Gouvernement du Québec

O.C. 436-2020, 8 April 2020

Natural Heritage Conservation Act
(chapter C-61.01)

Permanent status of the Réserve de biodiversité des Drumlins-du-Lac-Clérac, 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 636-2005 dated 23 June 2005, 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 des Drumlins-du-lac-Clérac and approved the plan of that area and the conservation plan proposed for the area;

WHEREAS, by Minister's Order dated 27 July 2005 (2005, *G.O.* 2, 4072), the Minister of Sustainable Development, Environment and Parks assigned in particular temporary protection status to the territory of the Réserve de biodiversité projetée des Drumlins-du-Lac-Clérac, for a term of four years commencing on 7 September 2005;

WHEREAS, by Order in Council 136-2008 dated 20 February 2008, the Government approved the amendments to the conservation plan of the 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 July 2009 (2009, *G.O.* 2, 2233), and eight years under the Order of the Minister of Sustainable Development, Environment, Wildlife and Parks dated 13 March 2013 (2013, *G.O.* 2, 769);

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 des Drumlins-du-Lac-Clérac 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 deals in particular with the feasibility of expanding the territory of the Réserve de biodiversité projetée des Drumlins-du-Lac-Clérac and concludes, among other things, that permanent protection status may be assigned to the territory;

WHEREAS the limits of the Réserve de biodiversité projetée des Drumlins-du-Lac-Clérac were reassessed by the Minister and changed after the public consultation to expand to the south-east and to expand the corridor connecting it eastward to the Réserve de biodiversité projetée Albanel-Témiscamie-Otish, and to rely, where possible, on natural or man-made elements easily visible on the site to facilitate management;

WHEREAS the plan of the Réserve de biodiversité projetée des Drumlins-du-Lac-Clérac and its conservation plan were adjusted based on the changed limits and the technical description corresponding to the new limits has 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 de Maria-Chapdelaine;

WHEREAS, in accordance with the first paragraph of section 152 of that Act, the council of Municipalité régionale de comté de Maria-Chapdelaine, by resolution No. 48-02-17 dated 8 February 2017, confirmed that the project for the establishment of the Réserve de biodiversité des Drumlins-du-Lac-Clérac complies with the objectives of the revised land use planning and development plan and to the layout of the complementary document;

WHEREAS the Commission de toponymie sent to the Minister its approval of the name "Réserve de biodiversité des Drumlins-du-Lac-Clérac" 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 des Drumlins-du-Lac-Clérac 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 des Drumlins-du-Lac-Clérac 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 des Drumlins-du-Lac-Clérac 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 des Drumlins-du-Lac-Clérac";

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

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

THAT permanent status of the Réserve de biodiversité des Drumlins-du-Lac-Clérac 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 des Drumlins-du-Lac-Clérac

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 des Drumlins-du-Lac-Clérac 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 a 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 in the biodiversity reserve;

(2) the work is carried out within the area of the 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, 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 to which they are related, and 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 improvement work includes work to replace or install works or facilities with 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.

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 if the activity does not involve the taking of fauna or flora resources, or the use of a motor vehicle.

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 DES DRUMLINS-DU-LAC-CLÉRAC
(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 in the townships of Clérac and Beauregard, in the watersheds of Rivière Mistassini and Rivière Rupert, in the unorganized territory of Rivière-Mistassini, in the administrative region of Saguenay-Lac-Saint-Jean, and in the registration division of Lac-Saint-Jean-Ouest. The perimeter of the territory may be described as follows:

PARCEL A

Starting from a point situated on an undulating line corresponding to the divide between the watershed of Rivière Saguenay and the watershed of Rivière Rupert, being point 1 (5 638 302 m North, 369 851 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 45°06'27'' over a distance of approximately 69 metres, to the intersection with the western shore of an unnamed lake, being point 2 (5 638 351 m North, 369 900 m East);

Thence, in a generally easterly direction, along the northern shore of an unnamed lake, to the intersection with the northern limit of the biological refuge number 02551R146, being point 3 (5 638 359 m North, 369 942 m East);

Thence, in an easterly direction, along the northern limit of the biological refuge number 02551R146, to the intersection with the western shore of an unnamed lake, being point 4 (5 638 378 m North, 370 042 m East);

Thence, in a generally easterly direction, along the northern shore of an unnamed lake, to the intersection with the northern limit of the biological refuge number 02551R146, being point 5 (5 638 332 m North, 370 419 m East);

Thence, in a generally easterly direction, along the northern limit of the biological refuge number 02551R146, to the intersection with the northern bank of an unnamed stream, being point 6 (5 638 327 m North, 370 461 m East);

Thence, in a generally southeasterly direction, along the northeastern bank of an unnamed stream and the northeastern bank of an unnamed lake, to the intersection with the northern limit of the biological refuge number 02551R146, being point 7 (5 638 184 m North, 370 728 m East);

Thence, in a generally easterly direction, along the northern limit of the biological refuge number 02551R146, to the intersection with the northwestern shore of an unnamed lake, being point 8 (5 638 171 m North, 370 786 m East);

Thence, in a generally southerly direction, along the eastern shore of an unnamed lake, to point 9 (5 636 976 m North, 370 806 m East);

Thence, in an easterly direction, along a straight line on a bearing of 86°01'12'' over a distance of approximately 240 metres, to the intersection with a line parallel to and at a distance of 200 metres from the eastern shore of an unnamed lake, being point 10 (5 636 993 m North, 371 045 m East);

Thence, in a generally southerly direction, along a line parallel to and at a distance of 200 metres from the eastern shore of an unnamed lake and Lac Boudreault, to point 11 (5 632 008 m North, 370 045 m East);

Thence, in a generally southeasterly direction, along a straight line on a bearing of 160°26'53'' over a distance of 259.99 metres, to point 12 (5 631 763 m North, 370 132 m East);

Thence, in a southeasterly direction, along a straight line on a bearing of 165°40'19'' over a distance of 242.54 metres, to point 13 (5 631 528 m North, 370 192 m East);

Thence, in an easterly direction, along a straight line on a bearing of 84°28'26'' over a distance of 275.23 metres, to point 14 (5 631 554 m North, 370 466 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 39°37’25’’ over a distance of 308.32 metres, to point 15 (5 631 792 m North, 370 662 m East);

Thence, in a generally northeasterly direction, along a straight line on a bearing of 50°10’52’’ over a distance of approximately 317 metres, to the intersection with the divide between the watershed of Rivière Saguenay and the watershed of Rivière Rupert, being point 16 (5 631 995 m North, 370 906 m East);

Thence, in a generally southerly direction, along an undulating line corresponding to the divide between the watershed of Rivière Saguenay and the watershed of Rivière Rupert, to point 17 (5 624 216 m North, 370 166 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 237°04’14’’ over a distance of approximately 1 030 metres, to the intersection with the southeastern shore of Lac Jules, being point 18 (5 623 656 m North, 369 301 m East);

Thence, in a generally southwesterly direction, along the southeastern shore of Lac Jules, to point 19 (5 623 261 m North, 368 974 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 199°12’57’’ over a distance of approximately 486 metres, to the intersection with the northeastern shore of an unnamed lake, being point 20 (5 622 802 m North, 368 814 m East);

Thence, in a generally southerly direction, along the eastern shore of an unnamed lake, to point 21 (5 622 723 m North, 368 792 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 212°57’26’’ over a distance of approximately 217 metres, to the northwestern bank of an unnamed intermittent stream, being point 22 (5 622 541 m North, 368 674 m East);

Thence, in a generally southwesterly direction, along the northwestern bank of an unnamed intermittent stream excluded from the biodiversity reserve, to the intersection with the western bank of an unnamed stream, being point 23 (5 622 086 m North, 368 359 m East);

Thence, in a generally southerly direction, along the western bank of an unnamed stream, excluded from the biodiversity reserve, to the intersection with the northern bank of another unnamed stream, being point 24 (5 621 978 m North, 368 320 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 193°15’50’’ over a distance of approximately 2537 metres, to the intersection with the southwestern bank of an unnamed intermittent stream, being point 25 (5 619 509 m North, 367 738 m East);

Thence, in a generally southeasterly direction, along the southwestern bank of an unnamed intermittent stream, excluded from the biodiversity reserve, to point 26 (5 619 376 m North, 367 794 m East);

Thence, in a northwesterly direction, along a straight line on a bearing of 288°00’15’’ over a distance of approximately 210 metres, to the intersection with the northeastern bank of an unnamed stream, being point 27 (5 619 441 m North, 367 594 m East);

Thence, in a generally westerly direction, along the northern bank of an unnamed river, excluded from the biodiversity reserve, to the intersection with the eastern shore of an unnamed lake, being point 28 (5 619 585 m North, 366 612 m East);

Thence, in a generally northerly direction, along the southern and western shore of an unnamed lake, to the intersection with the western bank of an unnamed river, being point 29 (5 620 168 m North, 366 510 m East);

Thence, in a generally northeasterly direction, along the western bank of an unnamed river, to the intersection with the southern shore of Lac Atshikash, being point 30 (5 620 487 m North, 366 635 m East);

Thence, in a generally northwesterly direction, along the southern shore of Lac Atshikash, the southern bank of an unnamed stream and the southern shore of an unnamed lake, to point 31 (5 620 985 m North, 365 626 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 257°58’08’’ over a distance of approximately 62 metres, to the intersection with the southeastern shore of an unnamed lake, being point 32 (5 620 972 m North, 365 565 m East);

Thence, in a generally southwesterly direction, along the southeastern shore of an unnamed lake, to point 33 (5 620 854 m North, 365 347 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 217°21’23’’ over a distance of approximately 165 metres, to the intersection with the eastern shore of an unnamed lake, being point 34 (5 620 723 m North, 365 247 m East);

Thence, in a generally southwesterly direction, along the southeastern shore of an unnamed lake, to the intersection with the eastern bank of an unnamed stream, being point 35 (5 620 049 m North, 364 943 m East);

Thence, in a generally southerly direction, along the eastern bank of an unnamed stream, to the intersection with the eastern shore of an unnamed lake, being point 36 (5 619 815 m North, 364 902 m East);

Thence, in a generally westerly direction, along the southern shore of a lake and the southern bank of an unnamed stream, to the intersection with a line parallel to and at a distance of 30 metres east of the centre line of an unnamed road, being point 37 (5 619 768 m North, 364 607 m East);

Thence, in a generally northerly direction, along a line parallel to and at a distance of 30 metres east of the centre line of the road, to the intersection with the southeastern right of way of another unnamed road, being point 38 (5 621 372 m North, 364 395 m East);

Thence, in a generally northeasterly direction, along the southeastern right of way of an unnamed road, to the intersection with the southern right of way of another unnamed road, being point 39 (5 626 468 m North, 367 303 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 18°40’57’’ over a distance of approximately 159 metres, to the intersection with the southern shore of an unnamed lake, being point 40 (5 626 619 m North, 367 354 m East);

Thence, in a generally northeasterly direction, along the southeastern shore of an unnamed lake, excluded from the biodiversity reserve, to point 41 (5 626 980 m North, 367 491 m East);

Thence, in a northwesterly direction, along a straight line on a bearing of 348°08’08’’ over a distance of approximately 365 metres, to the intersection with the western shore of Lac Boudreault, being point 42 (5 627 337 m North, 367 416 m East);

Thence, in a generally northerly direction, along the western shore of Lac Boudreault and the western bank of an unnamed intermittent stream, to point 43 (5 627 569 m North, 367 458 m East);

Thence, in a northerly direction, along a straight line on a bearing of 9°27’45’’ over a distance of approximately 298 metres, to the intersection with an unnamed intermittent stream, being point 44 (5 627 863 m North, 367 507 m East);

Thence, in a northerly direction, along a straight line on a bearing of 11°34’50’’ over a distance of approximately 374 metres, to the intersection with the southern bank of an unnamed stream, being point 45 (5 628 229 m North, 367 582 m East);

Thence, in a generally northeasterly direction, along the northwestern bank of an unnamed stream, to the intersection with the southern shore of an unnamed lake, being point 46 (5 628 361 m North, 367 771 m East);

Thence, in a generally northeasterly direction, along the western and northern shore of an unnamed lake, to point 47 (5 628 503 m North, 367 891 m East);

Thence, in a northerly direction, along a straight line on a bearing of 4°52’34’’ over a distance of approximately 212 metres, to the intersection with the outlet of an unnamed lake, excluded from the biodiversity reserve, being point 48 (5 628 714 m North, 367 909 m East);

Thence, in a northerly direction, along a straight line on a bearing of 14°54’00’’ over a distance of approximately 354 metres, to the intersection with the northern bank of an unnamed intermittent stream, being point 49 (5 629 056 m North, 368 000 m East);

Thence, in a generally easterly direction, along the northern bank of an unnamed intermittent stream, to the intersection with the northwestern shore of Lac Boudreault, being point 50 (5 629 103 m North, 368 233 m East);

Thence, in a generally northeasterly direction, along the northwestern shore of Lac Boudreault, to point 51 (5 629 619 m North, 368 461 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 55°22’51’’ over a distance of approximately 215 metres, to the intersection with a line parallel to and at a distance of 200 metres to the east of Lac Boudreault, being point 52 (5 629 741 m North, 368 638 m East);

Thence, in a generally northwesterly direction, along a line parallel to and at a distance of 200 metres to the west of Lac Boudreault, to the intersection with the eastern shore of an unnamed lake, being point 53 (5 632 592 m North, 368 167 m East);

Thence, in a generally northwesterly direction, along the southern and western shore of an unnamed lake, to the intersection with a line parallel to and at a distance of 200 metres to the west of Lac Boudreault, being point 54 (5 632 691 m North, 368 110 m East);

Thence, in a generally northerly direction, along a line parallel to and at a distance of 200 metres to the west of Lac Boudreault, to the intersection with the divide between the watershed of Rivière Saguenay and the watershed of Rivière Rupert, being point 55 (5 633 719 m North, 368 088 m East);

Thence, in a generally northeasterly direction, along an undulating line corresponding to the divide between the watershed of Rivière Saguenay and the watershed of Rivière Rupert, to the intersection with a line parallel to and at a distance of 200 metres to the west of Lac Boudreault, being point 56 (5 633 832 m North, 368 301 m East);

Thence, in a generally northeasterly direction, along a line parallel to and at a distance of 200 metres to the west of Lac Boudreault, to the intersection with the divide between the watershed of Rivière Saguenay and the watershed of Rivière Rupert, being point 57 (5 634 976 m North, 368 920 m East);

Thence, in a generally northeasterly direction, along an undulating line corresponding to the divide between the watershed of Rivière Saguenay and the watershed of Rivière Rupert, to starting point 1.

Having an area of 43.29 square kilometres.

PARCEL B

Starting from a point situated at the intersection of a line parallel to and at a distance of 30 metres southwest of the centre line of an unnamed road with the eastern bank of an unnamed intermittent stream, being point 58 (5 619 275 m North, 364 892 m East);

Thence, in a generally southerly direction, along the eastern bank of an intermittent stream and unnamed stream and the eastern shore of an unnamed lake, to point 59 (5 618 514 m North, 364 788 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 206°06'16'' over a distance of approximately 111 metres, to the intersection with the northern shore of an unnamed lake, being point 60 (5 618 414 m North, 364 739 m East);

Thence, in a generally southwesterly direction, along the northwestern shore of an unnamed lake, excluded from the biodiversity reserve, to point 61 (5 618 361 m North, 364 694 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 226°37'24'' over a distance of approximately 175 metres, to the intersection with the outlet from an unnamed lake, excluded from the biodiversity reserve, being point 62 (5 618 241 m North, 364 567 m East);

Thence, in a generally northerly direction, along the western bank of a stream and the western shore of an unnamed lake, to the intersection with the northeastern bank of an unnamed stream, being point 63 (5 618 670 m North, 364 554 m East);

Thence, in a generally northwesterly direction, along the northeastern bank of an unnamed stream, the northeastern shore of a lake and the northeastern bank of an unnamed intermittent stream, excluded from the biodiversity reserve, to point 64 (5 618 814 m North, 364 254 m East);

Thence, in a northwesterly direction, along a straight line on a bearing of 337°12'43'' over a distance of 183.31 metres, to point 65 (5 618 983 m North, 364 183 m East);

Thence, in a westerly direction, along a straight line on a bearing of 263°48'30'' over a distance of 126.78 metres, to point 66 (5 618 969 m North, 364 057 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 244°51'40'' over a distance of approximately 111 metres, to the intersection with the eastern shore of an unnamed lake, being point 67 (5 618 922 m North, 363 956 m East);

Thence, in a generally southwesterly direction, along the southeastern shore of an unnamed lake, to the intersection with the northwestern bank of an unnamed stream, being point 68 (5 618 385 m North, 363 728 m East);

Thence, in a generally northwesterly direction, along the northwestern bank of an unnamed stream, the northeastern shore of an unnamed lake and the northeastern bank of an unnamed stream, excluded from the biodiversity reserve, to the intersection with the southeastern shore of an unnamed lake, being point 69 (5 618 523 m North, 363 454 m East);

Thence, in a generally southwesterly direction, along the southwestern and southeastern shore of several unnamed lakes and the southwestern and southeastern bank of several unnamed streams, to point 70 (5 616 524 m North, 361 164 m East);

Thence, in a southerly direction, along a straight line on a bearing of 179°59'59'' over a distance of approximately 155 metres, to the intersection with the southeastern bank of an unnamed intermittent stream, being point 71 (5 616 369 m North, 361 164 m East);

Thence, in a generally southwesterly direction, along the southeastern bank of an intermittent stream, the southeastern bank of several unnamed streams and the southeastern shore of several unnamed lakes, to the intersection with the eastern bank of an unnamed river, being point 72 (5 614 741 m North, 360 049 m East);

Thence, in a generally southwesterly direction, along the southeastern bank of an unnamed river, the southeastern shore of several unnamed lakes, the southeastern bank of several unnamed streams and the southeastern bank of an unnamed intermittent stream, to point 73 (5 610 430 m North, 357 894 m East);

Thence, in a southerly direction, along a straight line on a bearing of 187°36'43'' over a distance of approximately 219 metres, to the intersection with the northern bank of an unnamed stream, being point 74 (5 610 213 m North, 357 865 m East);

Thence, in a generally westerly direction, along the northern bank of an unnamed stream, excluded from the biodiversity reserve, to the intersection with the northeastern bank of another unnamed stream, being point 75 (5 610 203 m North, 357 594 m East);

Thence, in a northwesterly direction, along a straight line on a bearing of 299°58'20'' over a distance of approximately 406 metres, to the intersection with the northeastern bank of an unnamed intermittent stream, being point 76 (5 610 406 m North, 357 242 m East);

Thence, in a generally southwesterly direction, along the northwestern bank of an unnamed intermittent stream, excluded from the biodiversity reserve, to point 77 (5 610 135 m North, 356 971 m East);

Thence, in a westerly direction, along a straight line on a bearing of 270°42'19'' over a distance of approximately 325 metres, to the intersection with the southeastern bank of an unnamed intermittent stream, being point 78 (5 610 139 m North, 356 646 m East);

Thence, in a generally northwesterly direction, along the northeastern bank of an unnamed intermittent stream, excluded from the biodiversity reserve, to point 79 (5 610 918 m North, 356 355 m East);

Thence, in a westerly direction, along a straight line on a bearing of 263°21'18'' over a distance of approximately 104 metres, to the intersection with the northwestern bank of an unnamed intermittent stream, being point 80 (5 610 906 m North, 356 252 m East);

Thence, in a generally southwesterly direction, along the northwestern bank of several intermittent streams and an unnamed stream, excluded from the biodiversity reserve, to point 81 (5 609 458 m North, 354 759 m East);

Thence, in a westerly direction, along a straight line on a bearing of 272°11'26'' over a distance of approximately 733 metres, to the intersection with the southeastern bank of an unnamed intermittent stream, being point 82 (5 609 486 m North, 354 027 m East);

Thence, in a generally southwesterly direction, along the southeastern bank of an intermittent stream and an unnamed stream, to point 83 (5 609 198 m North, 353 830 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 230°40'02'' over a distance of approximately 559 metres, to the intersection with the southeastern bank of an unnamed intermittent stream, being point 84 (5 608 844 m North, 353 398 m East);

Thence, in a generally southwesterly direction, along the southeastern bank of several intermittent streams and an unnamed stream and the southeastern shore of an unnamed lake, to point 85 (5 606 199 m North, 351 914 m East);

Thence, in an easterly direction, along a straight line on a bearing of 102°41'10'' over a distance of approximately 237 metres, to the intersection with the southeastern bank of an unnamed intermittent stream, being point 86 (5 606 147 m North, 352 145 m East);

Thence, in a generally southwesterly direction, along the eastern and southeastern of an intermittent stream and several streams and the eastern and southeastern shore of several unnamed lakes, to point 87 (5 601 016 m North, 349 531 m East);

Thence, in a southerly direction, along a straight line on a bearing of 189°10'25'' over a distance of approximately 163 metres, to the intersection with the northern shore of an unnamed lake, being point 88 (5 600 855 m North, 349 505 m East);

Thence, in a generally southwesterly direction, along the southeastern, southern and western shore of several unnamed lakes and the southeastern, southern and western bank of several streams and an unnamed intermittent stream, to point 89 (5 598 294 m North, 347 169 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 69°40'10'' over a distance of approximately 239 metres, to the intersection with the western shore of an unnamed lake, being point 90 (5 598 377 m North, 347 393 m East);

Thence, in a generally northerly direction, along the western and northwestern shore of several unnamed lakes and the western and northwestern bank of several unnamed streams, to point 91 (5 599 497 m North, 347 677 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 25°30'49'' over a distance of approximately 146 metres, to the intersection with the southern shore of an unnamed lake, being point 92 (5 599 629 m North, 347 740 m East);

Thence, in a generally northwesterly direction, along the southwestern and southeastern shore of several unnamed lakes and the southwestern and southeastern bank of several unnamed streams, to point 93 (5 600 500 m North, 344 970 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 252°55'21'' over a distance of approximately 457 metres, to the intersection with the eastern shore of Lac Clérac, being point 94 (5 600 366 m North, 344 533 m East);

Thence, in a generally southwesterly direction, along the eastern and southern shore of Lac Clérac, to point 95 (5 595 451 m North, 343 537 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 225°40'27'' over a distance of approximately 1 082 metres, to the southeastern bank of an unnamed intermittent stream, being point 96 (5 594 695 m North, 342 763 m East);

Thence, in a generally southwesterly direction, along the southeastern bank of several streams and an intermittent stream and the southeastern shore of several unnamed lakes, to the intersection with the northern shore of an unnamed lake, being point 97 (5 592 820 m North, 341 880 m East);

Thence, in a generally northwesterly direction, along the eastern, southern and western shore of several unnamed lakes and the eastern, southern and western bank of several unnamed streams, to point 98 (5 596 106 m North, 339 702 m East);

Thence, in a northwesterly direction, along a straight line on a bearing of 320°55'53'' over a distance of approximately 438 metres, to the intersection with the southern shore of an unnamed lake, being point 99 (5 596 446 m North, 339 426 m East);

Thence, in a generally northwesterly direction, along the southwestern shore of several unnamed lakes and the southwestern bank of several unnamed streams, to point 100 (5 599 163 m North, 337 822 m East);

Thence, in a westerly direction, along a straight line on a bearing of 277°05'54'' over a distance of 267 metres, to the intersection with an intermittent stream, being point 101 (5 599 196 m North, 337 557 m East);

Thence, in a westerly direction, along a straight line on a bearing of 269°27'46'' over a distance of approximately 320 metres, to the intersection with the southeastern bank of an unnamed stream, being point 102 (5 599 193 m North, 337 237 m East);

Thence, in a generally southwesterly direction, along the southeastern bank of an unnamed stream and the southeastern shore of an unnamed lake, to point 103 (5 598 962 m North, 336 838 m East);

Thence, in a northwesterly direction, along a straight line on a bearing of 289°27'53'' over a distance of approximately 1 020 metres, to the northwestern bank of an unnamed intermittent stream, being point 104 (5 599 302 m North, 335 876 m East);

Thence, in a generally northwesterly direction, along the southwestern bank of an intermittent stream and several unnamed streams and the southwestern shore of several unnamed lakes, to the intersection with the eastern bank of Rivière Nestaocano, being point 105 (5 600 130 m North, 335 131 m East);

Thence, in a northwesterly direction, along a straight line on a bearing of 302°06'22'' over a distance of approximately 60 metres, to the western bank of Rivière Nestaocano, being point 106 (5 600 162 m North, 335 080 m East);

Thence, in a generally northerly direction, along the western bank of Rivière Nestaocano and the western shore of an unnamed lake, to the intersection with the mouth of Rivière Nestaocano, being point 107 (5 606 394 m North, 334 129 m East);

Thence, in an easterly direction, along the outlet of an unnamed lake, to the intersection with the eastern bank of Rivière Nestaocano, being point 108 (5 606 379 m North, 334 196 m East);

Thence, in a generally easterly direction, along the northern shore of an unnamed lake and the northwestern bank of an unnamed intermittent stream, to point 109 (5 606 445 m North, 334 652 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 56°02'28'' over a distance of approximately 118 metres, to the intersection with the western shore of an unnamed lake, being point 110 (5 606 511 m North, 334 750 m East);

Thence, in a generally northeasterly direction, along the northwestern and western shore of several unnamed lakes, the northwestern and western bank of several unnamed streams, and the southern bank of an unnamed intermittent stream, to point 111 (5 612 627 m North, 336 721 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 45°36'14'' over a distance of approximately 67 metres, to the northwestern bank of an unnamed intermittent stream, being point 112 (5 612 674 m North, 336 769 m East);

Thence, in a generally northeasterly direction, along the northwestern and northeastern bank of several unnamed streams and intermittent streams and the northwestern and northeastern shore of several unnamed lakes, to point 113 (5 614 653 m North, 339 901 m East);

Thence, in a southwesterly direction, along a straight line on a bearing of 197°45'17'' over a distance of approximately 213 metres, to the intersection with the northeastern bank of an unnamed intermittent stream, being point 114 (5 614 450 m North, 339 836 m East);

Thence, in a generally northeasterly direction, along the northwestern bank of several unnamed streams and intermittent streams, to point 115 (5 618 142 m North, 342 990 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 63°09'54'' over a distance of approximately 569 metres, to the intersection with the western bank of an unnamed marsh, being point 116 (5 618 399 m North, 343 498 m East);

Thence, in a generally northeasterly direction, along the northwest bank of an unnamed marsh, to point 117 (5 618 445 m North, 343 586 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 67°40'04'' over a distance of approximately 721 metres, to the northwestern bank of an unnamed intermittent stream, being point 118 (5 618 719 m North, 344 253 m East);

Thence, in a generally northeasterly direction, along the northwestern and northeastern bank of several unnamed streams and intermittent streams and the northwestern and northeastern shore of several unnamed lakes, to point 119 (5 620 062 m North, 346 907 m East);

Thence, in a southeasterly direction, along a straight line on a bearing of 108°54'40'' over a distance of approximately 228 metres, to the northern shore of an unnamed lake, being point 120 (5 619 988 m North, 347 123 m East);

Thence, in a generally southeasterly direction, along the northern and northeastern shore of several unnamed lakes and the northern and northeastern bank of several unnamed streams, to point 121 (5 619 621 m North, 348 430 m East);

Thence, in a southeasterly direction, along a straight line on a bearing of 119°21'59'' over a distance of approximately 357 metres, to the intersection with the northern shore of an unnamed lake, being point 122 (5 619 446 m North, 348 741 m East);

Thence, in a generally easterly direction, along the northern shore of several unnamed lakes and the northern bank of an unnamed stream, to point 123 (5 619 356 m North, 349 717 m East);

Thence, in a southeasterly direction, along a straight line on a bearing of 110°52'48'' over a distance of approximately 497 metres, to the intersection with the northern shore of an unnamed lake, being point 124 (5 619 179 m North, 350 181 m East);

Thence, in a generally southerly direction, along the eastern shore of an unnamed lake, to point 125 (5 619 129 m North, 350 186 m East);

Thence, in a southerly direction, along a straight line on a bearing of 172°22'44'' over a distance of approximately 287 metres, to the intersection with the northern bank of an unnamed intermittent stream, being point 126 (5 618 845 m North, 350 224 m East);

Thence, in a generally northeasterly direction, along the northern and western bank of several unnamed streams and an intermittent stream and the northern and western shore of several unnamed lakes, to the intersection with the southeastern shore of an unnamed lake, being point 127 (5 619 480 m North, 350 830 m East);

Thence, in a generally northeasterly direction, along the southeastern shore of an unnamed lake, excluded from the biodiversity reserve, to the intersection with the northern bank of an unnamed stream, being point 128 (5 620 346 m North, 352 616 m East);

Thence, in a generally northeasterly direction, along the northwestern bank of several unnamed streams and the northeastern shore of several unnamed lakes, to point 129 (5 621 086 m North, 353 533 m East);

Thence, in an easterly direction, along a straight line on a bearing of 94°23'55'' over a distance of approximately 378 metres, to the intersection with the western shore of an unnamed lake, being point 130 (5 621 057 m North, 353 910 m East);

Thence, in a generally northeasterly direction, along the northwestern shore of several unnamed lakes and the northwestern bank of an unnamed stream, to point 131 (5 621 804 m North, 354 694 m East);

Thence, in a southeasterly direction, along a straight line on a bearing of 133°54'49'' over a distance of approximately 261 metres, to the intersection with the northeastern bank of an unnamed intermittent stream, being point 132 (5 621 623 m North, 354 882 m East);

Thence, in a southeasterly direction, along the northeastern bank of several unnamed streams and intermittent streams and the northeastern shore of several unnamed lakes, to point 133 (5 621 111 m North, 356 094 m East);

Thence, in a southeasterly direction, along a straight line on a bearing of 119°18’08’’ over a distance of approximately 225 metres, to the intersection with the eastern bank of an unnamed intermittent stream, being point 134 (5 621 001 m North, 356 290 m East);

Thence, in a generally southeasterly direction, along the northeastern bank of an unnamed intermittent stream and the northwestern bank of an unnamed stream to the intersection with the northwestern bank of an unnamed intermittent stream, being point 135 (5 620 480 m North, 356 666 m East);

Thence, in an easterly direction, along a straight line on a bearing of 93°04’24’’ over a distance of approximately 448 metres, to the intersection with the northern bank of an unnamed intermittent stream, being point 136 (5 620 456 m North, 357 113 m East);

Thence, in a generally easterly direction, along the northeastern and northwestern bank of an intermittent stream and several unnamed streams and the northeastern and northwestern shore of several unnamed lakes, to the intersection with the southeastern bank of an unnamed stream, being point 137 (5 620 636 m North, 358 811 m East);

Thence, in a generally northeasterly direction, along the southeastern bank of several unnamed streams and the southeastern shore of several unnamed lakes, excluded from the biodiversity reserve, to the intersection with the northern shore of an unnamed lake, being point 138 (5 620 858 m North, 359 581 m East);

Thence, in a generally southeasterly direction, along the northeastern shore of an unnamed lake and the northeastern bank of an unnamed stream and intermittent stream, to point 139 (5 620 445 m North, 360 648 m East);

Thence, in a southeasterly direction, along a straight line on a bearing of 114°12’28’’ over a distance of approximately 783 metres, to the intersection with the northern shore of an unnamed lake, being point 140 (5 620 124 m North, 361 362 m East);

Thence, in a generally easterly direction, along the northern shore of several unnamed lakes and the northern bank of an unnamed stream, to point 141 (5 620 275 m North, 361 985 m East);

Thence, in a southeasterly direction, along a straight line on a bearing of 115°46’09’’ over a distance of approximately 32 metres, to the intersection with the eastern shore of an unnamed lake, being point 142 (5 620 261 m North, 362 014 m East);

Thence, in a generally northeasterly direction, along the northern and northwestern shore of several unnamed lakes and the northern and northwestern bank of an unnamed stream and intermittent stream, to point 143 (5 620 962 m North, 362 869 m East);

Thence, in a northerly direction, along a straight line on a bearing of 1°29’51’’ over a distance of approximately 153 metres, to the intersection with the southwestern shore of an unnamed lake, being point 144 (5 621 115 m North, 362 873 m East);

Thence, in a generally northerly direction, along the western shore of several unnamed lakes and the western bank of an unnamed stream and intermittent stream, to point 145 (5 621 877 m North, 362 967 m East);

Thence, in a northeasterly direction, along a straight line on a bearing of 69°54’38’’ over a distance of approximately 230 metres, to the intersection with the outlet of an unnamed lake, being point 146 (5 621 956 m North, 363 183 m East);

Thence, in a southeasterly direction, along a straight line on a bearing of 124°00’57’’ over a distance of approximately 341 metres, to the intersection with the northern shore of an unnamed lake, being point 147 (5 621 765 m North, 363 466 m East);

Thence, in a generally southerly direction, along the eastern shore of an unnamed lake, to point 148 (5 621 701 m North, 363 475 m East);

Thence, in a southerly direction, along a straight line on a bearing of 166°37’33’’ over a distance of approximately 147 metres, to the eastern bank of an unnamed intermittent stream, being point 149 (5 621 558 m North, 363 509 m East);

Thence, in a generally southerly direction, along the eastern bank of an unnamed intermittent stream, to the intersection with the southern right of way of an unnamed road, being point 150 (5 621 194 m North, 363 471 m East);

Thence, in a generally easterly direction, along the southern right of way of several unnamed roads, to the intersection with a line parallel to and at a distance of 30 metres west of the centre line of an unnamed road, being point 151 (5 621 252 m North, 364 336 m East);

Thence, in a generally southerly direction, along a line parallel to and at a distance of 30 metres west of the centre line of an unnamed road, to the intersection with the eastern bank of an unnamed intermittent stream, being starting point 58.

Having an area of 405.67 square kilometres.

The biodiversity reserve as a whole having an area of 448.96 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), the database of the eco-forest information system (système d'information écoforestière, or SIEF) kept by the MERN, the Québec multi-scale hydrographic basin level 1 maps at a scale of 1:20 000 and 1:50 000 produced by Québec's Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC), and an excerpt from the surveys officialised in the register of lands in the domain of the State as of 19 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 streambank 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 8 (central meridian 79°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 1:60 000.

— 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 23 April 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 536702.

Prepared at Québec on 23 April 2018, under number 11 631 of my minutes.

Digitally signed by:

Pierre Hains,
Land surveyor

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

Direction des aires protégées

MDDELCC file: 5148-06-02(07)

Original filed at the office of the Surveyor-General of Québec.
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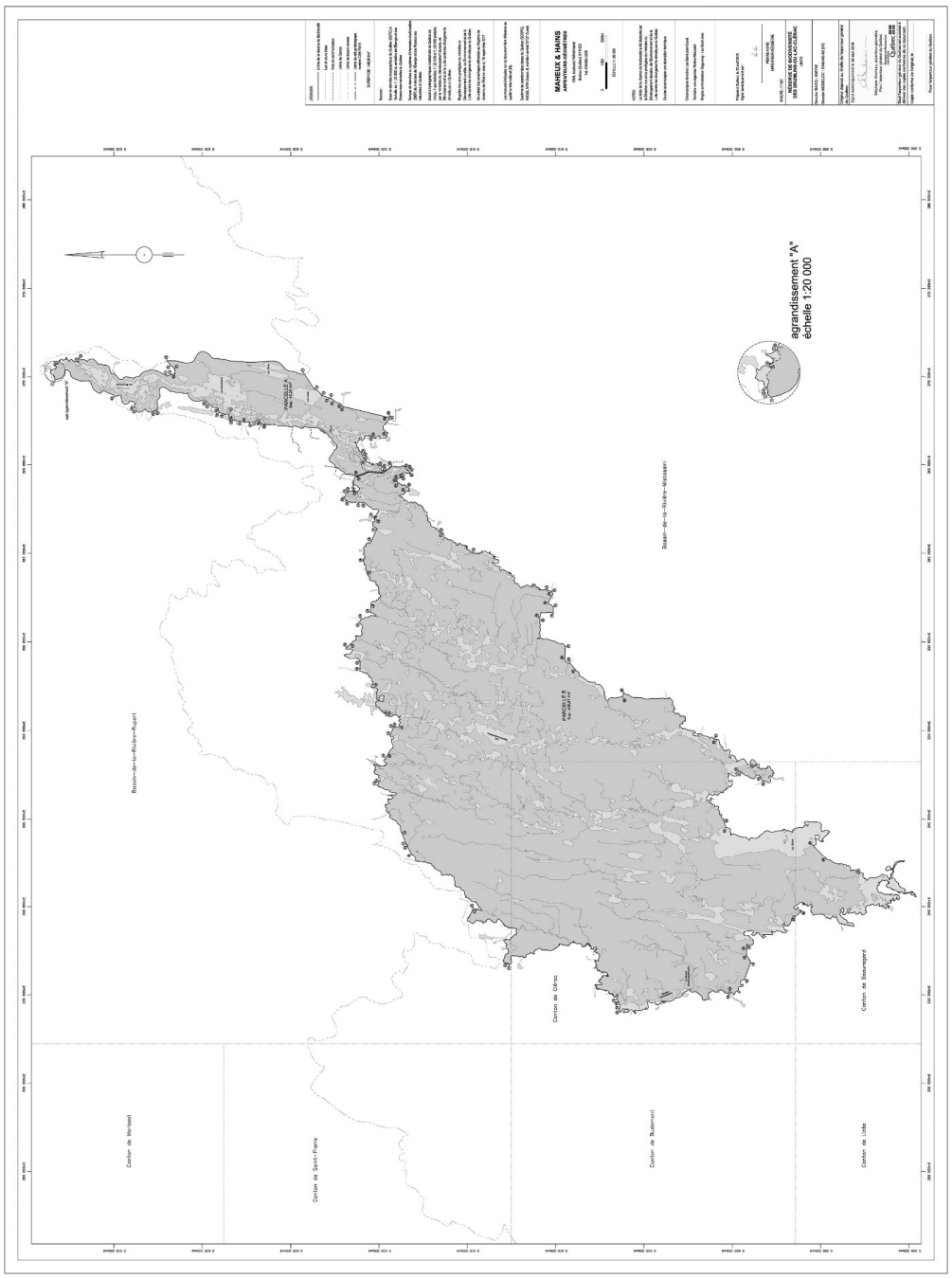
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Canton de Budemont
Canton de Lisgar
Canton de Beauregard
Canton de Clinton
Bassin-de-la-Rivière-Ripert
Bassin-de-la-Rivière-Wilkinson

SCHEDULE II
CONSERVATION PLAN FOR THE RÉSERVE DE BIODIVERSITÉ
DES DRUMLINS-DU-LAC-CLÉRAC

Protected areas
in Québec:

A Lifelong Heritage

Réserve de biodiversité des Drumlins-du-Lac-Clérac

CONSERVATION PLAN

Québec

Cover page photos: woodland caribou: Ministère des Forêts, de la Faune et des Parcs; other photos: André R. Bouchard and Marc-André Bouchard, Ministère de l'Environnement et de la Lutte contre les changements climatiques.

Reference to cite:

Gouvernement du Québec. 2019. Conservation Plan, Réserve de biodiversité des Drumlins-du-Lac-Clérac. Québec, Ministère de l'Environnement et de la Lutte contre les changements climatiques, Direction des aires protégées. 17 pages.

Contents

Introduction

By Order in Council No. 636-2005 of June 23, 2005, 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 des Drumlins-du-Lac-Clérac, and approved the boundaries and conservation plan proposed for it. The creation of this provisional protected area by the ministerial order of July 27, 2005 (2005, G.O. 2, 4072), came into force on September 7, 2005 for a duration of four years. This provisional protection status was extended twice, first until September 7, 2013 by order of the Minister of Sustainable Development, Environment and Parks on July 17, 2009 (2009, G.O. 2, 2233), and then until September 7, 2021 by order of the Minister of Sustainable Development, Environment, Wildlife and Parks on March 13, 2013 (2013, G.O. 2, 769).

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 des Drumlins-du-Lac-Clérac. 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 des Drumlins-du-Lac-Clérac, with the enlargements jointly proposed during hearings by the MDDEP and the Ministère des Ressources naturelles. Additionally, to widen the corridor connecting the reserve to the neighbouring protected area (Réserve de biodiversité projetée Albanel-Témiscamie-Otish), the Ministère de l'Environnement et de la Lutte contre les changements climatiques (MELCC) accepted some of the enlargement proposals made by forestry company Produits Forestiers Résolu during the public hearings of 2012.

1 The territory of Réserve de biodiversité des Drumlins-du-Lac-Clérac

1.1 Official toponym

The toponym "Réserve de biodiversité des Drumlins-du-Lac-Clérac" reflects the presence, near Lac Clérac, of a particular type of moraine[1] called *drumlins*. A drumlin is a rounded hill, semi ovoid or ellipsoidal in shape (like the back of a whale), formed under a moving glacier and oriented in the direction of ice flow (A. Robitaille and M. Allard, 2007).

[1] Moraine: topographic expression of accumulations of glacial sediments of sufficient size to create a relief.

1.2 Boundaries and location

The boundaries and location of Réserve de biodiversité des Drumlins-du-Lac-Clérac are shown on the map comprising Appendix 1.

The reserve is located about 200 km north of the municipality of Dolbeau-Mistassini and 125 km northeast of Chibougamau, between 50°26' and 50°44' north latitude and between 72°42' and 73°06' west longitude. It covers an area of 449 km^2 and is entirely within the administrative region of Saguenay–Lac-Saint-Jean. West of Lac Boudreault, a forest road is excluded from the reserve, dividing the protected area into two sections. The reserve intersects unorganized territories at the extreme north of the municipality of Rivière-Mistassini (Maria-Chapdelaine MRC). In the northeast, the reserve overlaps what is at present Réserve de biodiversité projetée Albanel-Témiscamie-Otish. When the latter is given permanent protection status, with a new name and adjusted boundaries, the boundaries of the reserve will run along two sectors of what will then be called Parc national Nibiischii.

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 Clérac in the southwest), 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 11 631 (April 23, 2018) and filed in the surveying archives of the Surveyor General of Québec (Greffe de l'arpenteur général du Québec), Ministère de l'Énergie et des Ressources naturelles under document number 536702.

1.3 Ecological portrait

1.3.1 Physical environment

The biodiversity reserve is in the northern part of the Central Laurentian natural province (Li, T. and J.-P. Ducruc, 1999[2]). It is in Grenville geological province, but near the contact zone with Superior geological province, to the north, where the general elevation is much higher. Grenville geological province corresponds to the roots of a chain of mountains formed nearly a billion years ago, during the Grenville orogeny. Gneiss, anorthosite and granite dominate the rock foundation. The relief of the reserve and environs is one of the least rugged in the natural province, corresponding to the Lac Manouane Depression natural region. The general physiography of the latter is that of a macro cuesta, the frontslope of which is on the northwest edge (Grenville front). Its relief is dominated by often elongated hollows with thick glacial deposits, separated by small blocks of mounds or isolated hillocks, mostly with a drumlinoid shape and a north/south or northeast/southwest orientation.

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

Like the natural region, Réserve de biodiversité des Drumlins-du-Lac-Clérac presents a fairly even relief, formed essentially of hillocks (25 to 50 metres in height). The elevation generally ranges from 455 to 550 m, except for two low hills (100 to 200 metres in height) northeast of Lac Clérac, whose summits have an elevation of 600 metres.

The dominant surface deposits, of glacial and fluvioglacial origin, are often covered by organic deposits (bogs). Thousands of hectares of bogs dominate the landscape to the west and north of Lac Clérac, where there are also drumlins. Near Rivière Nestaocano, at the western edge of the reserve, the dominant surface deposits are of fluvioglacial origin (proglacial and ice-marginal deposits), along with dunes stabilized by forest stands and one esker. There are also large areas of dead-ice moraine (especially near Lac Kaamichaapuhskau) and of Rogen or ribbed moraine near Lac Boudreault. Less than 30% of the soils of the reserve have good to moderate drainage.

In the last glaciation, the flow of the ice sheet profoundly marked the land. Thus, as with the drumlins, the other surface deposits along with the hydrographic network are generally oriented north/south or northeast/southwest, in the direction of glacial flow. Throughout the eastern half of the reserve, bands of fluvioglacial deposits, aligned northeast/southwest, alternate with bands of glacial deposits (ground moraine with no particular morphology [undifferentiated till]), with countless little areas of organic deposits scattered within them.

The reserve is essentially at the head of Rivière Nestaocano, a tributary of Rivière du Chef, which empties into Rivière Ashuapmushuan. To the northeast, the thinner section connecting the reserve to Réserve de biodiversité projetée Albanel-Témiscamie-Otish (the future Parc national Nibiischii) is at the head of the Rivière Mistassini watershed. The northeast and northwest boundary is very close to the height of land separating the great watersheds of the St. Lawrence and James Bay (via Rivière Rupert). As a result, the reserve's aquatic ecosystems, wetlands and near-shore environments have outstanding ecological integrity. Water bodies are abundant, accounting for nearly 16% of the area of the reserve, though only lakes Clérac, Kaamichaapuhskau, Boudreault, Minie, Jules and Atshikash ("mink lake" in Innu) and Rivière Nestaocano have official toponyms.

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 mm to 1359 mm, while the average growing season is 150 to 179 days.

1.3.2 Biological environment

Vegetation: Though located in the heart of the spruce/moss bioclimatic domain, the reserve has very few productive wooded areas: in 57 % of the reserve there are no forests at all (Table 1), while nearly half of the areas that do have forest present poor drainage conditions. Black spruce stands (often of low density) predominate, along with dry barrens. Grey pine stands (also often of

low density) are well represented, associated with fluvioglacial deposits and dead-ice moraine.

Table 1: Forest summary of the territory of Réserve de biodiversité des Drumlins-du-Lac-Clérac (MFFP, SIEF, 4th ten-year survey)

Type of cover		Area (ha)	Proportion (%)
Forest	Coniferous	22 642.3	50.4%
	Regenerating	1542.6	3.4%
	Alder stands	433	1.0%
	Wet barrens	8990.5	20.0%
Other	Dry barrens	4095.3	9.1%
	Water	7097.6	15.8%
	Island	48.1	0.1%
	Flooded	55.6	0.1%
Total		44 911	**100.0%**

The rare stands of balsam fir are confined to the slopes of the two low hills northeast of Lac Clérac. The bogs are immense, sometimes structured and very abundant to the west and north of Lac Clérac, while heathlands are common in the central part of the reserve. In 1996 a fire burned nearly 1000 hectares of forest along the western edge of the reserve. Old-growth forest (> 90 years) accounts for 61% of the forest cover, yet represents just 30% of the total area of the reserve, due to the abundance of non-forest environments (water, wetlands and barrens). A quarter of the wooded areas have poor drainage (levels 4, 5 and 6), and 92.8% are of low density (levels C and D). The reserve includes a territory designated as a “biological refuge” (#02551R146, see Appendix 3) under the Sustainable Forest Development Act. Created in 2008, the refuge has preserved old-growth forest since then.

No plant survey specific to the territory of the reserve has been done, but in 1990 observations were made at several ecological sampling points (Table 2), to the east of Lac Clérac and west of Lac Boudreault. Besides the species listed in Table 2, the MELCC also identified early meadow-rue (*Thalictrum dioicum*), shrubby cinquefoil (*Potentilla fructicosa*) and narrowleaf gentian (*Gentiana linearis*) in an inventory conducted in 2008.

Wildlife: With regard to wildlife, no survey specific to the territory of the reserve has been done, but telemetric monitoring has confirmed that woodland caribou frequent almost all of the reserve, both in winter and during the rut and calving periods. The woodland caribou is considered a threatened species across Canada and vulnerable in Québec. The territory of the reserve is thus included in the area of application of the *Plan de rétablissement du caribou forestier (Rangifer tarandus caribou) au Québec — 2013-2023* (ÉRCFQ, 2013) (recovery strategy for woodland caribou, boreal population).

Table 2: Species identified at 6 ecological observation points surveyed for the ecological inventory program of the MFFP (1986-2000).

Tree species	Black spruce (*Picea mariana*), grey pine (*Pinus banksiana*), balsam fir (*Abies balsamea*)
Shrubs	Speckled alder (*Alnus incana subsp. rugosa*), serviceberry (*Amelanchier sp*), willow (*Salix sp*)
Small shrubs and understorey herbaceous plants	Lowbush blueberry (*Vaccinium angustifolium*), velvet-leaf blueberry (*Vaccinium myrtilloïdes*), dwarf birch (*Betula glandulosa*), sedge (*Carex sp*), leatherleaf (*Cassandra calyculata*), creeping snowberry (*Gaultheria hispidula*), bluebead lily (*Clintonia borealis*), threeleaf goldthread (*Coptis groenlandica*), sheep laurel (*Kalmia angustifolia*), swamp laurel (*Kalmia polifolia*), labrador tea (*Rhododendron groenlandicum*), stiff clubmoss (*Lycopodium annotinum*), Canada mayflower (*Maïanthenum canadense*), cloudberry (*Rubus chamaemorus*)
Mosses, lichens and horsetails	Greater whipwort (*Bazzania trilobata*), green reindeer lichen (*Cladina mitis*), grey reindeer lichen (*Cladina rangiferina*), northern reindeer lichen (*Cladina stellaris*), fork moss (*Dicranum sp*), horsetail (*Equisetum sp*), glittering woodmoss (*Hylocomium splendens*), red-stemmed feathermoss (*Pleurozium Schreberi*), knights-plume moss (*Ptilium crista-castrensis*), haircap moss (*Polytricum sp*), rusty bogmoss (*Sphagnum fuscum*), Girgensohn's bogmoss (*Sphagnum girgensohnii*), peat moss (*Sphagnum sp.*)

Two other vulnerable species, the red bat (*Lasiurus borealis*) and southern bog lemming (*Synaptomys cooperi*) have been sighted near the biodiversity reserve.

In terms of aquatic wildlife, Lac Clérac is home to lake whitefish (*Coregonus clupeaformis*), yellow perch (*Perca flavescens*), walleye (*Sander vitreus*) and sculpin (*Cottus sp.*). White sucker (*Catostomus commersonii*), northern pike (*Esox lucius*) and fallfish (*Semotilus corporalis*) have also been found in the reserve.

1.3.3 Ecological representativeness

Réserve de biodiversité des Drumlins-du-Lac-Clérac is in the Lac Manouane Depression natural region, in the western part of the central Laurentian natural province. Elongated in shape, this natural region has a southwest/northeast orientation. It underlies the western part of the spruce/moss bioclimatic domain, extending all the way from the fir/white birch domain in the southwest (lakes Ashuapmushuan and Chigoubiche), almost to the taiga in the north, near Rivière Témiscamie-Est and the Monts Otish.

The reserve is in the physiographic complex of the Lac à l'Eau Froide mounds, which is at the confluence of three large watersheds: Rivière Témiscamie (which flows toward James Bay via Rivière Rupert), Rivière Ashuapmushuan and Rivière Mistassini, which both empty into the St. Lawrence (via Lac Saint-Jean and Rivière Saguenay). The territory of the reserve corresponds essentially to a depression, a topographic situation reflected by the ecosystems there. The proportion of aquatic environments (16%) is higher than the average for the natural region (11%), and much of the territory is poorly drained. Thus the reserve contains a good sample of aquatic ecosystems, including wetlands and near-shore environments, and a good sample of unproductive forest environments (low density or poor drainage). There is not much productive forest of the kind used by the forestry industry.

1.3.4 Ecological zones

Based primarily on the distribution of surface deposits, the reserve can be divided into four distinct ecological zones, from west to east, as shown in the map comprising Appendix 2.

Zone I: Rivière Nestaocano ecological zone (32.2 km^2)

At the western edge of the reserve, the dominant surface deposits are of fluvioglacial origin (proglacial and ice-marginal deposits). The relief is almost completely flat, except for some dunes stabilized by stands of grey pine and black spruce, a few eskers, and a mound near Rivière Nestaocano. A number of water bodies meet in this zone, notably in the sector named Confluent Maatauwaaskuyau. In 1996 a fire swept across nearly 1000 hectares in this part of the reserve.

Zone II: Drumlins ecological zone (149.2 km^2)

This ecological zone extends from Lac Clérac north and consists almost entirely of immense ombrotrophic bogs, often structured in pools or strings, along with stands of black spruce/sphagnum moss. Numerous drumlins emerge from these deposits, rising to barely a few metres above the surrounding fen. This type of moraine is elongated, aligned in parallel with the flow of the ice sheet, here with a north/south or slightly northeast/southwest orientation. The drumlins are generally covered with stands of black spruce over 100 years old. Dead-ice moraine is abundant in the southern part of this zone.

Zone III: Lac Kaamichaapuhskau ecological zone (188.5 km^2)

This ecological zone covers the central part of the protected area. It is chiefly characterized by the presence of a great number of small, narrow bodies of water with a north/south or northeast/southwest orientation.

Lac Kaamichaapuhskau lies in the centre of this zone, in an area with little relief and abundant lakes, generally aligned north/south or northeast/southwest. The deposits are varied (glacial, fluvioglacial, dead-ice moraines and organic deposits), mostly with unproductive cover of the “dry barrens” type, the only trees being grey pine (for the most part) or black spruce.

In the southern part of this zone, a few low hills and mounds support forest ecosystems that could be called productive in terms of woody matter. In 1991 a small fire burned just over 100 hectares to the west of Lac Kaamichaapuhskau. West of this lake there are several eskers.

Zone IV: Connectivity corridor ecological zone (79.2 km^2)

The easternmost portion of the biodiversity reserve connects up with Réserve de biodiversité projetée Albanel-Témiscamie-Otish (the future Parc national Nibiischii) and will allow wildlife to move safely between the two protected areas. Thick glacial deposits dominate in the southwest, while in the northeast the shores of Lac Boudreault are surrounded by organic and fluvioglacial deposits, along with Rogen and dead-ice moraine. Dry and wet barrens define the landscape, along with black spruce stands. A

forest road traverses the zone, and logging was done on about 2% of it (170 ha) between 2003 and 2015. Use of this road should be harmonized with the woodland caribou's life cycle.

1.3.5 Outstanding ecological elements

The exceptional ecological integrity of all the ecosystems present in the reserve is in itself an outstanding feature. In the boreal forest, most productive forest territory has been or will soon be subjected to logging. Réserve de biodiversité des Drumlins-du-Lac-Clérac protects forest ecosystems that have never been disturbed by industrial activities, and include sizeable areas of old-growth forest.

Forest development is gradually changing the landscapes of the boreal forest. Mature and over-mature forests will become increasingly rare as average forest age decreases. An important contribution of the biodiversity reserve will therefore be provide a quality habitat for species that thrive in mature and over-mature forests.

Apart from woodland caribou, according to the Centre de données sur le patrimoine naturel du Québec (2015) no plant or animal species that is threatened, vulnerable or likely to be so designated has been observed on the territory of the reserve. However, since no survey has been done of its plant and animal life, the absence of such species other than woodland caribou cannot be assumed.

1.4 Land occupation and uses

Réserve de biodiversité des Drumlins-du-Lac-Clérac is very remote and only accessible by forest road. West of Lac Boudreault, the forest road that cuts the reserve in two constitutes the main access to the eastern part of the protected area. Other forest roads offer access to the west bank of Rivière Nestaocano and the south and east shore of Lac Clérac, without entering the reserve itself. Thus, practically all of the reserve can only be reached by air or water (mainly Lac Clérac and Rivière Nestaocano).

The activities carried out on the territory of the reserve are primarily those of the Pekuakamiulnuatsh and the Cree of Mistissini. They are shown on the map comprising Appendix 3.

The Ministère de l'Énergie et des Ressources naturelles (MERN) has granted a single resort lease on the territory, plus there is an automated weather station operated by Rio Tinto Alcan on the western shore of Lac Clérac (a lease for purposes of meteorological instrument). Additionally, Rivière Nestaocano is a recognized canoe-kayak route (FQCK, 2005).

The reserve is located entirely within the Nitassinan of the Innu of 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*. It is south of the territory covered by the James Bay and Northern Québec Agreement. Certain terms and conditions of the Agreement to resolve the Baril-Moses forestry dispute between the Cree Nation of Eeyou Istchee and the Government of Quebec apply on the territory of Réserve de biodiversité des Drumlins-du-Lac-Clérac. The same applies to the Entente concernant certains

enjeux forestiers et fauniques entre la Première Nation des Pekuakamiulnuatsh et le gouvernement du Québec (Agreement concerning certain forestry and wildlife issues between the Pekuakamiulnuatsh First Nation and the Government of Quebec[3]). More than 90% of the territory of Réserve de biodiversité des Drumlins-du-Lac-Clérac overlaps with the Mistassini beaver reserve, the remainder being included in the Roberval beaver reserve. Only Indians and Inuit may hunt or trap fur-bearing animals in these two beaver reserve.

1.4.1 Particular heritage elements

According to Pekuakamiulnuatsh Takuhikan, many documents refer to the occupation of this land by the Pekuakamiulnuatsh (Montagnais of Lac-St-Jean), including the 1980 study by the Conseil Atikamewk Montagnais conducted for the Comprehensive Land Claim Negotiations. This study revealed that in the 1930s they travelled as far as Lac Témiscamie. In the 1960s, Ilnuatsh families (i.e. Montagnais families) lived on the shores of Lac Clérac, as shown by the presence of gravesites as well as Ilnu and Cree toponyms. Names were given to places where people often went. They refer to water courses, camp sites, portages and other topographical elements like mountains, islands, rapids or the mouths of rivers. A large number of toponyms in a given area can be a sign of archeological potential (Lac Clérac, Lac Beauregard and Lac à l'Eau Froide).Conservation and management issues

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. Based on the information presented in section 1, the conservation and other issues to be taken into account for Réserve de biodiversité des Drumlins-du-Lac-Clérac, and the orientations and objectives to which they give rise, are set out in the sections that follow.

2.2 Protection of biodiversity

The remoteness and inaccessibility of the territory of Réserve de biodiversité des Drumlins-du-Lac-Clérac are such that there is very little human footprint on its present-day ecosystems, which have a very high degree of ecological integrity.

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)

[3] Free translation

Additionally, since it is at the head of two watersheds, in an area where human activities are almost nil, the ecological integrity of the reserve's terrestrial, aquatic and wetland environments is also very high. The water quality of the lakes and rivers is particularly exceptional. The first conservation issue for the reserve will therefore be to maintain the ecological quality of its terrestrial, aquatic, wetland and near-shore environments.

The second conservation issue stems from the presence of woodland caribou, a species that is intolerant of human presence. The abundant bogs, dry barrens, conifer/lichen stands (often very old), with a few dense old-growth forests, offer all the habitat components needed by woodland caribou. To improve the status of the species by maintaining viable herd size and adequate recruitment, Québec's woodland caribou recovery team (ÉRCFQ) believes that it is essential to reduce the human footprint throughout the animal's range. The creation of the biodiversity reserve will contribute to that end insofar as the impact of human activities is reduced.

The third conservation issue concerns the objective of preserving a representative sample of the ecosystems of the Lac Manouane Depression natural region. The reserve contains a good sample of aquatic, wetland and near-shore environments. It also contains a few examples of productive woodlands, including the old balsam fir stands on the slopes of the two low hills northeast of Lac Clérac. All of these ecosystems have an exceptional level of ecological integrity.

The three conservation issues mentioned above converge toward a management approach that restricts human intervention as much as possible. Achieving that objective will be facilitated by the fact that the territory of the reserve is relatively inaccessible and little used.

2.3 Knowledge acquisition and environmental monitoring

Specific objective:

- ***Conduct plant and wildlife surveys and monitor the general evolution of ecosystems***

Very little is known about the flora and fauna of Réserve de biodiversité des Drumlins-du-Lac-Clérac. Accordingly, the MELCC intends to work with various partners to carry out specific surveys to learn more about the biodiversity of these natural environments. Among others, the MELCC will work with the Ministère des Forêts, de la Faune et des Parcs (MFFP) to monitor the woodland caribou herd that frequents the reserve, and to measure the reserve's contribution to maintaining viable herd size, maintaining adequate recruitment, and facilitating the circulation of caribou between Réserve de biodiversité des Drumlins-du-Lac-Clérac, Réserve de biodiversité projetée Albanel-Témiscamie-Otish, and the surrounding developed forest.

2.4 Conservation and management objectives

Réserve de biodiversité des Drumlins-du-Lac-Clérac is a "protected area" as defined in the *Natural Heritage Conservation Act*, and appears in the *Registre des aires protégés 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 increases the representativeness of the national and regional protected areas network, since it holds many ecological components of interest that are representative of the characteristic ecosystems of the Lac Manouane Depression natural region. For the government, the protection of these components and ecosystems, described in section 1.3, is a major objective. Accordingly, taking into account the issues explained in sections 2.1 and 2.2 of the present plan, the principal conservation and management objective for the reserve is: *Preserve the ecological integrity of the ecosystems present in the biodiversity reserve*.

To accomplish this, the MELCC will have to ensure that there continues to be only limited access to the territory, to avoid allowing usage to increase beyond the current level. This should also contribute to maintaining a quality habitat for the woodland caribou. However, by itself the reserve is not large enough to ensure the protection of the woodland caribou, which needs multiple interconnected protected areas ranging from 5000 to 13 000 km² (Schneider 2001, Wilkinson 2008). The enlargement of the initial project to connect it to the future Parc national Nibiischii (currently Réserve de biodiversité projetée Albanel-Témiscamie-Otish), should encourage circulation between the two protected areas, provided that the caribou are willing to cross the forest road that traverses the corridor. This will depend largely on how much the road is used during certain parts of the year. In light of the road avoidance behaviour described in several studies (ÉRCFQ, 2013), the effectiveness of the corridor is far from certain. This makes it all the more important that forest planning be adapted to the presence of woodland caribou in and around the reserve. This will improve the long-term chances of maintaining the herds that frequent the area.

The principal objective stated earlier (to preserve the ecological integrity of the ecosystems of the reserve) will allow the continued pursuit of traditional activities by the Aboriginal communities that frequent the land, as well as activities by the two holders of existing land rights. However, these activities must be practised in accordance with the applicable laws and regulations as well as treaties or agreements signed between the government of Québec and the Aboriginal communities concerned.

To achieve the objectives set out above, the conservation and management of Réserve de biodiversité des Drumlins-du-Lac-Clérac will be guided by an activity framework whose several dimensions are set out in sections 4, 5 and 6 of this plan.

3 Zoning

Since the territory of Réserve de biodiversité des Drumlins-du-Lac-Clérac is very little used, the MELCC does not propose management zoning.

4 Activity framework applicable to Réserve de biodiversité des Drumlins-du-Lac-Clérac

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

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 des Drumlins-du-Lac-Clérac

Accordingly, the provisions set out in Regulation respecting the Réserve de biodiversité des Drumlins-du-Lac-Clérac 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.mddelcc.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 des Drumlins-du-Lac-Clérac. 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 des Drumlins-du-Lac-Clérac. 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 difficult to access and little used, the MELCC intends to take a minimal approach to management. Signage and surveillance will be very limited.

6.2 Monitoring

As mentioned in section 2, “Conservation and management issues”, measures will be taken toward monitoring the status of the natural environment, in collaboration with the various

stakeholders. The MELCC particularly wishes, in collaboration with the Ministère des Forêts, de la Faune et des Parcs, to evaluate the contribution of the reserve to maintaining the woodland caribou herds that frequent the area. For example, the following parameters could be documented:

- Evolution of caribou numbers
- Level of recruitment by herds
- Circulation of woodland caribou between Réserve de biodiversité des Drumlins-du-Lac-Clérac, the future Parc national Nibiischii, and the surrounding developed forest

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 Maria-Chapdelaine, the Aboriginal communities whose members frequent the area, the holders of land rights and the regional units of other government departments that have responsibilities in the biodiversity reserve.

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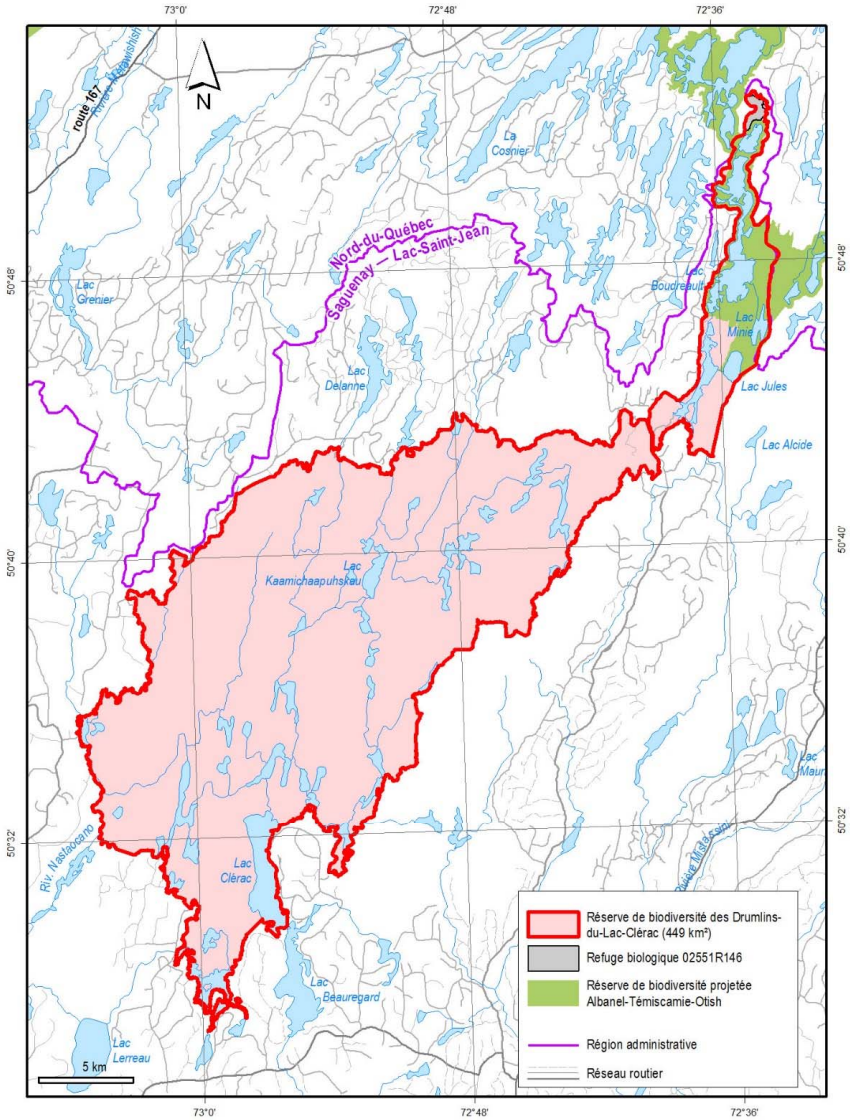
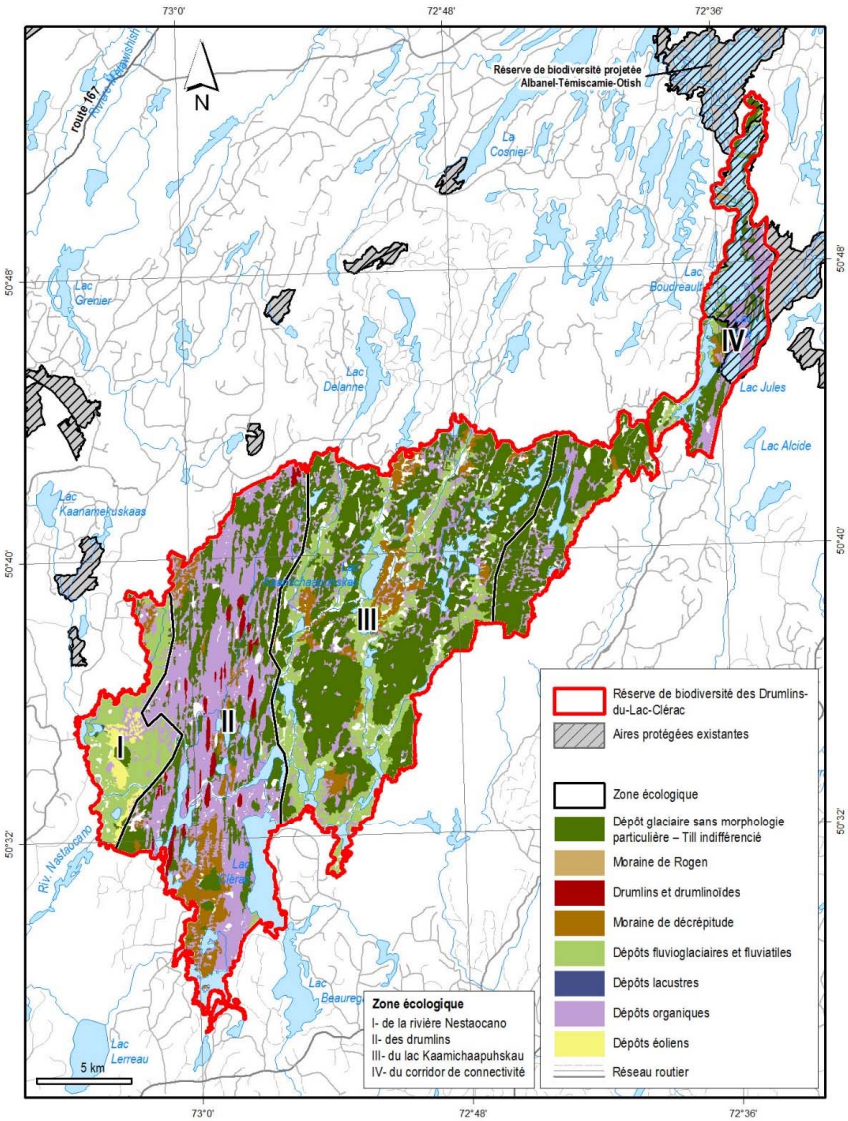
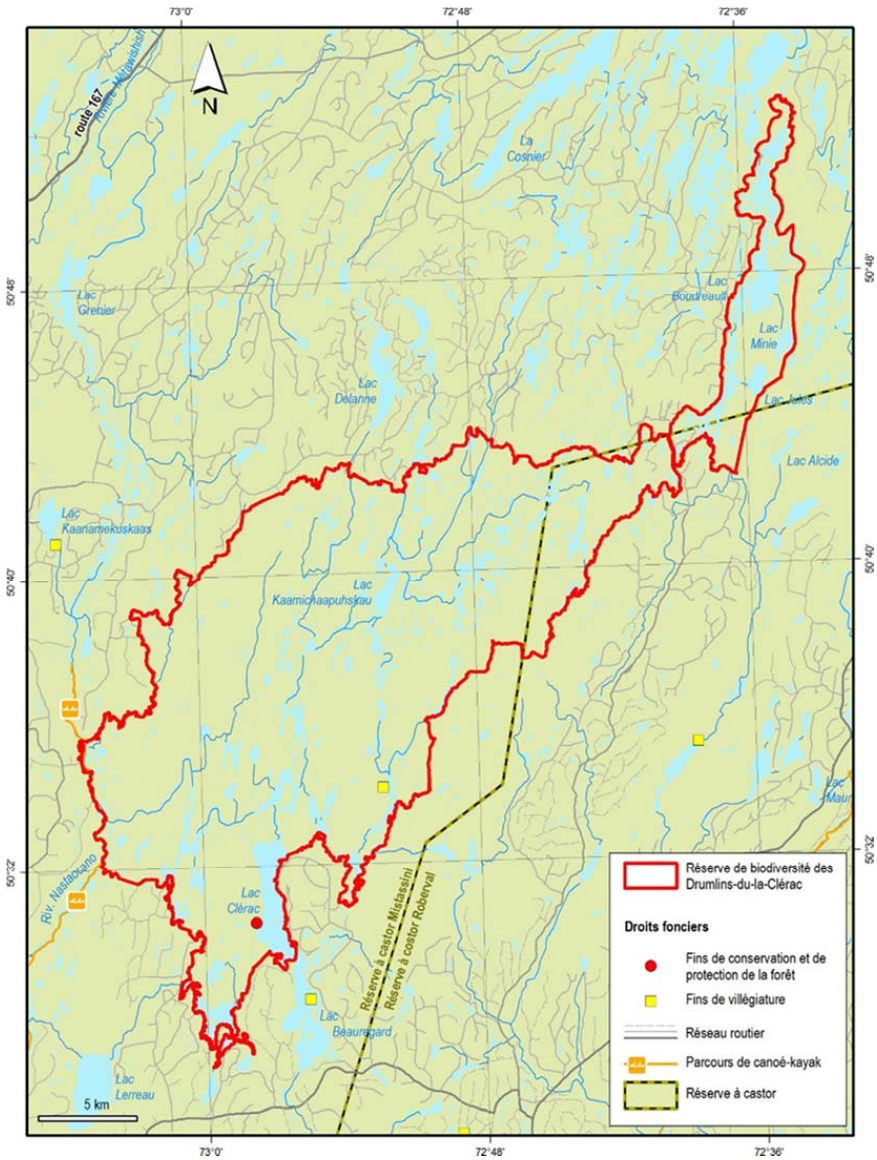
Appendix 1 - Boundaries and location



Appendix 2 — Ecological zones



Appendix 3 — Occupation and uses



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