



chapter Q-2, r. 35

Protection Policy for Lakeshores, Riverbanks, Littoral Zones and Floodplains

Environment Quality Act
(chapter Q-2, s. 2.1)

PREAMBLE

Lakeshores, riverbanks, littoral zones and floodplains are critical to the survival of the ecological and biological components of watercourses and bodies of water. In keeping with its desire to grant them adequate, minimum protection, the Gouvernement du Québec adopted the Politique de protection des rives, du littoral et des plaines inondables on 22 December 1987, acting on the recommendation of the Minister of the Environment pursuant to section 2.1 of the Environment Quality Act (chapter Q-2).

In 1991, the Government broadened the application of the Policy to cover all watercourses in Québec. The Policy was revised in 1996 to address various problems that had been encountered in implementing it. In order to enable the adoption of measures better suited to objectives pursued, the new Policy among other things allowed regional county municipalities and urban communities to submit a management plan for its lakeshores, riverbanks or littoral zones for approval and to adopt special protection measures departing wholly or in part from the measures set out in the Policy.

Although the Policy seeks to clarify the types of activity that may or may not be carried on in the targeted environments, the management plan mechanism enables allowance to be made for certain special circumstances, in consideration of the quality of the environment or the degree to which the environment has been artificialized. Strict enforcement of the Policy in such circumstances may not always be realistic, making it necessary to adopt different measures while nevertheless continuing to ensure adequate protection, enhancement and, if need be, rehabilitation of riparian zones.

The Policy needs to be further revised to enhance its content so as to more adequately protect high-velocity floodplain zones, to expand the scope of application of floodplain management plans and to restate the measures in the Agreement respecting flood risk mapping applied to floodplain preservation entered into on 7 September 1994 with the Government of Canada.

This Policy provides a minimal prescriptive framework; it does not prevent the various government and municipal authorities concerned, according to their respective jurisdictions, from adopting additional protection measures in response to special circumstances.

1. OBJECTIVES

1.1.

- To ensure the sustainability of bodies of water and watercourses, and to maintain and improve their quality by ensuring adequate, minimum protection of lakeshores, riverbanks, littoral zones and floodplains;
- To prevent the degradation and erosion of lakeshores, riverbanks, littoral zones and floodplains by encouraging their preservation in their natural state;
- To preserve and maintain the quality and biodiversity of the environment by limiting activities which may give greater accessibility to and permit the development of lakeshores, riverbanks, littoral zones and floodplains;

- In the case of floodplains, to ensure the safety of persons and the protection of property;
- To protect plants and wildlife characteristic of floodplains by taking into account the biological characteristics of that environment, and to ensure the natural streamflow is not impeded;
- To promote the rehabilitation of degraded riparian zones using the most natural techniques possible.

O.C. 468-2005, s. 1.1.

2. DEFINITIONS AND SCOPE

2.1. High-water mark

For the purposes of this Policy, high-water mark refers to the line which marks the limit of the littoral zone and the shoreline or riverbank.

The high-water mark corresponds to the natural high-water mark, namely:

(a) the point where predominantly terrestrial plants succeed predominantly aquatic plants, or

where there are no aquatic plants, the point closest to the water where terrestrial plants no longer grow.

Plants considered to be aquatic plants are all hydrophytes, including submergents, floating plants, emergents and emerged herbaceous and woody plants characteristic of open marshes and swamps.

(b) where a water retaining structure exists, the maximum operating water level of the hydraulic structure for the upstream portion of the body of water;

(c) where there is a legally erected retaining wall, the top of the structure;

If the high-water mark cannot be determined using the above criteria, it may be sited as follows:

(d) where the information is available, the 2-year flood limit, considered to correspond to the mark established according to the botanical criteria defined in paragraph a.

O.C. 468-2005, s. 2.1.

2.2. Lakeshore and riverbank

For the purposes of this Policy, lakeshore or riverbank refers to a strip of land bordering a lake or watercourse and extending inland from the high-water mark. The width of the shore or bank to be protected is measured horizontally.

The lakeshore or riverbank is at least 10 m wide where:

- the slope is less than 30%; or
- the slope is greater than 30% with a bank less than 5 m high.

The lakeshore or riverbank is at least 15 m wide where:

- the slope is continuous and greater than 30%; or
- the slope is greater than 30% with a bank over 5 m high.

The Sustainable Forest Development Act (chapter A-18.1) and the regulatory provisions concerning forest management standards that apply to forests in the domain of the State also contain special protection measures for lakeshores and riverbanks.

O.C. 468-2005, s. 2.2.

2.3. Littoral zone

For the purposes of this Policy, littoral zone refers to the part of a lake or watercourse that extends from the high-water mark to the centre of the body of water.

O.C. 468-2005, s. 2.3.

2.4. Floodplain

For the purposes of this Policy, floodplain refers to the area occupied by a lake or watercourse during flood periods. The floodplain corresponds to the geographic extent of the flooded area whose limits have been identified using

- a map approved under the agreement entered into between the Gouvernement du Québec and the Government of Canada respecting flood-risk mapping applied to floodplain preservation;
- a map published by the Gouvernement du Québec;
- a map integrated into a land use planning and development plan, interim control by-law or municipal planning by-law;
- 20-year flood elevations, 100-year flood elevations, or both, as established by the Gouvernement du Québec; or
- 20-year flood elevations, 100-year flood elevations, or both, as referred to in a land use planning and development plan, interim control by-law or municipal planning by-law.

If there is inconsistency in the application of those various means and, according to the law applicable, any one of them could govern a given situation, the most recent map or the most recent flood elevation, as the case may be, recognized as valid by the Minister of Sustainable Development, Environment and Parks, is to be used to delineate the extent of the floodplain.

O.C. 468-2005, s. 2.4.

2.5. High-velocity zone

This zone corresponds to the part of a floodplain that may be flooded during a 20-year flood event.

O.C. 468-2005, s. 2.5.

2.6. Low-velocity zone

This zone corresponds to the part of a floodplain beyond the high-velocity zone that may be flooded during a 100-year flood event.

O.C. 468-2005, s. 2.6.

2.7. Sanitation cutting

Sanitation cutting consists in the cutting or harvesting of deficient, defective, dying, damaged or dead trees in a stand.

O.C. 468-2005, s. 2.7.

2.8. Watercourse

The Policy applies to all watercourses. They include

(a) any mass of water running along a bed in a regular or intermittent flow, including a bed created or altered by human intervention, the St. Lawrence River and all the seas surrounding Québec, except a ditch as defined in section 2.9;

(b) in a forest in the domain of the State, a watercourse as defined by the Regulation respecting standards of forest management for forests in the domain of the State (chapter A-18.1, r. 7).

O.C. 468-2005, s. 2.8; O.C. 702-2014.

2.9. Ditch

A common ditch, a ditch along a public or private road or a drainage ditch within the meaning of subparagraph 4 of section 103 of the Municipal Powers Act (chapter C-47.1).

O.C. 468-2005, s. 2.9; O.C. 702-2014.

2.10. Flood-proofing

Flood-proofing a structure, undertaking or development consists in the implementation of various measures listed in Annex 1 designed to provide the necessary protection against possible flood damage.

O.C. 468-2005, s. 2.10.

3. LAKESHORES, RIVERBANKS AND LITTORAL ZONES

3.1. Prior authorization for activities on lakeshores and riverbanks and in littoral zones

All structures, undertakings and works that are liable to destroy or alter the vegetation cover of a lakeshore or riverbank, expose the soil or affect the stability of the lakeshore or riverbank or encroach on the littoral zone are subject to prior authorization. The pre-verification should be performed as part of the process when permits or other forms of authorization are issued by municipal authorities, the Government or its departments or bodies, according to their respective jurisdictions. The authorizations granted by municipal and government authorities are to take into account the scope for action allowed by the measures relating to lakeshores and riverbanks and those relating to littoral zones.

Structures, undertakings and works connected with forest management activities and subject to the Sustainable Forest Development Act (chapter A-18.1) and its regulations are not subject to the prior authorization of municipalities.

O.C. 468-2005, s. 3.1.

3.2. Measures relating to lakeshores and riverbanks

All structures, undertakings and works are in principle prohibited on lakeshores and riverbanks. The following structures, undertakings and works may be permitted provided they are consistent with other protection measures recommended for floodplains:

(a) the maintenance, repair and demolition of existing structures and undertakings used for purposes other than municipal, commercial, industrial, public or public access purposes;

(b) structures, undertakings and works for municipal, commercial, industrial, public or public access purposes, including their maintenance, repair and demolition, if an authorization must be obtained under the Environment Quality Act (chapter Q-2);

(c) the construction or enlargement of a main building for purposes other than municipal, commercial, industrial, public or public access purposes, provided that

- the size of the lot does not allow for the construction or enlargement of the main building once the buffer strip has been established, and the construction or enlargement cannot reasonably take place elsewhere on the land;
- the lot was subdivided before the coming into force of the first applicable municipal by-law that prohibits construction on the lakeshore or riverbank;
- the lot is not located in a high-risk erosion or landslide area identified in the land use planning and development plan; and
- a buffer strip of a minimum of 5 m is maintained in its current state, or preferably returned to its former natural state;

(d) the construction or erection of a subordinate structure or an appurtenance such as a garage, shed or pool is possible on the part of a lakeshore or riverbank that is no longer in its natural state, provided that

- the size of the lot does not allow for the construction or erection of the subordinate structure or appurtenance once the buffer strip has been established;
- the lot was subdivided before the coming into force of the first applicable municipal by-law that prohibits construction on the lakeshore or riverbank;
- a buffer strip of a minimum of 5 m is maintained in its current state, or preferably returned to its former natural state; and
- the subordinate structure or appurtenance is sited without excavation or fill;

(e) the following vegetation-related undertakings and works:

- forest management activities subject to the Sustainable Forest Development Act (chapter A-18.1) and its regulations;
- sanitation cutting;
- harvesting of 50% of stems 10 cm or more in diameter, provided that at least 50% of the forest cover is maintained in private woodlots used for forestry or agricultural purposes;
- felling required for an authorized structure or undertaking;
- felling required to create a 5-metre wide access to a body of water whose shore or bank has a slope of less than 30%;
- pruning and trimming required to create a 5-metre wide view window if the slope of the lakeshore or riverbank is greater than 30%, or to create a trail or stairs giving access to the body of water;
- for the purpose of restoring permanent and sustainable vegetation cover, the seeding or planting of plants, trees or shrubs, and the related work involved;
- all methods used to harvest herbaceous vegetation if the slope of the lakeshore or riverbank is less than 30%, and only on the top of the bank if the slope is greater than 30%.

(f) cultivation of soil for agricultural purposes provided that a strip of vegetation at least 3 m wide, measured from the high-water mark, is preserved and, where there is a bank and the top of the bank is less than 3 m from the high-water mark, provided that the width of the strip of vegetation to be preserved is a minimum of 1 m wide at the top of the bank; and

(g) the following undertakings and works:

- installation of fencing;
- installation or creation of outlets for sub-surface and surface drainage systems and pumping stations;
- creation of water crossings for fording, culverts and bridges and the related access roads;
- aquaculture facilities;
- septic installations that conform to the regulation concerning waste water disposal systems for isolated dwellings made under the Environment Quality Act;
- where the slope, soil type and site conditions prevent the restoration of vegetation cover and the return of a lakeshore or riverbank to its natural state, undertakings or works to stabilize the soil using vegetation or mechanical means such as riprap, gabions or retaining walls. Preference should be given to the technique most likely to promote the eventual establishment of natural plant growth;
- groundwater withdrawal facilities used for purposes other than municipal, commercial, industrial, public purposes or used for purposes of public access, and installed in accordance with the Water Withdrawal and Protection Regulation (chapter Q-2, r. 35.2);
- reconstruction or widening of an existing road, including farm and forest roads;
- undertakings and works required for the structures, undertakings and works authorized in littoral zones under Subsection 3.3;
- forest management activities subject to the Sustainable Forest Development Act and its regulation pertaining to standards of forest management for forests in the domain of the State.

O.C. 468-2005, s. 3.2; O.C. 702-2014.

3.3. Measures relating to littoral zones

All structures, undertakings and works are in principle prohibited in littoral zones.

The following structures, undertakings and works may be permitted provided they are consistent with other protection measures recommended for floodplains:

- (a) wharves, shelters or docks on pilings or made of floating platforms;
- (b) creation of water crossings for fording, culverts and bridges;
- (c) aquaculture facilities;
- (d) surface water withdrawal facilities installed in accordance with the Water Withdrawal and Protection Regulation (chapter Q-2, r. 35.2), except facilities composed of inlet or diversion channels intended for non-agricultural purposes;
- (e) (paragraph revoked);
- (f) encroachment on the littoral zone that is required for works authorized on the lakeshores or riverbanks;
- (g) cleanup and maintenance in watercourses, without disturbing the bed, carried out by a municipal authority pursuant to the powers and duties assigned to them by law;
- (h) structures, undertakings and works for municipal, commercial, industrial, public or public access purposes, including their maintenance, repair and demolition, for which an authorization must be obtained under the Environment Quality Act, the Act respecting the conservation and development of wildlife (chapter C-61.1), the

Watercourses Act (chapter R-13) or any other statute; and

(i) maintenance, repair and demolition of existing structures and works that are not used for municipal, industrial, commercial, public or public access purposes.

O.C. 468-2005, s. 3.3; O.C. 702-2014.

4. FLOODPLAINS

4.1. Prior authorization for activities in floodplains

All structures, undertakings and works that are liable to alter the water regime, interfere with the free flow of water during flood periods, disturb plant or wildlife habitats or threaten the safety of persons or property are subject to prior authorization. The pre-verification should be performed as part of the process when permits or other forms of authorization are issued by municipal authorities, the Government or its departments or bodies, according to their respective jurisdictions. The authorizations granted by municipal and government authorities are to take into account the scope for action allowed by the measures relating to floodplains, protect the integrity of the environment and ensure that the free flow of water is maintained.

Structures, undertakings and works connected with forest management activities and subject to the Sustainable Forest Development Act (chapter A-18.1) and its regulations as well as agricultural activities that do not require filling or the removal of fill are not subject to the prior authorization of municipalities.

O.C. 468-2005, s. 4.1.

4.2. Measures relating to the high-velocity zones of floodplains

All structures, undertakings and works are in principle prohibited in the high-velocity zone of a floodplain and in identified floodplains where high-velocity zones are not distinguished from low-velocity zones, subject to the measures under Subsections 4.2.1 and 4.2.2.

O.C. 468-2005, s. 4.2.

4.2.1. Permitted structures, undertakings and works

Despite the principle set forth above, the following structures, undertakings and works may be allowed in those zones, provided they are consistent with the protection measures applicable to lakeshores, riverbanks and littoral zones:

(a) works to maintain land in good condition, to maintain, repair, modernize or demolish existing structures and undertakings, provided the flood-prone area of the land does not increase as a result of the works; however, when work is carried out to modernize or reconstruct infrastructures associated with a public thoroughfare, the flood-prone area of the undertaking may be increased by 25% for public safety reasons or to bring the infrastructure into conformity with applicable standards; in all cases, major work on a structure or undertaking should entail flood-proofing the entire structure or undertaking;

(b) works, structures or undertakings for public access purposes or for municipal, industrial, commercial or public purposes that are essential to port activities, navigation or shipbuilding, in particular, wharves, breakwaters, canals, locks and fixed navigation aids and their equipment and accessories; appropriate flood-proofing measures should be applied to any part of an undertaking situated below the flood level of the 100-year flood elevation;

(c) linear, underground public utility facilities such as pipelines, power lines, telephone lines, water mains and sewers that have no service entrance for structures and undertakings situated in the high-velocity zone;

(d) construction of underground waterworks or sewer systems in built-up areas not supplied by services with a view to supplying the structures and undertakings existing on the date of coming into force of the first municipal by-law prohibiting new constructions;

- (e) septic installations for existing structures or undertakings; the planned installation must be in conformity with the regulation concerning waste water disposal systems for isolated dwellings made under the Environment Quality Act (chapter Q-2);
- (f) alteration or replacement, for the same use, of an existing water withdrawal facility, as well as the installation of a surface water withdrawal facility below ground level, in accordance with the Water Withdrawal and Protection Regulation (chapter Q-2, r. 35.2);
- (g) an open-air undertaking, other than a golf course, intended for recreation purposes and that does not require filling or the removal of fill;
- (h) reconstruction of an undertaking or structure destroyed by a disaster other than a flood; all reconstructed undertakings and structures should be flood-proofed in conformity with the requirements of the Policy;
- (i) development of wildlife habitats that does not require filling and development of wildlife habitats that requires filling, but in the latter case, only if an authorization must be obtained under the Environment Quality Act;
- (j) agricultural land drainage works;
- (k) forest management activities that do not require filling or the removal of fill, and that are subject to the Sustainable Forest Development Act (chapter A-18.1) and its regulations; and
- (l) agricultural activities that do not require filling or the removal of fill.

O.C. 468-2005, s. 4.2.1; O.C. 709-2008; O.C. 702-2014.

4.2.2. Structures, undertakings and works eligible for an exemption

Certain structures, undertakings and works may also be permitted if they are consistent with other protection measures applicable to lakeshores, riverbanks and littoral zones, and if they have been exempted pursuant to the provisions of the Act respecting land use planning and development (chapter A-19.1). Annex 2 to this Policy lists the criteria that a metropolitan community, a regional county municipality or a city exercising the powers of a regional county municipality should use to determine the eligibility of an application for an exemption. The following structures, undertakings and works are eligible for an exemption:

- (a) any project to widen, raise, create an entrance or exit, bypass or to realign along their present axis existing thoroughfares including railroads;
- (b) thoroughfares crossing bodies of water and their access roads;
- (c) any project to construct new aboveground public utilities such as pipelines, power lines, telephone lines, and infrastructures connected with water mains and sewers, with the exception of new thoroughfares;
- (d) the installation of a groundwater withdrawal facility in accordance with the Water Withdrawal and Protection Regulation (chapter Q-2, r. 35.2);
- (e) the installation of a surface water withdrawal facility below ground level in accordance with the Water Withdrawal and Protection Regulation;
- (f) waste water treatment plants;
- (g) flood protection works undertaken by governments or government departments or bodies, or by municipalities, to protect areas already built-up, and special flood prevention undertakings designed to protect existing structures and undertakings used for public, municipal, industrial, commercial, agricultural or public access purposes;
- (h) flood prevention works designed to protect zones bounded by land having an elevation higher than the 100-

year flood elevation and that are flooded only by the backing up of water mains;

(i) any undertaking:

- to expand an agricultural, industrial, commercial or public facility;
- to enlarge a structure and its dependencies without changing the zoning typology;

(j) commercial fishing and aquaculture facilities;

(k) development of land for recreational purposes or for agricultural or forest management activities that requires filling or the removal of fill, involving undertakings such as roads, footpaths and bicycle paths; flood protection undertakings and golf courses are not eligible for an exemption;

(l) development of wildlife habitats that requires filling, and for which an authorization need not be obtained under the Environment Quality Act (chapter Q-2); and

(m) dams used for municipal, industrial, commercial or public purposes, for which an authorization must be obtained under the Environment Quality Act.

O.C. 468-2005, s. 4.2.2; O.C. 709-2008; O.C. 702-2014.

4.3. Measures relating to the low-velocity zones of floodplains

The following are prohibited in the low-velocity zone of a floodplain:

- (a) all structures and undertakings which are not flood-protected; and
- (b) filling works other than works required to flood-protect authorized structures and undertakings.

Structures, undertakings and works may be permitted in the low-velocity zone of a floodplain if flood-proofing measures other than those listed in Annex 1 have been found to be sufficient in connection with an exemption granted under the Act respecting land use planning and development (chapter A-19.1) by a metropolitan community, a regional county municipality or a city exercising the powers of a regional county municipality.

O.C. 468-2005, s. 4.3.

5. SPECIAL PROTECTION MEASURES UNDER A MANAGEMENT PLAN

5.1. Objectives

To enable a metropolitan community, a regional county municipality or a city exercising the powers of a regional county municipality, as part of a revision or amendment of a land use planning and development plan, to:

- submit a management plan for lakeshores, riverbanks, littoral zones and floodplains in its territory;
- develop special measures (standards) to protect, enhance or rehabilitate designated lakeshores, riverbanks, littoral zones and floodplains in response to special circumstances; more specifically, in the case of floodplains, to develop special protection measures for a designated part of the territory to govern urban consolidation and prohibit the expansion of built-up areas;
- integrate the measures into an overall plan that takes into account and strives to harmonize the various activities within the territory.

The management plan and the special protection and enhancement measures approved for lakeshores, riverbanks, littoral zones and floodplains replace, to the extent specified therein, the measures set out in this Policy for the bodies of water and watercourses to which the Policy applies.

O.C. 468-2005, s. 5.1.

5.2. General eligibility criteria

Management plans must entail an improvement in the general state of the environment in the territory in which they are implemented.

Management plans should be developed with priority given to riparian and littoral zones which are degraded or located in highly developed urban areas, rather than to zones which are still in their natural state.

Special protection and enhancement measures should target riparian and littoral zones of special interest for their biological diversity.

Section 40 of the Sustainable Forest Development Act (chapter A-18.1) provides that special standards may be imposed to protect lakeshores, riverbanks and littoral zones in forests in the domain of the State, where circumstances so require. The special circumstances and standards are to be examined during the process of amending or revising land use planning and development plans, on the recommendation of the metropolitan communities, regional county municipalities or cities exercising the powers of a regional county municipality. The Ministère des Ressources naturelles et de la Faune is responsible for the making and enforcement of the measures.

O.C. 468-2005, s. 5.2.

5.3. Specific eligibility criteria for plans relating to floodplains

In addition to the undertakings, structures and works permitted under Chapter 4 of this Policy concerning floodplains, certain undertakings, structures and works may be allowed under a management plan, either because they are specifically permitted or are eligible for an exemption (Subsections 4.2 and 4.3). The undertakings, structures and works that may be allowed are those incidental to

- the development of a high-velocity zone bounded by a low-velocity zone, if those areas are not considered to have environmental value;
- additional development in built-up urban areas (net density greater than 5.0 structures per hectare or 35 structures per linear kilometre, per street side) served by a waterworks or sewer system, or both, before 18 May 2005 or before the date on which the extent of the floodplain was identified, whichever date is more recent; a sector is considered built-up if 75% of the lots are occupied by a main structure; new structures must be limited to additions to an existing built-up site, the expansion areas being excluded.

Analysis of the acceptability of the management plan shall take into account the following criteria:

- the management plan must set out the definitive development conditions for all the floodplains in one or more municipalities;
- the safety of residents must be ensured in the event of an evacuation, for example, by flood-proofing thoroughfares without blocking the free flow of water; an annual inspection program must be developed and implemented in cases where the management plan includes protection works;
- the hydraulic impact of works and structures permitted under the management plan must be minor; the free flow of water and natural streamflow must be ensured;
- if the management plan cannot be implemented without the loss of plant and wildlife habitat or the loss of flood routing capacity (capacity to store a volume of water as a way of limiting the impact of flooding elsewhere in the territory), compensatory measures must be implemented in the territory of the municipality or elsewhere on the same watercourse; the management plan must therefore include an assessment of the ecological value of the site (prior inventory of plants and wildlife), an estimate of the volume of fill required and the projected area that the fill will cover, and an estimate of the anticipated loss of habitat;

- the management plan must take into account the Government's orientations and policies; it must provide for access by the population to the watercourses and bodies of water through the maintenance of adequate existing access points or the creation of new access points if existing ones are insufficient;
- the management plan must include final subdivision of the areas concerned;
- the management plan must provide for the flood-proofing of undertakings and structures to be erected; the plan must also provide an assessment of the status of existing structures and undertakings with respect to flood-proofing and contain possible solutions to remedy difficulties encountered;
- the management plan must provide for the provision of waterworks and sewer services in sectors to be consolidated;
- the management plan must establish an implementation schedule;
- the management plan must take into account the titles of ownership of the State and in particular of water property in the domain of the State.

O.C. 468-2005, s. 5.3.

5.4. Content

Management plans should be developed having regard to the objectives of this Policy and include the following elements:

O.C. 468-2005, s. 5.4.

5.4.1. Identification:

- of the territory covered by a management plan;
- of the bodies of water and watercourses or parts thereof concerned;
- of the floodplains concerned.

O.C. 468-2005, s. 5.4.1.

5.4.2. Rationale for the management plan:

The reasons for presenting a management plan may vary in nature. The metropolitan community, regional county municipality or city exercising the powers of a regional county municipality should justify its reasons for proposing a management plan for the lakeshores, riverbanks, littoral zones and floodplains in its territory, and for developing special measures to protect, enhance or rehabilitate those areas in addition to or in replacement of the provisions of this Policy.

O.C. 468-2005, s. 5.4.2.

5.4.3. Characteristics of the territory covered by the management plan:

- a general description of the physical environment and hydrographic network, and a general ecological description of the surroundings;
- a general description of land occupation;
- characterization of the state of the bodies of water and watercourses and their shorelines or banks (quality of water and the shorelines and banks, soil type, artificialized sectors, sectors in their natural state, erosion-prone sectors, etc.);

- a description of sectors of special interest (unique plant or wildlife habitat, rare vegetation community, environment protecting a threatened or vulnerable species or species likely to be threatened or vulnerable, heritage site, etc.);
- a description of sectors with recreational or tourism potential and interest for public access.

and, in addition, where the management plan includes a floodplain:

- the location of water and sewer infrastructures serving the territory and, section by section, the date of coming into force of the by-law providing for their installation;
- a land use plan indicating for each lot the existing structures and their construction date, if they are occupied on a seasonal or permanent basis, and their status in terms of flood-proofing;
- a plan showing the roadway surface level of thoroughfares and their status in terms of flood-proofing.

O.C. 468-2005, s. 5.4.3.

5.4.4. Protection and enhancement of the sectors covered by the management plan:

- identification of sectors to be enhanced or rehabilitated;
- a description of the enhancement or rehabilitation measures;
- the impact of the enhancement or rehabilitation on natural surroundings (wildlife, plants, hydraulic regime) and human surroundings;
- identification of zones targeted by special protection measures;
- identification of the attenuation, mitigation and flood-proofing measures to be applied;
- identification of the protection standards to be applied;

and, in addition, where the management plan includes a floodplain:

- identification of landsites on which a structure and its dependencies may be built pursuant to section 116 of the Act respecting land use planning and development (chapter A-19.1);
- where the territory is not served by a waterworks or sewer system, the installation planning for the system;
- measures proposed to flood-proof existing structures and undertakings.

O.C. 468-2005, s. 5.4.4.

6. IMPLEMENTATION

6.1. Section 2.1 of the Environment Quality Act (chapter Q-2) provides that it shall be the responsibility of the Minister of Sustainable Development, Environment and Parks “to elaborate and propose to the Government a protection policy for lakeshores, riverbanks, littoral zones and floodplains, to implement such policy and to coordinate its application”.

Under the Act respecting land use planning and development (chapter A-19.1), municipalities are responsible for adopting and enforcing by-laws to implement the principles of this Policy in accordance with the land use planning and development plans and complementary documents of the metropolitan communities, regional county municipalities or cities exercising the powers of a regional county municipality into which the objectives and provisions of this Policy have been integrated.

That Act provides that the Minister of Sustainable Development, Environment and Parks may request that a planning by-law in force be amended if the Minister is of the opinion that it is not consistent with the policy of the Government or, considering the distinctive features of the locality, it fails to provide adequate protection for lakeshores, riverbanks, littoral zones and floodplains.

Responsibility for implementing the Policy on lands in the domain of the State is shared between the Government and the municipalities. The Minister of Natural Resources and Wildlife is responsible for the application of the Act respecting the lands in the domain of the State (chapter T-8.1) and its regulations, while the municipalities are responsible for implementing this Policy for lands in the domain of the State as regards the structures, undertakings and works of persons who have acquired land rights in those lands.

The Minister of Natural Resources and Wildlife, who administers the Sustainable Forest Development Act (chapter A-18.1) and its regulations including the regulation concerning standards of forest management in forests in the domain of the State, is also responsible for implementing the Policy as regards management activities in forests in the domain of the State. The activities of the regional county municipalities in unorganized territories and the activities of local municipalities must be consistent with those of the Department.

Where required by the Environment Quality Act, structures, undertakings and works for municipal, commercial, industrial, public or public access purposes, whether on private land or in forests in the domain of the State, must be authorized by the Minister of Sustainable Development, Environment and Parks and, where applicable, by the Government.

Authorization must be obtained from the Minister of Natural Resources and Wildlife for structures, undertakings and works in a littoral zone, and more specifically in a fish habitat, where the Act respecting the conservation and development of wildlife (chapter C-61.1) and its regulations so provide. The Ministère des Ressources naturelles et de la Faune, through its wildlife protection officers, is also responsible for controlling the administration of the federal fisheries legislation which also protects fish habitat.

As indicated above, this Policy sets out minimal measures; additional protection measures may be initiated by government authorities and municipalities in response to special circumstances.

Lastly, the Government, its departments and bodies and the municipalities will comply with the restrictions the Policy imposes on their works, structures and undertakings as a means of ensuring the Policy is implemented. In addition, in administering programs under which financial assistance is provided to third parties, the Government, its departments and bodies and the municipalities will ensure that no assistance is granted for structures, undertakings or works that have no place on lakeshores or riverbanks or in littoral zones, and that no assistance is granted for undertakings or works in a floodplain, unless those undertakings or works are permitted under this Policy, or for structures, except to facilitate the flood-proofing or relocation of existing structures.

O.C. 468-2005, s. 6.1.

7. INFORMATION AND EDUCATION

7.1. The Ministère du Développement durable, de l'Environnement et des Parcs will provide municipalities with technical support by making available a guide for the application of this Policy explaining the technical aspects associated with protecting, rehabilitating and enhancing riparian zones.

The Ministère du Développement durable, de l'Environnement et des Parcs may also use other means to provide additional information to the metropolitan communities, regional county municipalities and cities exercising the powers of a regional county municipality, local municipalities and the public on the objectives and nature of the Protection Policy for Lakeshores, Riverbanks, Littoral Zones and Floodplains, and to help them better understand that the survival of lakes and watercourses depends not only on protecting them from pollution but also on maintaining aquatic and riparian zones in their natural state and rehabilitating degraded areas.

O.C. 468-2005, s. 7.1.

ANNEX 1

FLOOD-PROOFING MEASURES APPLICABLE TO STRUCTURES, UNDERTAKINGS AND WORKS IN FLOODPLAINS

Authorized structures, undertakings and works must comply with the following flood-proofing standards, adapted to the specific context of the infrastructure concerned:

1. no opening (window, cellar window, door, garage, etc.) may be lower than the 100-year flood elevation;
2. no ground floor is allowed at a level that is lower than the level of the 100-year flood elevation;
3. drains must have a non-return valve;
4. for any structure or part of a structure built below the 100-year flood level, a study must show the structure's resistance to flooding and must include calculations relating to:
 - waterproofing;
 - structural stability;
 - reinforcement necessary;
 - seepage water pumping capacity; and
 - resistance of the concrete to compression and tension;
5. the filling of land should be restricted to protecting the area immediately around the structure or undertaking concerned and should not extend to the entire landsite; the average slope downward from the top of the fill next to the protected structure or undertaking should not be less than 33 $\frac{1}{3}$ % (vertical to horizontal ratio of 1:3).

When implementing flood-proofing measures, if the 100-year flood elevation was not established at the time the limits of a mapped floodplain were delineated, the elevation of the highest reference floodwater level should be used to replace the 100-year flood elevation in determining the limits of the floodplain, to which 30 cm should be added for safety reasons.

O.C. 468-2005, Ann. 1.

ANNEX 2

CRITERIA PROPOSED FOR DETERMINING THE ELIGIBILITY OF AN APPLICATION FOR AN EXEMPTION

An application for an exemption can only be assessed for eligibility if it is accompanied by the appropriate supporting documents. The application should provide a detailed cadastral survey of the site for which a works, undertaking or structure is planned and should show that the works, undertaking or structure satisfies the following 5 criteria, and accordingly, respects the public safety and environmental protection objectives set out in the Policy:

1. human safety is ensured and private and public property is protected because suitable flood-proofing and protection measures have been integrated;
2. natural streamflow is not impeded; the probable changes in the hydraulic regime of a watercourse must be identified and specific information relating to impediments to ice movement, reduction in flow area, potential erosion risks and risk of an increase in the flood level upstream that may be caused by a works, structure or undertaking must be given;
3. the integrity of the territories is maintained by avoiding filling and by demonstrating that the proposed works, undertakings and structures cannot be reasonably located somewhere other than in the floodplain;

4. the quality of the water, the plants and wildlife representative of wetlands and their habitats, and in particular threatened or vulnerable species, is protected to preclude damage; the potential environmental impacts of a structure, undertaking or works must be assessed taking into account the characteristics of the materials used for flood-proofing;

5. public interest for a works, undertaking or structure has been demonstrated.

O.C. 468-2005, Ann. 2.

REFERENCES

O.C. 468-2005, 2005 G.O. 2, 1441

O.C. 709-2008, 2008 G.O. 2, 2925

S.Q. 2011, c. 21, s. 242

O.C. 702-2014, 2014 G.O. 2, 1625