

QUÉBEC STRATEGY FOR PROTECTED AREAS



Réserve aquatique projetée du Banc-des- Américains

Conservation plan

April 2021

Québec 

1. Protection status and toponym

The governments of Québec and Canada have agreed to ensure the preservation of the Banc-des-Américains area in Gaspésie, by jointly creating a marine protected area (MPA). To that end, on March 4, 2019, they concluded a bilateral agreement under which a marine reserve will be created under the responsibility of the Ministère de l'Environnement et de la Lutte contre les changements climatiques, and a marine protected area under the responsibility of Fisheries and Oceans Canada. The boundaries and zoning of the territory for protection status will be the same in both cases. The two governments have also agreed to create a management committee to harmonize their respective interventions in the Banc-des-Américains Marine Protected Area.

A proposed aquatic reserve is a legal protected status governed by sections 27, 29-31, 33 and 34 of the *Natural Heritage Conservation Act* (chapter C-61.01), as it reads on March 18, 2021. The envisaged permanent marine protected area status is also governed by this law.

The principal objectives of Réserve aquatique projetée du Banc-des-Américains are to preserve a marine area of exceptional ecological value in the Gulf of St. Lawrence, to protect an underwater relief unlike any other in the Estuary and Gulf of St. Lawrence natural province, to preserve its biodiversity and to promote the recovery of threatened and vulnerable species.

The provisional toponym for the territory is “Réserve aquatique projetée du Banc-des-Américains.” The official toponym will be determined when the territory is given permanent protection status.

2. Plan and description

2.1. Geographical location, boundaries and dimensions

The boundaries and location of the proposed aquatic reserve are shown on the map in Schedule 1.

The proposed aquatic reserve lies to the east of the Gaspé Peninsula, in the administrative region of Gaspésie–Îles-de-la-Madeleine, between 48° 29' and 48° 45' north latitude and between 63° 40' and 64° 08' west longitude. It straddles territory in the municipalities of Gaspé to the north and Percé to the south, which lie in the regional county municipalities of La Côte-de-Gaspé and Le Rocher-Percé respectively.

The proposed aquatic reserve encompasses the rocky ridge, peaks and escarpments of Banc-des-Américains, part of the adjacent plains, and a portion of the infra littoral zone to the west. Rectangular in shape, it includes the water column, seabed and subsoil to a depth of five meters, and has an area of about 1000 km².

2.2. Ecological overview

Banc-des-Américains is an underwater relief extending from Forillon Peninsula on the south flank of the Laurentian Channel. Lying 6 kilometers from Cap Gaspé, its ridge is nearly 34 kilometers in length, extending to the southeast and terminating by a rocky cliff and two undersea adjacent plains. Depth varies between 12 meters at the summit of the ridge and an average of 90 meters on the southwest plain, to an average of 140 meters on the northeast plain. Among the various trenches scattered around the crest, the deepest reach up to 200 meters in depth. The ridge and cliff feature a compacted substrate. The gentlest slopes and adjacent plains are, as a rule, covered by sandy sedimentary rock and ooze. In the northeast, the proposed reserve is crossed by glacial furrows 6 meters in depth and over a kilometer in length. Based on the ecological reference framework for Québec, there is no other ecosystem assembly of this nature in the Estuary and Gulf of St. Lawrence natural province.

The proposed aquatic reserve is influenced by the Gaspé Current, which rises in the maritime estuary and follows the Gaspé Peninsula out to some twenty nautical miles offshore. The current primarily affects the first 50 meters of the upper layer of water. In the area of the shoal, the tidal current has an average speed of one knot, with a tidal range of up to 1.8 meters in the highest tides. Surface water temperatures range from -1 °C in winter to 16 °C in summer, while they are relatively stable in depth with values ranging from -3°C to 3°C. Salinity varies from 26 to 32 PSU in the surface water layer due to freshwater input from the Gaspé Current, while remaining relatively constant at 32 to 34 PSU in deep water (below 50 meters).

The Gaspé Current carries significant quantities of nutrients and plankton—consisting of diatoms, dinoflagellates, krill, invertebrate larvae and fish—which are held around Banc-des-Américains by a counterclockwise gyre. This oceanographic phenomenon, associated with a wide range of habitats (ridges, escarpments, cliffs, trenches, plains, etc.) and the water stratification during spring and summer, result in high biological productivity.

The area is characterized by a marked diversity and wealth of benthic fauna. Distinctive ridge, plain and cliff sector assemblages can be observed in the proposed reserve. In shallower water (<100 meters) Ophiuroidea is dominant, while at greater depth, shrimp and other arthropods are more abundant. For example, on the ridge, highly dense colonies of frilled anemone have been observed in association with bushy hydrozoans, red algae, sea cucumbers and fish of the cottidae family. The cliff favours the stratification of sessile species such as anemones, sponges, sea urchins and starfish. Within the proposed reserve, snow crab, American lobster, rock crab, waved whelk, Iceland scallop and northern shrimp can be found. The planktonic and benthic biomass of Banc-des-Américains attracts a wide variety of pelagic and groundfish species. Some of these species are abundant, including Atlantic cod, Atlantic halibut, Greenland halibut, witch flounder, deepwater redfish, Acadian redfish, capelin, Atlantic herring and Atlantic mackerel. Species that may frequent the area include American shad designated as vulnerable pursuant to the *Act respecting threatened or vulnerable species* (chapter E-12.01) and several species likely to be

designated as threatened or vulnerable, including Atlantic sturgeon, American eel, striped bass, sea trout, Arctic rainbow smelt, alewife, salmon, Atlantic, spotted and northern wolffish, Atlantic cod (Laurentian South population), porbeagle shark, blue shark and winter skate.

Réserve aquatique projetée du Banc-des-Américains is also a feeding ground or migration route for a number of species of marine mammals. Eighteen species may potentially frequent the area at one point or another over the course of a year. The most common are the humpback whale, blue whale, fin whale, minke whale, Atlantic white-sided dolphin, harbour porpoise, harbour seal and grey seal. According to the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), some species are endangered, such as the North Atlantic right whale, Atlantic Blue Whale and Beluga of the St. Lawrence Estuary, which may be observed in the area. The killer whale, an occasional visitor to the waters bordering the Banc-des-Américains, is considered a species of concern.

Small numbers of leatherback turtle (the largest turtle in the world) likely frequent the Banc-des-Américains area, particularly from June to October. This species is considered threatened in Québec under the *Act respecting threatened or vulnerable species*.

The Banc-des-Américains area is highly prized by sea birds that nest on the cliffs nearby and on Bonaventure Island, Percé Rock and the islands scattered along the Gaspé coast. The proposed aquatic reserve is especially valuable as a feeding ground for many species, such as the northern gannet, Atlantic puffin, razorbill, common murre, black guillemot, Leach's storm-petrel and black-legged kittiwake. Other, rarer pelagic species, such as northern fulmar, great shearwater, Wilson's storm-petrel and ivory gull, may also be present from August to October. From autumn to spring, large gatherings of common eider, red-breasted merganser, common goldeneye, long-tailed duck and black, velvet and surf scoter can be observed off the coast of the peninsula. During this period, other birds regularly seen are king eider, harlequin duck and Barrow's goldeneye, the latter two being designated as vulnerable under the *Act respecting threatened or vulnerable species*.

2.3. Land occupation and uses

Various indigenous groups settled in the Gaspé-Percé area during the prehistoric era to take advantage of the rich plant and wildlife resources of the Banc-des-Américains. European fishermen learned of this region at the beginning of the 16th century, with the first Québec fishing settlements appearing in the 17th century. Throughout the New France era, the cod fishery supplied the markets of Montréal, Québec City and France with sustenance that was both inexpensive and easy to store. After the conquest of New France, the fishery continued to grow, with large numbers of new settlements making it possible to both exploit the traditional fish resource and develop whaling.

The toponym “Banc-des-Américains” refers to the days when flotillas of fishing boats from the United States frequented the area to fish for cod. In the 1990s, a moratorium was placed on cod fishing due to the increasing rarity of stocks. Commercial fishers turned to snow crab, and to a lesser extent, Atlantic halibut, Greenland halibut and shrimp. There are around ten mariculture sites in Gaspé Bay, but none in the proposed aquatic reserve.

The proposed reserve is free of maritime infrastructures (ports, docks, marinas, etc.), submarine cables and hydrocarbons licenses. Along the coast between Gaspé and Rivière-au-Renard there are thirteen ports, primarily serving the needs of commercial fishers, sport fishers and recreational boaters.

On the periphery of the proposed reserve, there are multiple terrestrial protected areas. They include Parc national de l'Île-Bonaventure-et-du-Rocher-Percé, Forillon National Park, a migratory bird refuge and more than fifteen wildlife habitats (waterfowl gathering areas, seabird nesting cliffs, etc.). The proposed reserve consolidates the regional network of protected areas by strengthening conservation in a marine territory of exceptional biodiversity.

Due to its distance from the coast, the proposed reserve has few activities except for marine mammal observation cruises, boat fishing and recreational boating. However, it is regularly crossed by commercial vessels, including freighters, cruise ships and fishing boats.

The inventory drawn up by the Ministère de la Culture et des Communications currently lists only five archaeological sites within the boundaries of the proposed aquatic reserve. However, it is presumed that the reserve actually has major archaeological potential due to the historical importance of the Banc-des-Américains and the large number of sunken ships that probably lie in its waters. The shipwrecks bear witness not only to exploitation of the resource, but also to commerce and sea traffic that became rooted in the area over the centuries.

3. Zoning

Considering the use of the territory, the types of ecosystems and the protection and management objectives targeted in Réserve aquatique projetée du Banc-des-Américains, the area has been subdivided into two zones. The boundaries of the zones are shown in Schedule 2.

The zones are:

- Zone 1: Banc-des-Américains ridge
- Zone 2 (2a and 2b): Adjacent plains

Zone 1: Banc-des-Américains ridge

Zone 1 consists of Banc-des-Américains proper, a submarine elevation occupying about 126 km², roughly 10% of the area of the proposed aquatic reserve. It is the richest in biodiversity, as well as being the most fragile. It therefore requires the most restrictive management measures, particularly with regard to activities that could affect the seabed.

Zone 2 (2a and 2b): Adjacent plains

Zone 2 (2a and 2b) is composed of two sections that correspond to the plains adjacent to Banc-des-Américains. It covers about 874 km², which is nearly 90% of the total area of the proposed aquatic reserve.

The Ministère will take both overall zoning and the particular features of each zone into account both in its management of the proposed reserve and when studying authorization various requests for authorization of activities or development work. The activities framework in section 4 provides different restrictions for the two zones.

With respect to the permanent aquatic reserve, the conservation measures and zoning associated with the various levels of protection that have been proposed are identical to those set aside during the proposed reserve process.

4. Activities framework

§ Introduction

The purpose of the proposed aquatic reserve is to protect natural environments composed mainly of water, in particular because of the exceptional value they represent scientifically or for the biodiversity conservation of their biocenosis and their biotopes. Activities that may have a significant impact on biodiversity, particularly industrial activities, are prohibited. The proposed aquatic reserve must be considered to be a territory dedicated to the protection of the natural environment, the discovery of nature and recreation.

Activities carried on within the proposed aquatic reserve are governed mainly by the Natural Heritage Conservation Act. Under section 34 of the Act, as it reads on 18 March 2021, the main activities prohibited in a territory to which status as a proposed aquatic reserve has been assigned are

- mining, and gas or petroleum development; and
- the development of hydraulic resources and any production of energy on a commercial or industrial basis.

Although fundamental for the protection of the territory and ecosystems therein, the prohibitions are not always sufficient to ensure the protection of the natural environment and good management of the proposed aquatic reserve. The *Natural Heritage Conservation Act* makes it possible to specify in the conservation plan the legal framework applicable in the territory of the proposed aquatic reserve.

This section provides for prohibitions in addition to those already applicable in the territory of the Réserve aquatique projetée du Banc-des-Américains, under the Natural Heritage Conservation Act. It also sets out the conditions under which certain activities are permitted or may be authorized by the Minister, in conformity with the principles of conservation and other objectives of management of the proposed aquatic reserve. A greater number of prohibitions apply in zone 1 of the reserve since the ecosystems and habitats in that zone of the reserve are more fragile than those in zones 2a and 2b. Certain activities prohibited in zone 1 are, in zones 2a and 2b, subject to an authorization from the Minister.

§ Prohibitions, prior authorizations and other conditions governing certain activities in the Réserve aquatique projetée du Banc-des-Américains

Chapter I – Prohibited activities

4.1 In addition to the activities referred to in subparagraph 1 of the first paragraph of section 34 of the Natural Heritage Conservation Act, as it reads on 18 March 2021, the following activities are prohibited in zones 1, 2a and 2b of the proposed aquatic reserve:

- (1) mining, gas and petroleum exploration, brine and underground reservoir exploration, prospecting, and digging or boring even where those activities do not necessitate stripping, the digging of trenches or excavation;
- (2) the transportation of mineral substances and hydrocarbons;
- (3) the transmission, transformation and distribution of energy on a commercial or industrial basis;
- (4) aquaculture;
- (5) the use of fertilizers, fertilizing materials and pesticides;
- (6) the introduction of faunal and plant specimens and individuals of non-native species into the environment;
- (7) any other activity likely to degrade the soil or a geological formation or otherwise affect the integrity of the marine environment, in particular by stripping, the digging of trenches or excavation work.

Chapter II – Activities requiring an authorization

- 4.2 In zones 1, 2a and 2b of the proposed aquatic reserve, the following activities are subject to an authorization:
- (1) scientific research and ecological monitoring;
 - (2) activities carried out for the maintenance of biodiversity;
 - (3) educational activities;
 - (4) commercial tourism.

- 4.3 An application for authorization must contain the information listed in Schedule 3. The Minister may require an applicant to provide any information or document the Minister considers is necessary to examine an application or make an authorization subject to appropriate conditions, including the requirement to provide a financial guarantee.

Chapter III – Activities permitted

- 4.4 In addition to the activities referred to in subparagraph 2 of the first paragraph of section 34 of the Natural Heritage Conservation Act, as it reads on 18 March 2021, the following activities are permitted in zones 1, 2a and 2b of the proposed aquatic reserve:

- (1) activities for ensuring public safety or the application of the Act, or for responding to an emergency;
- (2) activities carried out by a member of an Aboriginal community where the activities are 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.

5. Activities governed by other laws

Some activities that may potentially be carried out in the proposed aquatic reserve are also governed by other applicable legislative and regulatory provisions, and may require a permit, authorization or the payment of fees. Some activities could be prohibited or limited under other laws or regulations applicable within the proposed aquatic reserve.

Other legal frameworks may govern activities that are permitted or subject to authorization within a proposed aquatic reserve, as follows:

- **Protection of the environment:** measures set out in particular by the *Environment Quality Act* (chapter Q-2) and its regulations.
- **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).
- **Exploitation and conservation of wildlife resources:** Measures set out in the *Act respecting the conservation and development of wildlife* (chapter C-61.1) and its regulations, including the provisions in respect of threatened and/or vulnerable wildlife species and restrictions on sport and commercial fishing stemming from the implementation of the Quebec Fishery Regulations (1990) (SOR/90-214), the *Fisheries Act* (R.S.C., 1985, c. F-14) and the Banc-des-Américains Marine Protected Area Regulations (SOR/2019-50) by the responsible ministers
- **Archaeological research and discoveries:** measures set out in particular by the *Cultural Heritage Act* (chapter P-9.002).
- **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).

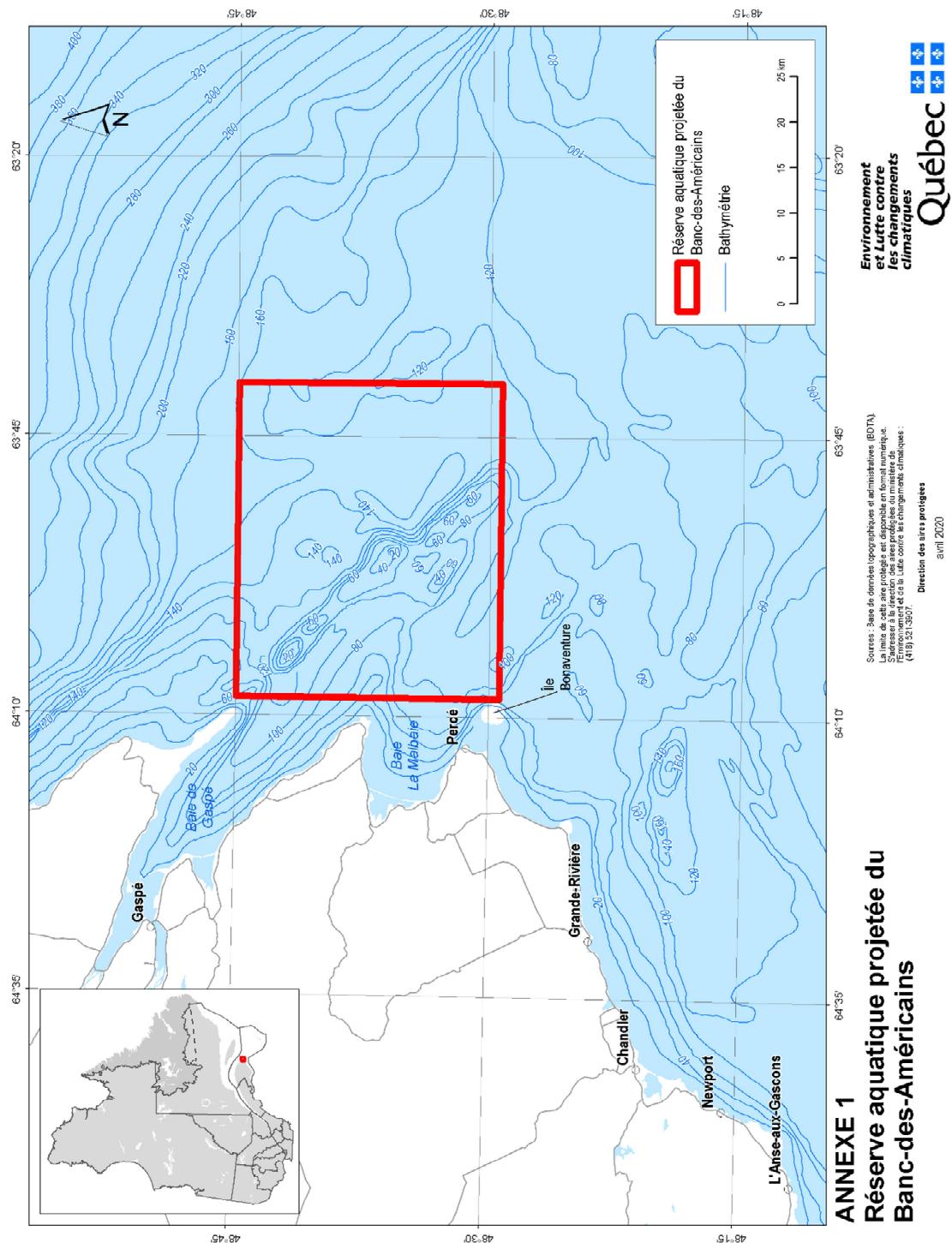
Pursuant to the Canada-Quebec Collaborative Agreement on the proposed Banc-des-Américains marine protected area, carrying out various activities is subject to approval of a plan of activity by Fisheries and Oceans Canada and/or an authorization issued by the Ministère de l'Environnement et de la Lutte contre les changements climatiques.

6. 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 ensuring compliance with the *Natural Heritage Conservation Act* and the activities regime set out in the conservation plan. Among other things, the Minister ensures monitoring and control of activities that may take place within the proposed aquatic reserve. The tools needed by users of the reserve to guide their authorization requests will be made available to them. In managing the proposed aquatic reserve, the Minister also enjoys collaboration and participation by other representatives of the governments of Québec and Canada that have specific responsibilities in or adjacent to the territory. They include the Québec Minister of Forests, Wildlife and Parks, Minister of Energy and Natural Resources and Minister of Agriculture, Fisheries and Food, as well as Minister of Fisheries and Oceans Canada. All these ministries are signatories to the *Canada-Québec joint project agreement regarding the Banc-des-Américains Marine Protected Area*. In carrying out their functions they will take into account the protection desired for the natural environments within the reserve and the protection status now granted to them.

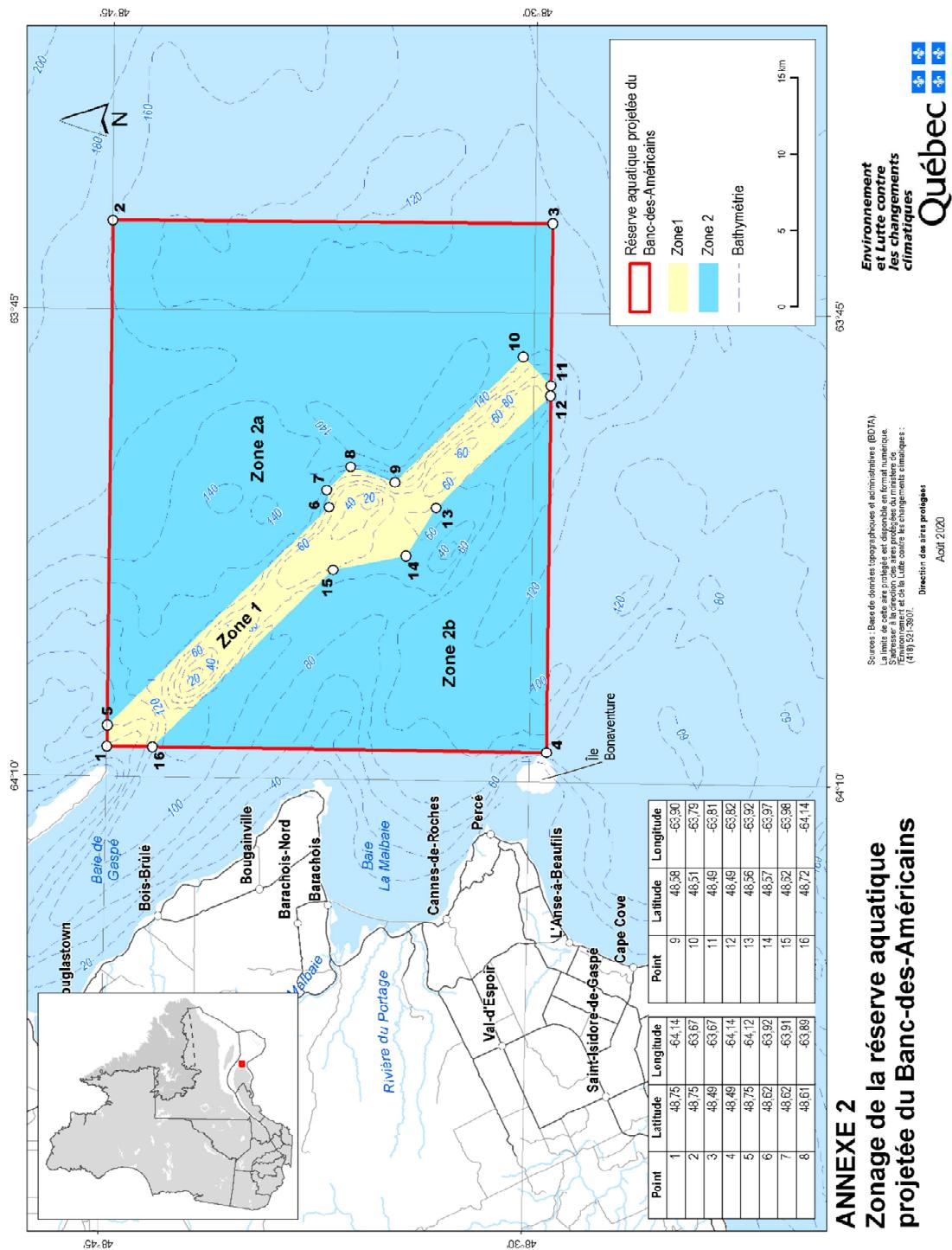
Schedule 1

Map of Réserve aquatique projetée du Banc-des-Américains



Schedule 2

Zoning of Réserve aquatique projetée du Banc-des-Américains



Schedule 3

Information required when submitting an authorization request

Section 4.3

All authorization requests must include (without being limited to) the following information:

- 1° A confidentiality statement;
- 2° The name of the person in charge of the proposed activity, their contact information (address, telephone numbers and email address) and the name of their affiliated institution or organization;
- 3° The name and type of each vessel expected to be used for the activity, including the country/state of registry, registration number, radio call sign and contact information (name, address, telephone numbers and email address) of the vessel's owner, captain and operator;
- 4° A description of the activity:
 - a) General description;
 - b) Purpose of the proposed activity and description of how it will:
 - i) further knowledge about the biodiversity and biological productivity, habitats of living marine organisms, ecological functions or any living marine organism, including fish species, forage species or species at risk, within the proposed aquatic reserve;
 - ii) contribute to the management of the proposed aquatic reserve or to raising public awareness about it;
 - c) A detailed description of the proposed activity, including:
 - i) the geographic coordinates of the site of the proposed activity, with a map showing its location within the proposed aquatic reserve;
 - ii) the planned date of the proposed activity, as well as alternate dates and estimated duration;
 - iii) the methods and techniques that will be used within the framework of the proposed activity, and the data that will be collected;
 - iv) a list of the equipment that will be used, how it will be deployed and recovered, and how it will be anchored or secured;

- v) a list of the samples (type and quantity) that will be collected;
 - vi) a description of any scientific research, ecological monitoring, biodiversity conservation, and educational or commercial maritime tourism that the applicant has already carried out or intends to carry out at a later date within the proposed aquatic reserve;
- d) Copies of all other required authorizations;
- 5° Justification for access to the proposed aquatic reserve;
- 6° G general description of the studies, reports or other publications that would result from the proposed activity, and their expected date of completion;
- 7° Potential impacts of the activity on ecosystems and species, including a description of any potential negative environmental effects;
- 8° Envisioned mitigation measures;
- 9° Envisioned protection and safety measures for deployment in the field.