay;

WHEREAS, in accordance with the first paragraph of section 152 of that Act, the council of Municipalité régionale de comté du Fjord-du-Saguenay, by resolution No. C-16-364 dated 23 November 2016, confirmed that the project for the establishment of the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes complies with the objectives of the revised land use planning and development plan and the provisions of the complementary document;

WHEREAS the Commission de toponymie sent to the Minister its approval of the name "Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes" to designate that permanent biodiversity reserve;

WHEREAS, under subparagraph *f* of paragraph 1 of section 46 of the Natural Heritage Conservation Act, in an aquatic reserve and a biodiversity reserve, any activity which the Government may prohibit by regulation is prohibited;

WHEREAS, under subparagraph *g* of paragraph 1 of section 46 of the Act, in an aquatic reserve and a biodiversity reserve, subject to measures in the conservation plan authorizing the activities and specifying the conditions on which they may be carried on, any allocation of a right to occupy land for vacation resort purposes, earthwork, backfilling or construction work and commercial activities are prohibited;

WHEREAS, under paragraph 2 of section 46 of the Act, all other activities are permitted, in addition to those prohibited by paragraph 1 of that section, subject to the applicable conditions;

WHEREAS, in accordance with sections 10 and 11 of the Regulations Act (chapter R-18.1), the draft Regulation respecting the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes was published in Part 2 of the *Gazette officielle du Québec* of 15 May 2019 with a notice that it could be made by the Government on the expiry of 45 days following that publication;

WHEREAS it is expedient to make the Regulation respecting the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes with amendments, in particular to include the technical description of the territory and to make technical adjustments;

WHEREAS, under paragraph 3 of section 44 of the Natural Heritage Conservation Act, the establishment of a biodiversity reserve and a change in its limits, or its abolishment, is effected by order of the Government, on a proposal by the Minister, subject to the publication of a notice of the decision of the Government to establish a biodiversity reserve in the *Gazette officielle du Québec* with the plan of the area and the conservation plan;

WHEREAS the publication in the *Gazette officielle du Québec* of this Order in Council, of the Regulation respecting the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes and of its conservation plan constitutes the notice required by that paragraph, including the documents that must accompany it;

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

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

THAT permanent biodiversity reserve status be assigned to the territory described in the Regulation attached to Schedule I to this Order in Council, under the name “Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes”;

THAT the Regulation respecting the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes, attached to Schedule I to this Order in Council, be made;

THAT the conservation plan applicable to the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes, attached to Schedule II to this Order in Council, be approved;

THAT permanent status of the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes and its conservation plan take effect on the fifteenth day following the date of their publication in the *Gazette officielle du Québec*.

YVES OUELLET,
Clerk of the Conseil exécutif

SCHEDULE I

Regulation respecting the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes

Natural Heritage Conservation Act
(chapter C-61.01, s. 43 and s. 46, par. 1, subpars. *e, f* and *g*, and par. 2)

1. The Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes is established in the territory described in the Schedule.

2. For the purposes of this Regulation,

(1) the words or terms “high-water mark”, “littoral zone”, “floodplain”, “lakeshore” and “riverbank” have the meaning given to them in the Protection Policy for Lakeshores, Riverbanks, Littoral Zones and Floodplains (chapter Q-2, r. 35);

(2) the term “wetlands and bodies of water” has the meaning given to it in section 46.0.2 of the Environment Quality Act (chapter Q-2);

(3) the term “forest development activity” has the meaning given to it in the Sustainable Forest Development Act (chapter A-18.1).

DIVISION I PROTECTION OF RESOURCES AND THE NATURAL ENVIRONMENT

3. Subject to the prohibition in the second paragraph, no person may introduce any individuals of a native or non-native species of fauna into the biodiversity reserve, including by stocking, unless the person has been authorized by the Minister.

No person may stock a lake or watercourse for aquaculture, commercial fishing or any other commercial purpose.

Except with the authorization of the Minister, no person may introduce non-native species of flora into the biodiversity reserve.

4. No person may use fertilizers in the biodiversity reserve. Compost for domestic purposes is however permitted if it is used at least 20 metres from a lake or watercourse, measured from the high-water mark.

5. No person may remove from the biodiversity reserve species of flora, small fruits or any other non-timber forest product by mechanical means.

6. No person may in the biodiversity reserve, unless the person has been authorized by the Minister,

(1) intervene in a wetland area, in particular a marsh, swamp or peat bog;

(2) modify the natural drainage or water regime, including by creating or developing lakes and watercourses;

(3) dig, fill, obstruct or divert a lake or watercourse;

(4) install or construct any structure, infrastructure or new works in the littoral zone, on the banks or shores or the floodplains of a lake or watercourse; no authorization is however required for minor works — quay or platform, boat shelter — installed for private purposes and may be free of charge under section 2 of the Regulation respecting the water property in the domain of the State (chapter R-13, r. 1);

(5) carry on an activity other than those referred to in paragraphs 1 to 4 likely to directly and substantially affect the biochemical characteristics or quality of wetlands and bodies of water in the biodiversity reserve, including by discharging or dumping residual materials or contaminants into the wetlands or bodies of water;

(6) carry out soil development work or an activity likely to degrade the soil or a geological formation, or to damage the vegetation cover, in particular by stripping, the digging of trenches or excavation work, including any burial, earthwork, removal or displacement of surface materials or vegetation cover, for any purpose;

(7) install or construct a structure, infrastructure or new works;

(8) reconstruct or demolish a structure, infrastructure or works;

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

(10) carry on educational or research-related activities if the activities are likely to directly or significantly damage or disturb the natural environment, in particular because of the nature or size of the samples taken or the invasive character of the method or process used; or

(11) hold a sports event, tournament, rally or any other similar event where

(a) fauna or flora species are taken or are likely to be taken; or

(b) motor vehicles or craft are used.

7. Despite paragraphs 6, 7 and 8 of section 6, if the requirements provided for in the second paragraph are met, no authorization is required to carry out the following work:

(1) the maintenance, repair or improvement of any structure, infrastructure or works, including a camp, a cabin, a road or a trail, including an ancillary facility such as a lookout or stairs;

(2) the construction or installation

(a) of a dependency or a facility ancillary to a trapping camp, a rough shelter, a shelter or a cabin, including a shed, a water withdrawal facility or a system for the discharge and disposal of waste water, grey water and toilet effluents; or

(b) of a trapping camp, a rough shelter, a shelter or a cabin if, on the date of coming into force of this Regulation, such a building was permitted under the right of use or occupancy granted, but had not yet been carried out; or

(3) the demolition or reconstruction of a trapping camp, a rough shelter, a shelter or a cabin, including a dependency or a facility ancillary to such a structure, including a shed, a water withdrawal facility or a system for the discharge and disposal of waste water, grey water and toilet effluents.

The carrying out of the work referred to in the first paragraph must comply with the following requirements:

(1) the work involves a structure, infrastructure or works whose presence is permitted within the biodiversity reserve;

(2) 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 biodiversity reserve, whether the right results from a lease, a servitude or other form of title, permit or authorization;

(3) the nature of the work or elements installed by the work will not operate to increase the area of land that may remain deforested beyond the limits permitted under the provisions applicable to the sale, lease and granting of immovable rights under the Act respecting the lands in the domain of the State (chapter T-8.1) and, if applicable, the limits set under an authorization issued in connection with that structure, works or infrastructure;

(4) the work is carried out in accordance with the prescriptions of any permit or authorization issued for the work or in connection with the structure, infrastructure or works involved, and in compliance with the laws and regulations that apply;

(5) in the case of forest roads, the work must not operate to alter or exceed the existing right of way, widen the roadway or convert the road to a higher class.

For the purposes of this section, repair and upgrading work includes work to replace or install works or facilities to comply with the requirements of an environmental regulation.

8. No person may bury, incinerate, abandon or dispose of residual materials or snow, except if they are disposed of in waste disposal containers, facilities or sites determined by the Minister or, in other cases, with the authorization of the Minister.

Despite the first paragraph, a controlled zone does not need an authorization to use a disposal facility or site, in compliance with the Environment Quality Act (chapter Q-2) and its regulations, if the controlled zone was already using the facility or site on the date of coming into force of this Regulation.

DIVISION II

RULES OF CONDUCT FOR USERS

9. No person may enter, carry on an activity or operate a vehicle in a given sector of the biodiversity reserve if the signage installed by the Minister restricts access, traffic or certain activities in the sector 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.

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

DIVISION III

ACTIVITIES REQUIRING AN AUTHORIZATION

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

For the purposes of the first paragraph,

(1) the occupation or use of a site includes

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

(b) setting up a camp or a shelter; and

(c) installing, burying or abandoning any property in the reserve, including equipment, a device or a vehicle; and

(2) the expression “same site” includes any other site within a radius of 1 kilometre from the site.

Despite the first paragraph, an authorization is not required if a person,

(1) on the date of coming into force of this Regulation, was a party to a lease or had already obtained another form of right or another authorization allowing the person to legally occupy the land under the Act respecting the lands in the domain of the State (chapter T-8.1) or, if applicable, the Act respecting the conservation and development of wildlife (chapter C-61.1), and whose right to occupy the land is renewed or extended on the same conditions, subject to possible changes in fees; or

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

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.

Despite the first paragraph, persons staying or residing within the biodiversity reserve and who collect wood required to make a campfire are not required to obtain the authorization of the Minister.

No such authorization is required if a person collects firewood to meet domestic needs to supply a trapping camp or a rough shelter permitted within the biodiversity reserve in the following cases and on the following conditions:

(1) the wood is collected by a person in compliance with the conditions set out in the permit for the harvest of firewood for domestic purposes issued under the Sustainable Forest Development Act (chapter A-18.1);

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

In addition, no authorization to carry on a forest management activity is required if a person authorized by lease to occupy land within the biodiversity reserve in accordance with this Regulation carries on the activity for the purpose of

(1) clearing, maintaining or creating visual openings, and any other similar removal work permitted under the provisions governing the sale, lease and granting of immovable rights under the Act respecting the lands in the domain of the State (chapter T-8.1), including for access roads, stairs or other trails permitted under those provisions; or

(2) clearing the necessary area for the installation, connection, maintenance, repair, reconstruction or upgrading of facilities, lines or mains for water, sewer, electric power or telecommunications services.

If the work referred to in subparagraph 2 of the fourth paragraph is carried on for or under the responsibility of an enterprise providing any of those services, the work requires the prior authorization of the Minister, other than in the case of the exemptions provided for in sections 14 and 16.

13. No person may carry on commercial activities in the biodiversity reserve, except with the authorization of the Minister.

Despite the first paragraph, no authorization is required

(1) if the activity does not involve the taking of fauna or flora resources, or the use of a motor vehicle; or

(2) to carry on commercial activities which, on the date of coming into force of this Regulation, were the subject of a right to use the land for such a purpose, whether the right results from a lease or other form of title, permit or authorization, within the limits of the right.

DIVISION IV **AUTHORIZATION EXEMPTIONS**

14. Despite the preceding provisions, an authorization is not required for an activity or other form of intervention within the biodiversity 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 catastrophe. The person concerned must, however, immediately inform the Minister of the activity or intervention that has taken place.

15. Despite the preceding provisions, an authorization is not required for a member of a Native community for an intervention within the biodiversity reserve where that intervention is part of the exercise of rights covered by section 35 of the Constitution Act, 1982 (Schedule B of the Canada Act, chapter 11 in the 1982 volume of the Acts of the Parliament of the United Kingdom) and those rights are credibly asserted or established.

16. Despite the preceding provisions, the following activities and interventions carried out by Hydro-Québec (hereinafter the “Société”) or by any other person for Hydro-Québec do not require the prior authorization of the Minister under this Regulation:

(1) any activity or intervention required within the biodiversity reserve to complete a project for which express authorization had previously been given by the Government and the Minister, or only by the latter, in accordance with the requirements of the Environment Quality Act (chapter Q-2), if the activity or intervention is carried out in compliance with the authorizations issued;

(2) any activity or intervention necessary for the preparation and presentation of a pre-project report for a project requiring an authorization under the Environment Quality Act;

(3) any activity or intervention relating to a project requiring the prior authorization of the Minister under the Environment Quality Act if the activity or intervention is in response to a request for a clarification or for additional information made by the Minister to the Société and it is carried out in accordance with the request.

The Société informs the Minister of the various activities or interventions referred to in this section it proposes to carry out before the work is begun within 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 monitor 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 purposes of access, construction or traffic incidental to the work.

DIVISION V FINAL

17. This Regulation comes into force on the fifteenth day following the date of its publication in the *Gazette officielle du Québec*.

SCHEDULE

TECHNICAL DESCRIPTION

RÉSERVE DE BIODIVERSITÉ DU PLATEAU-DU-LAC-DES-HUIT-CHUTES (s. 1)

[Translation of the technical description filed in French only at the office of the Surveyor-General of Québec of the Ministère de l'Énergie et des Ressources naturelles.]

A territory of irregular shape situated in the township of Chastelain, in the watersheds of Rivière Shipshaw and Rivière Betsiamites, in the unorganized territory of Mont-Valin, in the administrative region of Saguenay-Lac-Saint-Jean, and in the registration division of Chicoutimi. The perimeter of the territory may be described as follows:

PARCEL A

Starting from a point situated at the intersection of the southeastern shore of Lac Desmeules with a line parallel to and at a distance of 20 metres from the southwestern right of way of an unnamed road, being point 1 (5 424 518 m North, 278 578 m East);

Thence, in a generally southeasterly direction, along a line parallel to and at a distance of 20 metres southwest of the centre line of an unnamed road, to the northern limit of a surface mineral substance extraction site at point 2 (5 423 050 m North, 279 701 m East);

Thence, in a westerly and southerly direction, around the said site, in such a way as to exclude it from the biodiversity reserve, to points:

3 (5 423 060 m North, 279 589 m East);

4 (5 422 948 m North, 279 563 m East);

Thence, in an easterly direction, to the intersection with a line parallel to and at a distance of 20 metres north-west of the centre line of an unnamed road, being point 5 (5 422 940 m North, 279 644 m East);

Thence, in a generally southeasterly direction, along a line parallel to and at a distance of 20 metres southwest of the centre line of an unnamed road, to the northern limit of a surface mineral substance extraction site at point 6 (5 419 060 m North, 282 208 m East);

Thence, in a southwesterly and southerly direction, around the said site, in such a way as to exclude it from the biodiversity reserve, to points:

7 (5 419 048 m North, 282 174 m East);

8 (5 418 830 m North, 282 213 m East);

Thence, in a northeasterly direction, to the intersection with a line parallel to and at a distance of 20 metres southwest of the centre line of an unnamed road, being point 9 (5 418 966 m North, 282 364 m East);

Thence, in a generally southeasterly direction, along a line parallel to and at a distance of 20 metres southwest of the centre line of an unnamed road, to the western limit of a surface mineral substance extraction site at point 10 (5 418 194 m North, 283 163 m East);

Thence, in a southerly and easterly direction, around the said site, in such a way as to exclude it from the biodiversity reserve, to points:

11 (5 418 115 m North, 283 167 m East);

12 (5 418 110 m North, 283 256 m East);

Thence, in a northerly direction, to the intersection with a line parallel to and at a distance of 20 metres south of the centre line of an unnamed road, being point 13 (5 418 217 m North, 283 257 m East);

Thence, in a generally easterly direction, along a line parallel to and at a distance of 20 metres south of the centre line of an unnamed road, to the intersection with the southwestern right of way of an unnamed road, being point 14 (5 418 207 m North, 283 464 m East);

Thence, in a generally southeasterly direction, along the southwestern right of way of an unnamed road, to point 15 (5 418 128 m North, 283 569 m East);

Thence, in a southerly direction, along a straight line on a bearing of 180°27'52" over a distance of approximately 36 metres, to point 16 (5 418 092 m North, 283 569 m East);

Thence, in an easterly direction, along a straight line on a bearing of 89°54'21" over a distance of approximately 63 metres, to the intersection with the western shore of Lac Léger, being point 17 (5 418 092 m North, 283 632 m East);

Thence, in a generally northeasterly direction, along the northwestern shore of Lac Léger, to the intersection with a line parallel to and at a distance of 20 metres south of the centre line of an unnamed road, being point 18 (5 418 277 m North, 283 738 m East);

Thence, in a generally easterly direction, along a line parallel to and at a distance of 20 metres south of the centre line of an unnamed road, to the intersection with the eastern shore of Lac Léger, being point 19 (5 418 285 m North, 283 761 m East);

Thence, in a generally southeasterly direction, along the northeastern shore of Lac Léger, to the intersection with the southwestern bank of an unnamed stream, being point 20 (5 417 166 m North, 284 552 m East);

Thence, in a generally northeasterly direction, along the southwestern bank of an unnamed stream and the southeastern bank of another unnamed stream in such a way as to exclude the said streams from the biodiversity reserve, to the intersection with a line parallel to and at a distance of 20 metres southwest of the centre line of an unnamed road, being point 21 (5 417 195 m North, 284 609 m East);

Thence, in a generally southeasterly direction, along a line parallel to and at a distance of 20 metres southwest of the centre line of an unnamed road, to the intersection with the western shore of an unnamed lake, being point 22 (5 417 011 m North, 284 935 m East);

Thence, in a generally easterly direction, along the northern shore of an unnamed lake, to the intersection with a line parallel to and at a distance of 20 metres south of the centre line of an unnamed road, being point 23 (5 417 005 m North, 284 991 m East);

Thence, in a generally southerly direction, along a line parallel to and at a distance of 20 metres southeast, southwest and west of the centre line of several unnamed roads, in such a way as to pass west of Lac de la Chique, north and west of Lac de la Tente, east of Lac Mercier and northwest and north of Lac Pierre, to the intersection with the southwestern bank of an unnamed stream, being point 24 (5 412 599 m North, 285 406 m East);

Thence, in a generally northwesterly direction, along the southwestern bank of several unnamed streams and the southwestern shore of an unnamed lake and Lac Julia, to point 25 (5 413 054 m North, 284 650 m East);

Thence, in a northwesterly direction, along a straight line on a bearing of 296°33'54" over a distance of approximately 65 metres, to the intersection with the eastern shore of Lac Mandan, being point 26 (5 413 083 m North, 284 592 m East);

Thence, in a generally southwesterly direction, along the southeastern shore of Lac Mandan, Lac du Cuisinier, Lac Dobe and several unnamed lakes, the southeastern bank of several unnamed streams, and the southern bank of an intermittent watercourse, to point 27 (5 411 211 m North, 279 714 m East);

Thence, in a westerly direction, along a straight line on a bearing of 254°41'36" over a distance of approximately 98 metres, to point 28 (5 411 185 m North, 279 619 m East);

Thence, in a generally southwesterly direction, along the southern bank of an intermittent watercourse, the southeastern shore of Lac Derosier, the southeastern bank of several unnamed streams and the southeastern shore of an unnamed lake, to the intersection with the northeastern shore of Lac des Huit Chutes, being point 29 (5 410 718 m North, 278 918 m East);

Thence, in a generally northwesterly direction, along the southwestern shore of Lac des Huit Chutes, to the intersection with the northwestern bank of an unnamed stream, being point 30 (5 413 667 m North, 275 375 m East);

Thence, in a generally northeasterly direction, along the northwestern bank of several unnamed streams, the northwestern shore of an unnamed lake and Lac du Jaseur, and the northwestern bank of an intermittent watercourse, to point 31 (5 414 761 m North, 276 017 m East);

Thence, in an easterly direction, along a straight line on a bearing of 85°01'48" over a distance of approximately 162 metres, to the intersection with the western shore of Lac du Grappin, being point 32 (5 414 775 m North, 276 178 m East);

Thence, in a generally northeasterly direction, along the western shore of Lac du Grappin, the western bank of an unnamed stream, the western shore of Lac à Jack, the northeastern shore of Lac à Jack and the northeastern bank of an unnamed stream and Rivière des Huit-Chutes, to point 33 (5 415 095 m North, 276 725 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 47°21'33" over a distance of approximately 430 metres, to point 34 (5 415 386 m North, 277 041 m East);

Thence, in a northerly direction, along a straight line on a bearing of 19°12'16" over a distance of approximately 188 metres, to the intersection with the southern shore of an unnamed lake, being point 35 (5 415 564 m North, 277 103 m East);

Thence, in a generally northwesterly direction, along the southwestern shore of several unnamed lakes, the southwestern bank of several unnamed streams, the southwestern shore of Lac de la Gueule, Lac Levasseur and Lac à Jos, the southwestern bank of Ruisseau Harvey and the southwestern shore of Premier Lac, to the intersection with the northwestern bank of an unnamed stream, being point 36 (5 419 011 m North, 275 434 m East);

Thence, in a generally northeasterly direction, along the northwestern bank of several unnamed streams and the northwestern shore of Lac Arseneault, Lac Katshessimun and Lac de l'Irlandais, to point 37 (5 420 483 m North, 276 524 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 29°52'34" over a distance of approximately 271 metres, to the intersection with the northwestern bank of an intermittent watercourse, being point 38 (5 420 718 m North, 276 659 m East);

Thence, in a generally northeasterly direction, along the northwestern bank of an intermittent watercourse and the northwestern shore of Lac Hornibrook, to point 39 (5 421 218 m North, 277 161 m East);

Thence, in a westerly direction, along a straight line on a bearing of 276°20'25" over a distance of approximately 36 metres, to the intersection with a road unsuitable for vehicular traffic, being point 40 (5 421 222 m North, 277 125 m East);

Thence, in a generally northwesterly direction, along the northeastern right of way of an unnamed road, in such a way as to exclude the said road from the biodiversity reserve, to point 41 (5 421 497 m North, 277 034 m East);

Thence, in a northwesterly direction, along a straight line on a bearing of 306°31'42" over a distance of approximately 34 metres, to the intersection with the southeastern shore of Lac Sainte-Croix, being point 42 (5 421 517 m North, 277 007 m East);

Thence, in a generally northwesterly direction, along the southwestern, western and northern shore of Lac Sainte-Croix, to point 43 (5 421 888 m North, 276 825 m East);

Thence, in an easterly direction, along a straight line on a bearing of 77°00'05" over a distance of approximately 13 metres, to the intersection with the northwestern shore of an unnamed lake, being point 44 (5 421 891 m North, 276 838 m East);

Thence, in a generally northeasterly direction, along the northwestern shore of several unnamed lakes and the northwestern bank of several unnamed streams, the northwestern shore of Lac de la Petite Hache and the southeastern shore of Lac Desmeules, in such a way as to exclude the said lake from the biodiversity reserve, to the intersection with a line parallel to and at a distance of 20 metres southwest of the centre line of an unnamed road, being starting point 1.

Having a area of 90.13 square kilometres.

PARCEL B

Starting from a point situated at the intersection of the northern bank of an intermittent watercourse and the northwestern shore of Lac du Revolver, being point 45 (5 422 540 m North, 283 677 m East);

Thence, in a generally southeasterly direction, along the northeastern shore of Lac du Revolver, the southeastern bank of an unnamed stream and the southeastern shore of Lac de la Discorde, to point 46 (5 420 185 m North, 284 548 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 226°10'04" over a distance of approximately 96 metres, to point 47 (5 420 118 m North, 284 479 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 202°58'38" over a distance of approximately 86 metres, to the intersection with the northeastern shore of Lac Boiteux, being point 48 (5 420 039 m North, 284 445 m East);

Thence, in a generally southwesterly direction, along the southeastern shore of Lac Boiteux and Lac du Magasinier, to the intersection with a line parallel to and at a distance of 20 metres northwest of the centre line of an unnamed road, being point 49 (5 418 323 m North, 283 747 m East);

Thence, in a generally northwesterly direction, along a line parallel to and at a distance of 20 metres northwest and east of the centre line of an unnamed road, to point 50 (5 418 996 m North, 282 398 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 47°59'38" over a distance of approximately 16 metres, to the intersection with the western bank of an unnamed stream, being point 51 (5 419 007 m North, 282 409 m East);

Thence, in a generally northwesterly direction, along the southwestern bank of an unnamed stream and Rivière à la Hache, to point 52 (5 419 090 m North, 282 287 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 249°29'00" over a distance of approximately 38 metres, to the intersection with a line parallel to and at a distance of 20 metres northeast of the centre line of an unnamed road, being point 53 (5 419 076 m North, 282 252 m East);

Thence, in a generally northwesterly direction, along a line parallel to and at a distance of 20 metres northeast of the centre line of several unnamed roads, to the intersection with the southwestern bank of Rivière à la Hache, being point 54 (5 420 128 m North, 281 828 m East);

Thence, in a generally northwesterly direction, along the southwestern bank of Rivière à la Hache, to the intersection with a line parallel to and at a distance of 20 metres northeast of the centre line of an unnamed road, being point 55 (5 420 707 m North, 281 486 m East);

Thence, in a generally northwesterly direction, along a line parallel to and at a distance of 20 metres northeast of the centre line of an unnamed road, to the intersection with the southern shore of Lac Sec, being point 56 (5 420 945 m North, 281 027 m East);

Thence, in a generally northwesterly direction, along the southwestern shore of Lac Sec, to the intersection with a line parallel to and at a distance of 20 metres northeast of the centre line of an unnamed road, being point 57 (5 421 004 m North, 280 945 m East);

Thence, in a generally northwesterly direction, along a line parallel to and at a distance of 20 metres northeast of the centre line of several unnamed roads, to the intersection with the southwestern shore of Lac Laban, being point 58 (5 421 334 m North, 280 565 m East);

Thence, in a generally northeasterly direction, along the northwestern shore of Lac Laban and the northwestern bank of an unnamed stream and an intermittent watercourse, to point 59 (5 422 911 m North, 281 620 m East);

Thence, in an easterly direction, along a straight line on a bearing of 69°06'33" over a distance of approximately 140 metres, to the intersection with the western shore of Deuxième Lac Price, being point 60 (5 422 961 m North, 281 751 m East);

Thence, in a generally southeasterly direction, along the northwestern and eastern of Deuxième Lac Price and the northern bank of several unnamed streams, the northern shore of Lac de la Paye and Lac du Compte, and the northern bank of an intermittent watercourse, to point 61 (5 422 434 m North, 283 370 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 64°18'41" over a distance of approximately 88 metres, to the intersection with the northern bank of an intermittent watercourse, being point 62 (5 422 472 m North, 283 449 m East);

Thence, in a generally easterly direction, along the northern bank of an intermittent watercourse, to the intersection with the northwestern shore of Lac du Revolver, being starting point 45.

Having an area of 12.58 square kilometres.

The biodiversity reserve as a whole having an area of 102.71 square kilometres.

Notes:

— The boundary of the biodiversity reserve shown on the plan accompanying the technical description was determined using the digital files in the Québec topographic database (base de données topographique du Québec, or BDTQ) at a scale of 1:20 000 kept by Québec's Ministère de l'Énergie et des Ressources naturelles (MERN) and the mining rights management system (système de gestion des droits miniers, or Gestim) kept by the MERN as of 8 September 2017.

— In general, the beds of all watercourses, rivers and lakes are included in the biodiversity reserve. Only those that are excluded are mentioned in this technical description.

— A limit defined by a lakeshore, riverbank or stream-bank runs along the high-water mark.

— The coordinates and areas mentioned in this technical description are approximate. They were determined graphically using the same data as the data used to determine the boundary of the biodiversity reserve. They are expressed in metres with reference to the Québec plane coordinate system (QPCS), Modified Transverse Mercator projection (MTM), Time Zone 7 (central meridian 70°30'), North American Datum 1983 (NAD83).

— Measurements are expressed in International System units.

— The boundary of the biodiversity reserve is based on the actual layout of the elements described in this document and must be legally interpreted on that basis. It was defined by the Direction des aires protégées of Québec's Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques.

— The territory of the biodiversity reserve, as described in this technical description, contains only lands in the domain of the State. Any land that that proves to be not part of the domain of the State is excluded from the biodiversity reserve.

— The territory is shown on a plan drawn at a scale of 1:20 000.

— In accordance with the instructions of the Direction des aires protégées of Québec's Ministère de l'Environnement et de la Lutte contre les changements climatiques, the information contained in the source documents provided by the mandator, from which this technical description was prepared, has been accepted as fact.

The whole as shown on the plan prepared by the undersigned on 15 February 2018 and filed with the office of the Surveyor-General of Québec at the Ministère de l'Énergie et des Ressources naturelles under document number 536701.

Prepared at Québec by Pierre Hains, land surveyor, on 15 February 2018, under number 11 514 of his minutes.

Digitally signed by:

PIERRE HAINS,
Land surveyor

Ministère du Développement durable,
de l'Environnement et de la Lutte contre
les changements climatiques

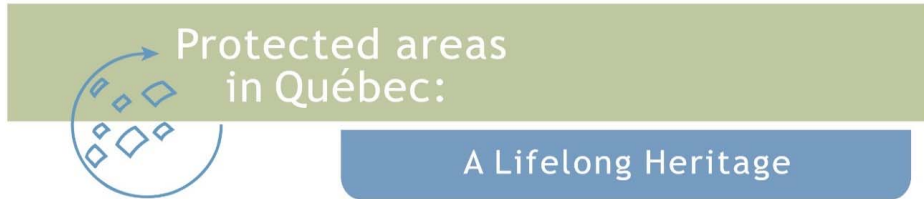
Direction des aires protégées

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SCHEDULE II
CONSERVATION PLAN FOR THE RÉSERVE DE BIODIVERSITÉ
DU PLATEAU-DU-LAC-DES-HUIT-CHUTES



Réserve de biodiversité
du Plateau-du-Lac-
des-Huit-Chutes



CONSERVATION PLAN

Cover page photos: Marc-André Bouchard, Ministère de l'Environnement et de la Lutte contre les changements climatiques.

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Introduction

By Order in Council No. 81-2007 of February 6, 2007, pursuant to section 27 of the *Natural Heritage Conservation Act* (chapter C-61.01), the government authorized the Minister of Sustainable Development, Environment and Parks to create Réserve de biodiversité projetée du Plateau-du-Lac-des-Huit-Chutes, and approved the boundaries and conservation plan proposed for it. The creation of this provisional protected area by the ministerial order of February 20, 2007 (2007, G.O. 2, 1192) came into force on March 7, 2007 for a duration of four years. This provisional protection status was extended twice, first until March 7, 2015 by order of the Minister of Sustainable Development, Environment and Parks on February 17, 2011 (2011, G.O. 2, 631), and then until March 7, 2023 by order of the Minister of Sustainable Development, Environment and the Fight against Climate Change on February 10, 2015 (2015, G.O. 2, 178).

On January 26, 2012 the Minister of Sustainable Development, Environment and Parks (MDDEP) mandated the Bureau d'audiences publiques sur l'environnement (BAPE) to hold public consultations on ten proposed protected areas in the Saguenay–Lac-Saint-Jean region, one of them being Réserve de biodiversité projetée du Plateau-du-Lac-des-Huit-Chutes. This mandate was given to the BAPE in accordance with section 39 of the *Natural Heritage Conservation Act*, which provides for a public consultation process before permanent protection status is recommended to the Gouvernement du Québec for a territory reserved for the creation of a new protected area. The BAPE's mandate began on February 13, 2012 and concluded on July 20 of

the same year. The consultation was held in March and April 2012 in Saguenay and Saint-Félicien. The BAPE's inquiry and public hearing report (No. 287) was submitted to the Minister on July 20, 2012 (BAPE, 2012). In its report, the commission recommended giving permanent protection status to Réserve de biodiversité projetée du Plateau-du-Lac-des-Huit-Chutes.

The boundaries of the permanent protected area are the same as those for the provisional version (Réserve de biodiversité projetée du Plateau-du-Lac-des-Huit-Chutes).

1 The territory of Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes

1.1 Official toponym

The overall terrain and the name of the largest lake in the protected area determined the choice of toponym: *Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes*.

1.2 Boundaries and location

The boundaries and location of Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes are shown on the map comprising Appendix 1. Covering an area of 102.7 km², the reserve lies between 48° 50' and 48° 57' north latitude and between 70° 44' and 70° 54' west longitude, about 45 km north of the borough of Chicoutimi in the city of Saguenay, and 15 km north of the municipality of Saint-David-de-Falardeau. The reserve is located in the unorganized territory of Mont-Valin (MRC Le Fjord-du-Saguenay), in the administrative region of Saguenay–Lac-Saint-Jean.

Wherever possible, the boundaries of the reserve were defined on the basis of natural or anthropic elements that are easily identified on the ground, such as watercourses, lakes, forest roads and the edges of bogs. For sections along the banks of a water body (e.g. Lac des Huit Chutes in the south), the real boundary is the natural high-water mark. Where the boundary corresponds to a forest road, the right of way of the road is excluded from the protected area. The legal boundaries of the reserve are defined in the technical description and the survey map prepared by land surveyor Pierre Hains with the following minutes 11514 (February 15, 2018) and filed in the surveying archives of the Surveyor General of Québec (Greffes de l'arpenteur général du Québec), Ministère de l'Énergie et des Ressources naturelles under document number 536701.

1.3 Ecological portrait

1.3.1 Physical environment

The biodiversity reserve is in the southern part of Central Laurentian natural province (Li, T. and J.-P. Ducruc, 1999¹), in Grenville geological province. The latter corresponds to the roots of a mountain chain formed nearly a billion years ago, during the Grenville orogeny.

The sector where the reserve is located is on the western edge of the Monts-Valin natural region, which includes the southernmost of the three great massifs of the natural province. The Monts-Valin massif, whose summits approach 1000 metres, constitutes the southwestern

portion of the natural region that bears its name. The reserve itself is in the northwestern part of the massif, at the centre of a plateau whose summits are almost always over 700 m, though generally under 800 m. Within the biodiversity reserve, the elevation ranges from 630 to 830 m (average 741 m). The bedrock is mostly anorthosite and orthopyroxene granitoids. Undifferentiated till (a glacial deposit with no particular morphology) is the dominant surface deposit (77%) in the reserve. Fluvioglacial deposits (mainly ice-marginal, but also proglacial) are rare, as are organic deposits, and scattered across the territory. In the south there are also a few dead-ice moraines, near Lac du Manitou and Lac du Chef. Thin soils with rocky outcrops cover 1.5% of the area of the reserve. Almost 90% of the reserve's soils enjoy good to moderate drainage, with bogs being small to rare (< 1.5% of the reserve).

The waters of the western, southern and eastern margins of the Monts-Valin massif drain toward Rivière Saguenay (via the Shipshaw, Valin, Sainte-Marguerite and Sainte-Marguerite Nord-Est rivers), while those of the centre and north flow toward the St. Lawrence through the Côte-Nord region (via the Betsiamites, Portneuf and Des Escoumins rivers). Located in the western part of the Monts-Valin massif, the reserve has numerous bodies of water (over 300) accounting for 17.6% of its total area. The waters of the reserve mostly drain into Rivière Shipshaw (via Rivière à la Tête Blanche and Rivière des Huit Chutes), with only the southeastern portion

¹ http://www.mddelcc.gouv.qc.ca/biodiversite/cadre-ecologique/rapports/Provinces_Internet_16-12-2014.pdf

(with lakes Tuzo, Matuetin and Mercier) being in the Rivière Betsiamites watershed. The main water bodies of the reserve, apart from Lac des Huit Chutes, are lakes Dobe, Mandan, Pauvre, Léger, Nicole, Gagnon, Du Bois Sec, De la Petite Hache, De l'Irlandais, De l'Ouragan, Boiteux and Revolver. However, a multitude of dams control the drainage of the Shipshaw basin, three of them being inside the reserve (where they form lakes Ramier, Ricken and Mandan) with several others on the immediate periphery.

According to Gerardin and McKenney (2001), the territory of the reserve is subject to a cold subarctic continental climate, subhumid with a medium growing season. Average temperatures are on the order of -9.4 to -6.0 °C. The average annual precipitation ranges from 800 to 1359 mm, while the average growing season is 150 to 179 days.

1.3.2 Biological environment

The landscape is characterized by productive forest environments, with forests occupying 81.2% of the area of the reserve (Table 1). Due to the logging of recent decades, young and regenerating forests dominate the landscape, although old-growth forests (> 90 years) are relatively well represented (30% of the forest cover). Two species dominate the forest cover, which is almost entirely coniferous: balsam fir (59.3%) and black spruce (20.2%). Over a third of the territory has been logged in the last two decades.

Table 1: Forest summary of the territory of Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes (MFFP, SIEF, 4th 10-year survey)

Type of cover		Area (ha)	Proportion (%)
Forest	Deciduous	0	0
	Mixed	1050.1	10.2
	Coniferous	7151.7	69.6
	Regeneration	148.4	1.4
Other	Alder stands	2.6	0.0
	Wet barrens	91.0	0.9
	Water	1810.5	17.6
	Island	10.5	0.1
	Flooded	6.9	0.1
	Other	1.0	0.0
Total		10 272.8	100.0%

In 2008 the MELCC conducted a summary plant survey in the territory of the reserve. The following species were observed: *Gaultheria hispidula*, *Clintonia borealis*, *Coptis groenlandica*, *Picea mariana*, *Maïenthemum canadense*, *Larix laricina*, *Hypericum ellipticum*, *Oxalis montana*, *Rubus chamaemorus*, *Abies balsamea* and *Smilacina trifolia*.

With regard to wildlife, no survey specific to the reserve has been done, but the presence of three species that are vulnerable in Québec has been noted: Barrow's goldeneye, woodland caribou and Bicknell's thrush. Also, the reserve is part of the largest territory of allopatric (geographically isolated) brook trout in the region (MRNF, 2012), one of the two largest known in Québec. Given its high density of water bodies, the area has strong potential for the conservation and development of brook trout.

1.3.3 Ecological representativeness

Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes will enrich the representation of the characteristic ecosystems of the Monts-Valin natural region in Québec's protected areas network. Together with Réserve de biodiversité Akumunan, Réserve aquatique de la Vallée-de-la-Rivière-Sainte-Marguerite and Parc national des Monts-Valin, Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes completes the representation of the characteristic ecosystems of the uplands (elevations > 600 m) of the southwest part of the natural region, which basically correspond to the Lac-Tremblay low hills physiographic complex (level 3 in the ecological reference framework of Québec). While some of the protected areas mentioned above also include low-elevation ecosystems (< 500 m), the biodiversity reserves of Plateau-du-Lac-des-Huit-Chutes and Akumunan are on the heights of the massif (basically between 500 and 800 m). These two protected areas are highly representative of the types of physical environments and surface deposits characteristic of the Lac-Tremblay low hills physiographic complex. On the other hand, in terms of hydrography, Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes stands out for its high proportion of wetlands, twice that of the natural region (17.6% versus 8.2%). This concentration of wetlands is characteristic of the western half of the natural region, where there are not only big lakes but a high density of them.

With regard to biology, the present-day forests of the biodiversity reserve and the areas around it differ considerably, in structure and composition, from the natural forest landscapes (Grondin *et al.*

2010). The latter authors recommend that the stands of balsam fir/white birch and fir/black spruce (mixed Eastern forest) be the focus of forest restoration efforts, to gradually bring their structure and composition closer to those of natural landscapes. The cessation of logging will contribute to that end by letting the young forests (fir and spruce stands) to age.

Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes is in the Eastern bioclimatic subdomain, whose climate, wetter than its counterpart to the west, results in a longer forest fire cycle. For this reason it normally contains more old-growth forests. The current presence of a high proportion of such forests (which will increase over time) heightens the reserve's ecological value, since the surrounding forests are considerably younger because of logging.

In this respect, the biodiversity reserve forms a conservation nucleus of over 100 km², in which the biodiversity components expressed across the landscape (types of physical environments and assemblages of associated species) will continue evolving with greater ecological integrity (see sidebar).

Having a conservation nucleus of good size will ensure the long-term effectiveness of the reserve in protecting ecosystem functionality, while reducing its vulnerability to natural disturbances and changes in the surrounding landscape.

1.4 Land occupation and uses

The principal occupations and uses of the territory of Réserve de biodiversité du Plateau-

du-Lac-des-Huit-Chutes are shown on the map comprising Appendix 2.

Though relatively remote, the reserve can be accessed via forest roads, which among other things are used in winter by snowmobilers. The reserve can be entered from the east by R0201 (branches at kilometres 25, 29 and 35), from the west by the main access road to Onatchiway ZEC, where branches at kilometres 3, 14 and 18 lead into the reserve. The branch at km 3 leads to Lac des Huit Chutes, and is also a snowmobile trail. The easiest access is at kilometre 35 of R0201, an unpaved passable road that crosses the reserve but is excluded from the protected area (40 m right of way), which is a snowmobile trail in winter. Also excluded from the reserve are the two surface material extraction sites along this road (SMS 22D15-50 and SMS 22D15-51). A dense and well-developed network of unpaved roads and non-passable forest roads covers nearly all the southern half of the reserve, as a result of logging done shortly before provisional protection status was granted.

Lying entirely inside Onatchiway ZEC, the biodiversity reserve overlaps seven trapping grounds (MRNF, 2012). It is part of fur-bearing animal management unit 53 and of hunting zone 28. In some sectors there is a fair amount of vacation development (45 resort leases), notably at the western end of Lac des Huit Chutes and around the lakes accessed by the forest road that crosses the reserve in the north (lakes Léger, Pauvre, Nicole, etc.). A lease enlargement has been granted on the perimeter of the reserve. There are three trapping camps on the territory, but no trails with land rights. Note that the reserve

ECOLOGICAL INTEGRITY

The condition of a protected area that is considered characteristic of its natural region and likely to persist, including abiotic [non-living] components and the composition and abundance of native species and biological communities, rates of change and supporting processes.

Adapted from the definition in the Canada National Parks Act (S.C. 2000, c. 32).

CONSERVATION NUCLEUS

An area where the protection of biodiversity, ecological integrity, the natural environment and other similar values take precedence over usage values.

Brassard et al., 2010.

is entirely within the Nitassinan of the Mashteuiatsh First Nation, as demarcated in Schedule 4.1 of the *Agreement-in-Principle of General Nature between the First Nations of Mamuitun and Nutashkuan and the Government of Québec and the Government of Canada*.

In summary, the territory of Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes is mostly used for vacationing, hunting, fishing and trapping, but the level of use can be considered relatively light, since the cottages are concentrated around lakes accessible by land and most of the reserve has no cottages at all.

1.4.1 Particular heritage elements

Historic trails and portages used by First Nations people have been identified by the Pekuakamiulnuatsh Takuhikan, notably between Lac des Huit-Chutes and Lac Dobe, and along Rivière à la Hache.

2 Conservation and management issues

2.1 Introduction

Generally, a biodiversity reserve is dedicated to protection of the natural environment, nature discovery and recreation. For this reason, activities that could have a significant impact on ecosystems and biodiversity, particularly of an industrial nature, are prohibited. Less harmful activities, such as those involving recreation, wildlife, ecotourism or education, are permitted in this type of protected area. However, the management framework to which they are subject is conditioned by conservation issues specific to each biodiversity reserve. The conservation and other issues to be taken into account for Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes, and the orientations and objectives to which they give rise, are set out in the sections that follow.

2.2 Protection of biodiversity

Restoration of forest ecosystems

For this conservation issue, the corresponding objective is: *Promote the gradual restoration of the characteristic ecosystems of the Monts-Valin natural region.* The absence of industrial activities will allow the average age of forest stands to gradually increase. Ultimately, old stands of balsam fir (with black spruce and white birch) should cover most of the reserve's land surface. The next objective is therefore: *Avoid any development that could reduce the age of the forest cover.*

Protection of lacustrine ecosystems and near-shore environments

Containing the headwaters of the Tête Blanche and Huit Chutes watersheds, the reserve's hydrographic network has excellent ecological integrity and water quality. Accordingly, maintaining the integrity of aquatic, wetland and near-shore environments is another conservation issue for the reserve. The corresponding objective is: *Avoid any new development that could degrade the quality of aquatic, wetland or near-shore environments.*

Protection of threatened or vulnerable species

Due to its small size and the number of cottages present, Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes is unlikely to make a significant contribution to the conservation of woodland caribou, which require a large home range and minimal human presence. However, since they still appear to frequent the area, the potential contribution of the protected area to maintaining the species in the surrounding (developed) forest will have to be evaluated over the coming years.

Another species to protect is the Barrow's goldeneye, considered an arboreal duck because it usually nests in natural cavities in trees (Savard and Robert, 1997). Large trees that could offer nesting cavities are generally rare in the north, and current practices in forestry favor the production of healthy trees (without cavities). Special attention should therefore be given to the reserve's intact forests and small headwater lakes, which these ducks seem to prefer. Lastly, to maintain the habitat of Bicknell's thrush,

infrastructure work (e.g. on roads) should be minimized in the environments favoured by this species, particularly stands of balsam fir at higher elevations. Accordingly, the next objective is: *Adapt the management of the reserve to protect threatened or vulnerable species for which it provides a habitat.*

2.3 Development activities

The territory of the reserve offers numerous attractions for recreation (hunting, fishing, vacationing). The reserve is also easy to access, especially from kilometre 35 on R0201. At present it is mostly used by hunters, fishers, trappers and those who have cottages there. The Onatchiway ZEC, a controlled hunting and fishing zone, is responsible for wildlife development, harvesting and conservation, and for facilitating access to the territory.

Practised in accordance with the applicable laws and regulations, these activities by users of the territory are compatible with the status of biodiversity reserve, and can continue to be practised normally.

The MELCC wants all concerned stakeholders to be involved in preparing an action plan to carry out these conservation objectives, in particular the protection of sensitive or fragile natural environments, the recovery of old-growth forests and the protection of threatened or vulnerable species. To encourage participation by all stakeholders, the following objectives have been set: (1) *Establish participative and collaborative management.* (2) *Inform all users as to the conservation and management objectives being pursued in the protected area.*

2.4 Knowledge acquisition and environmental monitoring

Existing information about the ecosystems of Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes (section 1.3) is fragmentary. Knowledge acquisition, besides being crucial to the achievement of objectives specific to natural heritage protection, will make it possible to monitor the natural environment. The knowledge acquired could also be used in developing activities for nature discovery, education and public awareness. It will facilitate the analysis of development projects, and ensure that management partners have a common understanding of the issues.

Ecological knowledge, especially about the support capacity of natural environments, and about the impact of recreational and tourist activities on ecosystems, must also be developed. The corresponding objective is: *Promote knowledge building, in particular by conducting targeted surveys and monitoring biodiversity.*

The MELCC will target certain needs related to knowledge building on biodiversity. With the help of regional partners, the MELCC aims to establish an inventory of the plant and animal species found in the reserve. The subjects of surveys and research to prioritize will be determined later, and will concern both existing and expected ecological problems.

2.5 Conservation and management objectives

Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes is a “protected area” as defined in the *Natural Heritage Conservation Act*, and appears

in the *Registre des aires protégées du Québec* constituted under the Act. Thus, it was primarily created to ensure the protection and maintenance of the area's biological diversity, with the associated natural and cultural resources. In addition, protecting this territory enhances the representativeness of the national and regional protected areas network, since it holds numerous ecological components of interest that are representative of the characteristic ecosystems of the Monts-Valin natural region. For the government, the protection of these components and ecosystems, described in section 1.3, is a major objective. Note that this protection will allow the pursuit of traditional activities by members of the Aboriginal communities who frequent the land, as well as the recreotourism activities currently practised there.

Taking into account the issues explained in sections 2.1 to 2.4, and the geographical sectors of interest corresponding to the elements described in section 1 (see Appendix 3), the conservation and management objectives specific to Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes are as follows:

- *Avoid any development that could reduce the age of the forest cover.*
- *Avoid any new development that could degrade the quality of aquatic, wetland or near-shore environments.*
- *Adapt the management of the reserve to protect threatened or vulnerable species for which it provides a habitat.*
- *Establish participative and collaborative management.*
- *Inform all users as to the conservation and management objectives being pursued in the protected area.*

- *Promote knowledge building, in particular by conducting targeted surveys and monitoring biodiversity.*

To achieve those objectives, the conservation and management of the reserve will be guided by an activity framework whose several dimensions are set out in sections 4, 5 and 6 of this plan.

3 Zoning

In light of its ecosystems, occupation and uses, the current condition of its natural environment, and its protection and management objectives, the reserve has been subdivided into two zones. While both enjoy the same degree of legal protection and have the same activity framework, their protection measures and development possibilities reflect their respective features.

The two zones are presented in the map comprising Appendix 4. The MELCC will consider this zoning in managing the reserve and when evaluating applications for authorization concerning activities or developments.

The two zones are:

Zone I: The Lac des Huit Chutes uplands

Zone II: The Lac Nicole mounds and hillocks

Zone I: The Lac des Huit Chutes uplands

Occupying the southern part of the reserve, Zone I is mostly suited to stands of balsam fir/white birch as its potential vegetation. Due to recent logging, at present the forest cover is almost totally in regeneration, except for a few areas of old-growth forest, such as the north slope of the chain of elongated lakes that form an arc at the zone's south end: Lac des Huit Chutes, Lac Dobe, Lac du Marmiton, Lac du Cuisinier and Lac

Mandan. Threatened or vulnerable species may frequent the zone, since one occurrence of Barrow's goldeneye has been noted and Bicknell's thrush has been seen nearby. Since Zone I is fairly inaccessible and little used (with just two resort leases), it will be managed to ensure a high level of protection.

Zone II: The Lac Nicole mounds and hillocks

Occupying the northern part of the reserve, Zone II is suited to stands of balsam fir/black spruce and balsam fir/white birch as its potential vegetation, along with a few black spruce stands. The logging of recent years has not affected the forest cover, which presents a more varied age structure and a good proportion of old-growth forests. The zone is cut in two by a class I forest road, making it very accessible and well used, with many resort leases. Zone II is suitable for recreation activities compatible with the reserve's conservation objectives.

4 Activity framework applicable to Réserve de biodiversité du Plateau- du-Lac-des-Huit-Chutes

The activity framework applicable to Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes follows from the provisions of the *Natural Heritage Conservation Act* and the Regulation respecting the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes.

4.1 Activity framework established by the Natural Heritage Conservation Act

Activities carried out within the biodiversity reserve are primarily governed by the provisions of the *Natural Heritage Conservation Act*.

Under the Act, the principal activities prohibited in a territory with the status of biodiversity reserve are the following:

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

Though fundamental to protecting the territory and its ecosystems, the above prohibitions do not cover all of the standards considered desirable to ensure the proper management of the reserve and the conservation of its natural environment. The *Natural Heritage Conservation Act* allows the Regulation to detail the legal framework applicable on the territory of a biodiversity reserve.

4.2 Activity framework established by the Regulation respecting the Réserve de biodiversité du Plateau-du-Lac-des- Huit-Chutes

Accordingly, the provisions set out in Regulation respecting the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes present additional prohibitions beyond those already stipulated in the Act. Their purpose is to set conditions for the performance of certain permitted activities, thus ensuring better protection of the natural environment in accordance with the principles of conservation and other management objectives for the biodiversity reserve. Certain activities are therefore subject to prior authorization by the Minister.

The measures contained in Regulation specifically concern new interventions. They do not affect activities that are already being practised or facilities that are already present, so many existing uses are therefore preserved.

However, for activities subject to authorization, the provisions set out in Regulation do not identify which activities could be refused authorization, being considered incompatible with the vocation of the biodiversity reserve. Basic information about the compatibility or incompatibility of each type of activity is provided in the document *Activity Framework for Biodiversity Reserves and Aquatic Reserves*, which is available on the website of the MELCC at:

http://www.mdelcc.gouv.qc.ca/biodiversite/aires_protegees/regime-activites/regime-activite-reserve-bio-aqua-en.pdf.

For certain activities, Regulation also includes exemptions to the requirement for prior authorization.

5 Activities governed by other laws

Certain activities that could potentially be practised in the biodiversity reserve are also governed by other applicable legislative and regulatory provisions, and some require a permit or authorization or the payment of certain fees. Certain activities could be prohibited or limited under other laws or regulations applicable on the territory of the reserve.

Within the biodiversity reserve, a particular legal framework may govern permitted activities under the following categories:

- **Protection of the environment:** measures set out in particular by the *Environment Quality Act* (chapter Q-2) and its regulations.
- **Archeological research and discoveries:** measures set out in particular by the *Cultural Heritage Act* (chapter P-9.002).
- **Exploitation and conservation of wildlife resources:** measures stipulated by the *Act respecting the conservation and development of wildlife* (chapter C-61.1) and its regulations, including provisions relating to threatened or vulnerable wildlife species, outfitters and beaver reserves; and measures in the applicable federal laws and regulations, including the legislation and regulations on fisheries.
- **Plant species designated as threatened or vulnerable:** measures prohibiting the harvesting of such species under the *Act respecting threatened or vulnerable species* (chapter E-12.01).
- **Access and property rights related to the domain of the State:** measures set out in particular by the *Act respecting the lands in the domain of the State* (chapter T-8.1) and the *Watercourses Act* (chapter R-13).
- **Issuance and oversight of forest development permits** (harvesting of firewood for domestic purposes, wildlife development, recreational development); and **delivery of authorizations** (forest roads): measures stipulated by the *Sustainable Forest Development Act* (chapter A-18.1).
- **Travel:** measures stipulated by the *Act respecting the lands in the domain of the*

State and by the regulations on motor vehicle travel in fragile environments, under the *Environment Quality Act*.

- **Construction and development standards:** regulatory measures adopted by local and regional municipal authorities in accordance with the applicable laws.

6 Management

6.1 Responsibilities of the Minister of the Environment and the Fight against Climate Change

The Minister of the Environment and the Fight against Climate Change is responsible for the management of Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes. Among other things, the Minister sees to the application of the *Natural Heritage Conservation Act* (chapter C-61.01) and the Regulation respecting the Réserve de biodiversité du Plateau-du-Lac-des-Huit-Chutes. In its management, the MELCC enjoys the collaboration and participation of other government representatives that have specific responsibilities in or adjacent to the territory. Since the territory is accessible and often frequented by humans, the MELCC intends to take a “participative” approach to management. The principal local and regional stakeholders concerned will be invited to participate in management activities. Depending on needs, their participation could take place through the creation of a management committee, a zoning plan, the development and implementation of an action plan, and follow-up on actions taken.

6.2 Monitoring

As mentioned in section 2, measures will be taken toward monitoring the status of the natural environment, in collaboration with the various stakeholders. Botanical and wildlife surveys may also be conducted.

6.3 Participation of stakeholders

To fulfill its management responsibilities, the MELCC will seek the collaboration and participation of the principal actors concerned by the territory, including the MRC of Fjord-du-Saguenay, the community of Mashteuiatsh, Onatchiway ZEC, the holders of land rights, and the regional units of other government departments that have responsibilities in the biodiversity reserve.

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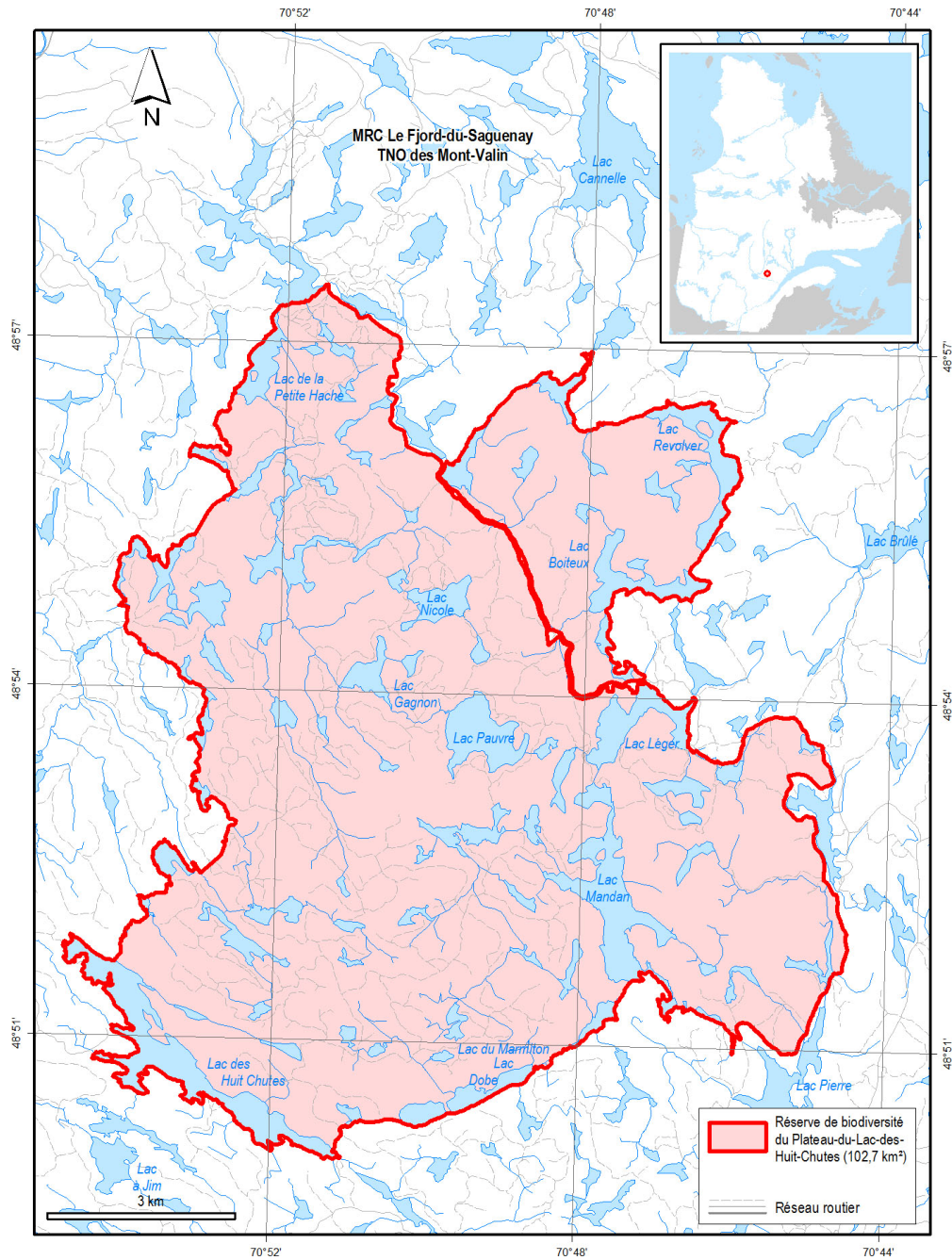
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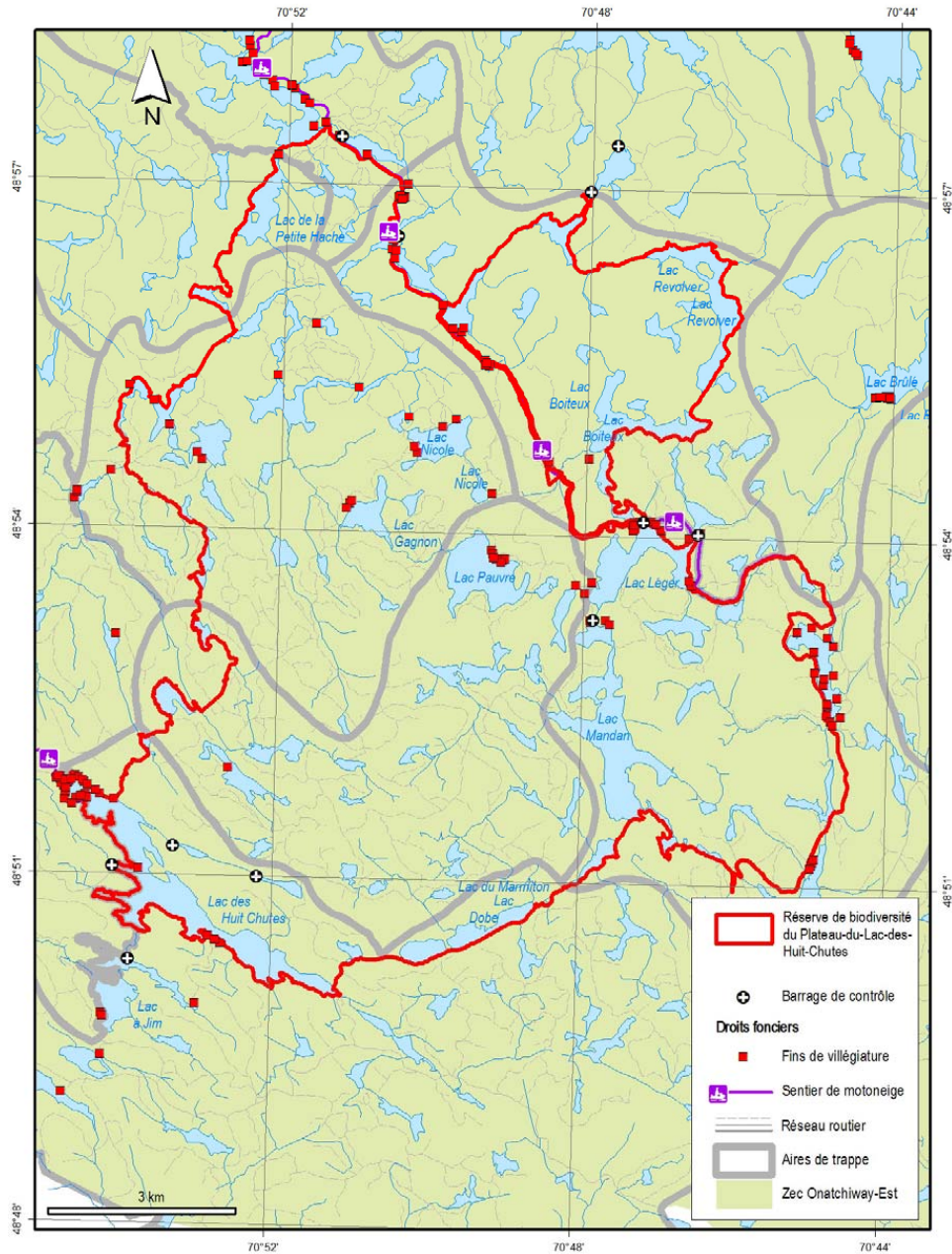
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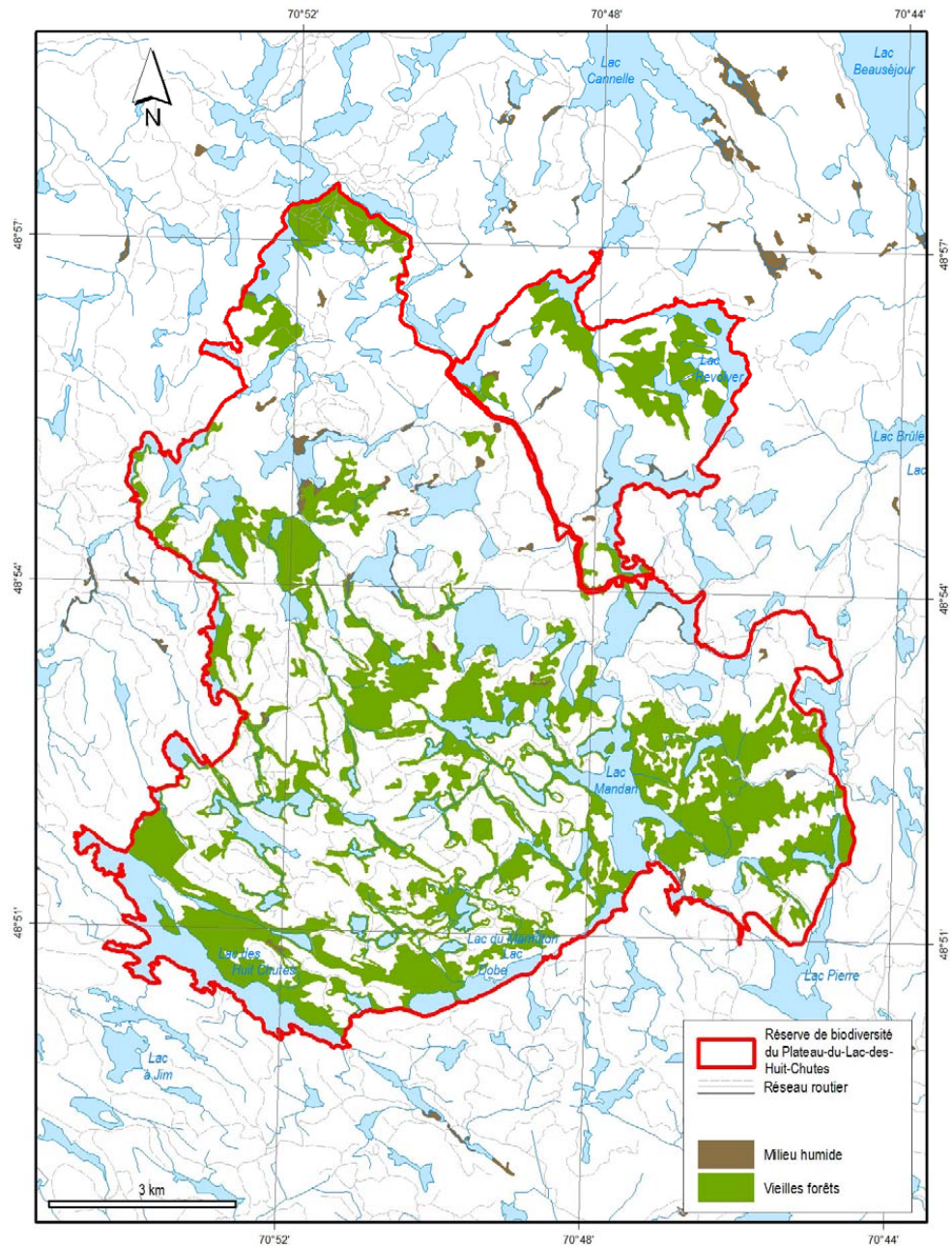
Appendix 1 — Boundaries and location



Appendix 2 — Occupation and uses



Appendix 3 — Location of sectors of interest



Appendix 4 — Zoning

