



Transport
Canada

Transports
Canada



A new **bridge** for the St. Lawrence

**Final Environmental Assessment Guidelines
(including the Scope of the Environmental Assessment)**



July 2012

Canada 

Page left intentionally blank



Transport
Canada

Transports
Canada



Environnement
Canada

Environment
Canada



Pêches et Océans
Canada

Fisheries and Oceans
Canada

Page left intentionally blank

TABLE OF CONTENTS

1 INTRODUCTION	1
1.1 PROJECT BACKGROUND.....	1
1.2 APPLICATION OF THE CANADIAN ENVIRONMENTAL ASSESSMENT ACT.....	1
1.3 FEDERAL CO-ORDINATION.....	3
1.4 CO-ORDINATION WITH THE PROVINCIAL ENVIRONMENTAL ASSESSMENT PROCESS.....	3
1.5 PRODUCTION OF ENVIRONMENTAL ASSESSMENT.....	3
1.6 PUBLIC REGISTRY.....	3
2 PROJECT SCOPE	4
2.1 PROJECT COMPONENTS.....	4
2.1.1 Component A: Reconstruction and widening of Highway 15.....	4
2.1.2 Component B: New Nuns' Island Bridge.....	4
2.1.3 Component C: Work on Nuns' Island.....	4
2.1.4 Component D: New Bridge for the St. Lawrence.....	6
2.1.5 Component E: Alignment with Highway 10.....	6
2.1.6 Component F: Demolition of the existing Champlain Bridge.....	6
2.1.7 Component G: Demolition of the Nuns' Island Bridge.....	6
2.2 PROJECT SITE.....	6
3 SCOPE OF THE ENVIRONMENTAL ASSESSMENT	7
3.1 FACTORS TO BE CONSIDERED.....	7
3.2 SCOPE OF FACTORS.....	8
3.2.1 Changes that delivering the project may cause to the environment.....	8
3.2.2 Assessment of the effect of the environment on the project.....	9
3.2.3 Assessment of accidents and malfunctions.....	9
3.2.4 Temporal boundaries.....	9
3.2.5 Spatial boundaries.....	10
3.2.6 Study of likely cumulative effects.....	10
4 ENVIRONMENTAL ASSESSMENT APPROACH	10
4.1 ENVIRONMENTAL ASSESSMENT BY OBJECTIVES.....	10
4.2 ADAPTIVE MANAGEMENT.....	11
5 CONTENT OF THE ENVIRONMENTAL ASSESSMENT REPORT	11
5.1 SUMMARY.....	11
5.2 INTRODUCTION.....	11
5.3 PROJECT RATIONALE AND LEGAL FRAMEWORK.....	12
5.4 PROJECT DESCRIPTION.....	12
5.5 SCOPE OF THE PROJECT AND SCOPE OF THE ASSESSMENT.....	12
5.6 DESCRIPTION OF CURRENT ENVIRONMENT.....	12
5.7 ENVIRONMENTAL EVALUATION AND MITIGATION.....	12
5.7.1 Assessing environmental effects.....	13
5.7.2 Assessment of the effect of the environment on the project.....	13
5.7.3 Assessment of accidents and malfunctions.....	13
5.7.4 Likely cumulative effects assessment.....	13
5.8 ASSESSMENT OF THE SIGNIFICANCE OF RESIDUAL ENVIRONMENTAL EFFECTS.....	13
5.9 INFORMATION SESSION/CONSULTATION WITH THE PUBLIC AND FIRST NATIONS.....	14
5.10 ENVIRONMENTAL MANAGEMENT PLAN - MONITORING AND FOLLOW-UP PROGRAM.....	14
5.11 CONCLUSIONS AND RECOMMENDATIONS CONCERNING THE DECISION.....	15
5.12 REFERENCES, ANNEXES, PLANS AND PHOTOGRAPHS OF THE SITE, IF APPLICABLE.....	15
6 ENVIRONMENTAL ASSESSMENT CONTACT	15
APPENDIX A: DEPARTMENTAL EXPERTISE APPLICABLE TO THIS PROJECT	16

Page left intentionally blank

1 Introduction

Transport Canada is proposing that a new bridge (hereinafter referred to as the New Bridge for the St. Lawrence) be built to replace the existing Champlain Bridge in Montreal. Under the requirements of the *Canadian Environmental Assessment Act*, a federal environmental assessment must be conducted. The Act states that the responsible authorities, in this instance Transport Canada, Fisheries and Oceans Canada and Environment Canada, will determine the scope of the project, the environmental components to be examined and the scope of these components in the assessment. This document provides that information.

1.1 Project background

In service since 1962, the Champlain Bridge is the busiest bridge in Canada. In 2009, an average of 156,000 vehicles crossed it every day, including 12,000 trucks and 1,900 buses, with 900 of them in reserved lanes during the morning and afternoon rush hours (*Pre-feasibility Study Concerning the Replacement of the Existing Champlain Bridge*, Jacques Cartier and Champlain Bridges Incorporated, 2011).

The Champlain Bridge also carries traffic in transit between the Island of Montreal, the South Shore, the eastern U.S. and the western part of North America. It is vital to the economy of Quebec as a whole. It is important for freight transportation by truck and it is a strategic link for transportation to and from the Port of Montreal, whose area of influence extends to the U.S. Midwest.

After the publication of a study of the Champlain Bridge's potential for rehabilitation, the federal Minister of Transport announced the construction of a New Bridge for the St. Lawrence on October 5, 2011. The new bridge and related components, valued at three to five billion dollars, should be in service in about 10 years.

The Champlain Bridge will remain in service until the new bridge has been completed. It will then be demolished.

1.2 Application of the Canadian Environmental Assessment Act

An environmental assessment must be conducted in accordance with the *Canadian Environmental Assessment Act* when a federal authority, in relation to a project, considers assuming any one of the following authority that would enable the project to be delivered, in whole or in part:

- a) It is the project proponent;
- b) It provides financial assistance to the project proponent;
- c) It sells, leases, or disposes of federal lands; and
- d) It issues a permit or licence or gives any other authorization under the provisions of the *Law List Regulations*.

These scenarios amount to triggers within the meaning of the *Canadian Environmental Assessment Act*.

Here is how the New Bridge for the St. Lawrence project will meet each of these conditions:

a) Existence of a project

The delivery of the New Bridge for the St. Lawrence and associated work constitutes a “project” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act*.

b) Non-exclusion of the project

No exclusions are applicable under section 7 of the *Canadian Environmental Assessment Act* and its *Exclusion List Regulations 2007*.

c) Exercise by a federal authority of a duty or function under subsection 5(1) of the *Canadian Environmental Assessment Act* (trigger)

Under the *Canadian Environmental Assessment Act*, Transport Canada, Fisheries and Oceans Canada and Environment Canada are **responsible authorities**. Indeed, each of these departments exercises one or more of the duties or functions under this project:

- Transport Canada, pursuant to:
 - Paragraph 5(1)(a) of the *Canadian Environmental Assessment Act*: is the proponent of the project; and
 - Paragraph 5(1)(d) of the *Canadian Environmental Assessment Act*: project approvals under section 5 of the *Navigable Waters Protection Act*, which is named in the *Law List Regulations*, are required.
- Fisheries and Oceans, pursuant to:
 - Paragraph 5(1)(d) of the *Canadian Environmental Assessment Act*: project approvals for changes to fish habitat caused by the project under subsection 35(2) of the *Fisheries Act*, which is named in the *Law List Regulations*, are required.
- Environment Canada, pursuant to:
 - Paragraph 5(1)(d) of the *Canadian Environmental Assessment Act*: permits or licences for the project under subsection 9(1) of the *Migratory Bird Sanctuary Regulations*, which is named in the *Law List Regulations*, are required.

Consequently, an environmental assessment must be conducted under the provisions of the *Canadian Environmental Assessment Act* so that the three responsible authorities can exercise their duties or functions to the extent that the environmental assessment report concludes that the project will not have any substantial negative impact.

In addition, the following **federal authorities** have been identified, and they will provide their expertise with respect to the conducting of the environmental assessment:

- Health Canada;
- Parks Canada;
- Federal Bridge Corporation Limited; and
- St. Lawrence Seaway Management Corporation.

Type of environmental assessment: Since the project is not included in the *Comprehensive Study List Regulations*, the environmental assessment will be a “screening” type assessment.

1.3 Federal co-ordination

Transport Canada will act as the federal co-ordinator of the environmental assessment. Transport Canada’s role is to co-ordinate the participation of federal authorities in the environmental assessment process and to facilitate communication and co-operation among them.

On December 8, 2011, Transport Canada, the proponent of the project, assumed the federal co-ordination role under the *Regulations Respecting the Coordination by Federal Authorities of Environmental Assessment Procedures and Requirements*.

1.4 Co-ordination with the provincial environmental assessment process

Transport Canada and Quebec’s Ministère du développement durable de l’environnement et des parcs will be collaborating to ensure that pertinent provincial environmental directives are taken into account in the environmental assessment.

1.5 Production of environmental assessment

The responsible authorities will delegate the performance of the environmental assessment to another party (a firm). Accordingly, the firm will be responsible for conducting on-site environmental studies and drafting the reports required for the environmental assessment.

1.6 Public Registry

On January 22, 2012, Transport Canada, on behalf of the responsible authorities, posted a notice of commencement on the Canadian Environmental Assessment Registry, in accordance with section 55 of the *Canadian Environmental Assessment Act*. The notice of commencement is posted in the Registry at the following address: <http://www.ceaa.gc.ca/050/details-eng.cfm?evaluation=65574>. The Registry number for this environmental assessment is 12-01-65574.

2 Project scope

The New Bridge for the St. Lawrence project not only includes the bridge over the St. Lawrence River, but also a corridor that extends from the South Shore (Brossard) to the North Shore (at the Atwater exit on Highway 15, Montreal Island). For the environmental assessment of the New Bridge for the St. Lawrence project, the project scope includes the components in the following section.

2.1 Project components

The final plans and specifications for the New Bridge for the St. Lawrence project will be prepared once the method of construction has been identified. The environmental assessment will evaluate the project at the most advanced stage of its design. Thus, the design plans of the pre-feasibility studies ordered by Jacques Cartier and Champlain Bridges Incorporated are the ones that will be used as the basis for the environmental assessment of the project. The map in Figure 1 shows the locations of the various project components.

The mitigation measures identified as part of the environmental assessment process will be incorporated into the plans and specifications.

Moreover, the environmental assessment will include the pre-work phase (engagement, temporary works, etc.) and the post-work phase (dismantling of temporary facilities, site restoration, demolition of the current bridge, etc.).

2.1.1 Component A: Reconstruction and widening of Highway 15

The federal section of Highway 15 (i.e. the section between Nuns' Island Bridge and the Atwater Avenue off-ramps) will be rebuilt and widened. There are plans to add a third lane in each direction, so that there will be three continuous lanes between the Turcot Interchange and the New Bridge for the St. Lawrence. There will also have to be work carried out on several on-ramps in the Atwater Avenue and Nuns' Island areas.

2.1.2 Component B: New Nuns' Island Bridge

The bridge connecting Nuns' Island to the Island of Montreal will be replaced.

2.1.3 Component C: Work on Nuns' Island

On Nuns' Island, the work will consist of doing alterations to Highway 10, the on-ramps to the New Bridge for the St. Lawrence and to the Nuns' Island Bridge, as well as to certain local roads. The on-ramps located at the entry and exit points to Nuns' Island will also have to be realigned with the new bridge. Additional work could be required to facilitate the movement of public transit.

Figure 1: Location of the various project components



Source: Google Earth and Transport Canada

2.1.4 Component D: New Bridge for the St. Lawrence

The new bridge will span the St. Lawrence downstream from the Champlain Bridge. This bridge, which will be built over the St. Lawrence River and the St. Lawrence Seaway, will be built starting from Nuns' Island in the Verdun borough of Montreal, and extending over to the City of Brossard on the South Shore. According to the *Pre-feasibility Study Concerning the Replacement of the Existing Champlain Bridge*, Jacques Cartier and Champlain Bridges Incorporated, 2011, the best configuration would comprise three lanes in each direction, plus a fourth lane in each direction reserved for public transit. Traffic forecast studies have been ordered by Transport Canada to help determine the best configuration. The bridge includes three components:

- Component D1a spans the St. Lawrence River between Nuns' Island and the Seaway;
- Component D2 spans the Seaway; and
- Component D1b spans the Small Laprairie Basin between the Seaway and the Brossard shore.

2.1.5 Component E: Alignment with Highway 10

Highway 10 will have to be realigned so that it connects to the new bridge. The access ramps to the South Shore will also have to be slightly reconfigured to connect with Highway 10.

2.1.6 Component F: Demolition of the existing Champlain Bridge

The demolition of the Champlain Bridge will take place after the construction of the New Bridge for the St. Lawrence.

2.1.7 Component G: Demolition of the Nuns' Island Bridge

The strategy for demolishing the Nuns' Island Bridge is still under review.

2.2 Project site

The New Bridge for the St. Lawrence and related components will run between the Island of Montreal and Brossard; the project includes work on both shores of the St. Lawrence and on Nuns' Island. The new bridge will be built about 10 metres downstream (north) of the Champlain Bridge in order to minimize the impact of the new route on Nuns' Island, facilitate temporary installations during construction (stabilization and/or anchoring of temporary works and barges on the existing upstream piers), facilitate linkage to the existing transportation system and protect temporary works from ice.

3 Scope of the environmental assessment

3.1 Factors to be considered

Subsection 16(1) of the *Canadian Environmental Assessment Act* specifies the factors that must be considered in a “screening-type” environmental assessment:

16(1) Every screening [...] shall include a consideration of the following factors:

- (a) the environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the project and any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out;*
- (b) the significance of the effects referred to in paragraph (a);*
- (c) comments from the public that are received in accordance with this act and the regulations;*
- (d) measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project; and*
- (e) any other matter relevant to the screening [...] that the responsible authority [...] may require to be considered.*

In addition, certain project alternatives will be discussed.

It should be noted that the terms “environment” and “environmental effect” are defined in subsection 2(1) of the *Canadian Environmental Assessment Act*:

“environment”

“environment” means the components of the Earth, and includes:

- (a) land, water and air, including all layers of the atmosphere,*
- (b) all organic and inorganic matter and living organisms, and*
- (c) the interacting natural systems that include components referred to in paragraphs (a) and (b).*

“environmental effect”

“environmental effect” means, in respect of a project,

- (a) any change that the project may cause in the environment, including any change it may cause to a listed wildlife species, its critical habitat or the residences of individuals of that species, as those terms are defined in subsection 2(1) of the Species at Risk Act,*
- (b) any effect of any change referred to in paragraph (a) on*
 - (i) health and socio-economic conditions,*
 - (ii) physical and cultural heritage,*
 - (iii) the current use of lands and resources for traditional purposes by aboriginal persons, or*

(iv) any structure, site or thing that is of historical, archaeological, paleontological or architectural significance, or

(c) any change to the project that may be caused by the environment, whether any such change or effect occurs within or outside Canada.

Lastly, appropriate directives under Quebec's *Environment Quality Act* will also be taken into consideration in this environmental assessment.

3.2 Scope of factors

3.2.1 Changes that delivering the project may cause to the environment

Delivering the project will have an impact on environmental components. The environmental assessment will have to demonstrate what impact the project will have on these components.

Special attention will be focused on components called "valued ecosystem components," which are selected on the basis of their legal, scientific, cultural, social, economic or aesthetic value. The tentative list of the valued ecosystem components selected for this project is shown in Table 1.

The consultation that the federal authorities will conduct with interested parties and the public during the environmental assessment could result in the addition of other environmental components.

Table 1: 1 Tentative list of Valued Ecosystem Components selected for this project

Environment	Topic (Valued Ecosystem Components)
Physical environment	<ul style="list-style-type: none"> • Water quality/hydrology; and • Soil and sediment quality.
Biological environment	<ul style="list-style-type: none"> • Fish and fish habitat; • Migratory birds and their habitats (protected areas); • Precarious plant, wildlife and aquatic species; and • Herpetofauna.
Human environment	<ul style="list-style-type: none"> • Navigation; • Physical and cultural heritage resources; and • Aesthetic and visual aspects; • Quality of life; • Soundscape; and • Air quality.

3.2.2 Assessment of the effect of the environment on the project

The assessment must take into account how the environment could adversely affect the project: for example, from seismic events or severe weather, including occurrences of extreme ice jam and high water level events. The assessment should also consider any potential effect of climate change¹ on the project, such as an assessment of whether the project is designed to endure changes in climate conditions during its life span.

This part of the assessment will be conducted in a step-wise fashion, similar to that described in section 4.7.1.. The possible interactions between potential natural hazards and the project will be first identified, followed by an assessment of the effects of those interactions, mitigation measures, if required, and the significance of any remaining likely adverse environmental effects.

The emphasis in this section should be on environmental conditions that are reasonably plausible, but should not be limited to events that occur on a regular basis.

3.2.3 Assessment of accidents and malfunctions

The environmental assessment will examine the malfunctions and accidents that might occur, so that relevant environmental effects are taken into account in the assessment. The information provided will include a description of:

- specific malfunctions and accidents that have a reasonable probability of occurring during the various phases of the project, including an explanation of how these occurrences were identified for purposes of this environmental assessment;
- the source, quantity, mechanism, flow, form and characteristics of contaminants and other materials (physical and chemical) that risk being released into the surrounding environment should any malfunctions or accidents occur; and
- all emergency plans or cleaning or restoration activities in the surrounding environment that could be required in the case of malfunctions or accidents, or immediately after them.

Special attention must be paid to vulnerable components of the environment that could be affected by an accident or a malfunction and could have more serious consequences (for example, proximity to communities, natural sites of special value).

3.2.4 Temporal boundaries

The temporal boundaries of this assessment establish the period of time during which the negative environmental effects of the project will be taken into consideration.

The temporal boundaries of the project components must include the construction, operation and maintenance of the New Bridge for the Saint Lawrence, and the decommissioning of the Champlain Bridge and the Nuns' Island Bridge as well as site restoration.

¹ For example, would roadway drainage structures be able to safely accommodate the modest increase in the frequency and intensity of precipitation extremes and associated flood flows expected to occur in the future (based on climate change predictions), compared with those provided for under current drainage design standards?

3.2.5 Spatial boundaries

The spatial boundaries that will be established for the environmental assessment must include geographical areas where it would be reasonable to foresee that the project would have an impact on the environment, or that might be relevant to assessing cumulative environmental effects.

3.2.6 Study of likely cumulative effects

Cumulative effects are residual effects of the project on the environment (i.e. which persist even after mitigation measures have been put in place) combined with the cumulative effects of past, present and future projects or activities. They may also result from a combination of various effects of the project on the same environmental component. Therefore, the following will be considered: both the impact of the project and that of other projects and activities that have already been completed or will be, and whose effect will be added to the impact of the project (at the same time and the same location).

All reasonably foreseeable projects will be considered, especially those that contribute to the cumulative effects on the valued ecosystem components, particularly water quality, vegetation, wildlife habitat, air quality and soundscape, because these are the environmental factors that are most often subject to the impact of multiple projects or cumulative effects.

The consideration of cumulative effects on the environment will be based on the reference guide entitled *Cumulative Effects Assessment Practitioners' Guide* (Canadian Environmental Assessment Agency, 1999) available on the following Web site:

<http://www.ceaa.gc.ca/default.asp?lang=en&n=43952694-1>.

4 Environmental Assessment Approach

Since the environmental assessment is a planning tool, it is normal that the technical details of the project are not finalized while it is being conducted. However, a minimum of information must be available and the *Étude de préféabilité portant sur le remplacement de l'actuel pont Champlain, 2011*, constitutes that information. Environmental assessment by objectives and adaptive management are mechanisms that will be integrated into the environmental assessment in order to develop mitigation measures that are effective and adapted to a context where some technical details are still to come.

4.1 Environmental assessment by objectives

Since, at this stage, it would be difficult to develop specific mitigation measures, they will be expressed as objectives rather than specific parameters. This is what is called an environmental assessment by objectives. Environmental assessment by objectives is a mechanism used when certain project details have not yet been finalized, making it impossible to develop very specific mitigation measures.

The details of the mitigation measures will be fleshed out in the compensation plan and the environmental follow-up plan, once the final plans and specifications for the project are complete.

4.2 Adaptive management

Adaptive management could also be applied as part of this environmental assessment. Subsection 38(5) of the *Canadian Environmental Assessment Act* stipulates the following:

The results of follow-up programs may be used for implementing adaptive management measures or for improving the quality of future environmental assessments.

Owing to factors such as the complexity of ecosystems and problems predicting the details of future developments, all environmental assessments involve some degree of uncertainty with regard to the identification of environmental effects, the assessment of their significance and the effectiveness of mitigation measures. In general, adaptive management is a planned and systematic process for continuously improving environmental management practices by learning about their outcomes. Adaptive management provides flexibility to identify and implement new mitigation measures or to modify existing ones during the life of a project. The ultimate goal in applying adaptive management is to ensure that the best possible measures are in place to mitigate any significant adverse environmental effects.

In cases where an adaptive management approach is identified as an alternative to support the proposed mitigation measures, there must be a clear commitment to implement adaptive management measures if the results of the follow-up or monitoring program indicate that corrective measures are warranted

5 Content of the environmental assessment report

The content and recommended structure for the environmental assessment will provide a framework to explain how the assessment factors required under subsection 16(1) of the *Canadian Environmental Assessment Act* are to be presented. To create this framework, information on the project and the current environment must be obtained. The findings of all on-site environmental studies will be documented and added to the environmental assessment by the firm selected to conduct the environmental assessment. The main sections of the environmental assessment report will be:

5.1 Summary

In this section, the project must be briefly described, indicating the main anticipated environmental effects. The key aspects of the affected project and environment must be identified and linked with the anticipated effects and the proposed mitigation measures. Any uncertainties or concerns of the public associated with the project must also be noted.

5.2 Introduction

The introduction should give an overview of the project, including its location, components and related activities, as well as timelines and other key details. In this section, the project proponent must also be identified. This is more of a backgrounder than a description.

5.3 Project rationale and legal framework

Clarification on the application of the *Canadian Environmental Assessment Act* by Transport Canada, Fisheries and Oceans Canada and Environment Canada must also be provided. The reason for conducting the assessment and the environmental assessment triggers must also be specified. This information will shed light on the context of the environmental assessment and the issues to which it responds.

Reference will also be made to agreement elements concluded or to be concluded between the proponent and the governments; there will also be reference made to interests and the main concerns of the parties involved.

5.4 Project description

The environmental assessment must include a clear statement of the purpose of the project. The description of the purpose should include a summary of the need for the project. An adequate description of the project is also required for the assessment of the environmental effects of the project. The project description will include a description of the construction and operations activities that are being proposed. The description will refer to, and elaborate on, the items identified in the project scope, supported with appropriate maps and diagrams. Certain project alternatives will also be discussed here and taken into account in section 5.5.

5.5 Scope of the project and scope of the assessment

The scope of the project consists of a description of the main phases of the project, the project components and a brief description of the related activities.

The scope of the assessment consists of identifying the environmental factors whose potential interactions with the project components will have to be assessed.

5.6 Description of current environment

A description of the existing environment based on the various ecosystem components, especially those for physical, biological and human environments, is required to determine the likely interactions between the project and the surrounding environment and, conversely, between the environment and the project.

5.7 Environmental evaluation and mitigation

The consideration of environmental effects in the screening should be done in a systematic and traceable manner. The assessment methodology should be summarized. The results of the assessment process should be clearly documented using summary matrices and tabular summaries where appropriate.

The basic steps are:

5.7.1 Assessing environmental effects

The assessment will be conducted in accordance with the following general method, using the relevant, appropriate tools, where applicable:

- a) Identify the potential interactions between the project activities and the existing environment during construction and normal operations, and if there are identified malfunctions and accidents.
- b) Describe the changes that are likely to occur to the environmental components and the valued ecosystem components following interactions with the project.
- c) Specify and describe the mitigation measures that could be applied to each probable harmful effect (or sequence of effects) that are technically and economically applicable.
- d) Describe the significance of the environmental effects that likely will occur as a result of the project, after taking into account the implementation of the proposed mitigation measures.

5.7.2 Assessment of the effect of the environment on the project

This part of the assessment will be conducted in a step-wise fashion, similar to that described for the assessment of the project effects. The possible interactions between potential natural hazards and the project will be first identified, followed by an assessment of the effects of those interactions, mitigation measures, if required, and the significance of any remaining likely adverse environmental effects. See section 3.2.2 for further details.

5.7.3 Assessment of accidents and malfunctions

This part of the assessment will also be conducted in a step-wise fashion, similar to that described for the assessment of the project effects. The environmental assessment will examine the malfunctions and accidents that might occur, so that relevant environmental effects are taken into account in the assessment. See section 3.2.3 for further details.

5.7.4 Likely cumulative effects assessment

All reasonably foreseeable projects will be considered, especially those that contribute to the cumulative effects on the valued ecosystem components identified in Table 1, particularly on water quality, vegetation, wildlife habitat, air quality and the sound environment, because these are the environmental factors that are most often subject to the impact of multiple projects or cumulative effects. See section 3.2.6 for further details.

5.8 Assessment of the significance of residual environmental effects

The previous sections described the significance of the effect of:

- the project on the environment;
- the environment on the project;
- project incidents and malfunctions on the environment; and

- this project and other activities connected with past, present, and known future projects (cumulative effects).

The environmental assessment will consider all of these effects in order to provide an opinion as to whether the project, taking mitigation measures into account, is likely to have significant adverse environmental effects. Conclusions shall be reached using the available methodology. The responsible authorities will make the final decision on the significance of the adverse environmental effects.

5.9 Information session/consultation with the public and First Nations

The environmental assessment will include a description of information sessions and consultations that have been held with the public and First Nations. The description will include a list of the main interested parties and a summary of the issues raised and the measures taken in response to them.

Following the information sessions and, if applicable, consultations, comments from stakeholders on the environmental assessment will be clearly listed and classified in tables and addenda, illustrating the way in which they were processed and integrated into the final environmental assessment and showing their impact on the project or the assessment.

Under subsection 18(3) of the *Canadian Environmental Assessment Act*, the responsible authorities may offer the public the opportunity to examine the environmental assessment and comment on it. The level of detail in the environmental assessment should reflect this point. When the responsible authorities deem the preliminary environmental assessment to be satisfactory, it will be made available to the public for review and comment. Modifications to the environmental assessment report could be made in order to take comments from the public into consideration.

In accordance with section 55 of the Act, a project file has been created in the Canadian Environmental Assessment Registry to give notice of the federal environmental assessment and to facilitate public access to related records. As was previously indicated, the link to the record of this project in the Canadian Environmental Assessment Registry is as follows: <http://www.ceaa.gc.ca/050/details-eng.cfm?evaluation=65574>.

5.10 Environmental management plan - Monitoring and follow-up program

Environmental monitoring is an essential mechanism to verify whether the implementation of mitigation measures is satisfactorily carried out when performing work. Its aim is to ensure that activities on the construction site are at all times consistent with what was agreed in the environmental assessment.

The purpose of a follow-up program, pursuant to the *Canadian Environmental Assessment Act*, is to assist in determining whether the environmental and cumulative effects of the project are those predicted in the environmental assessment. The follow-up program also seeks to confirm whether the defined mitigation measures are effective and, if applicable, to determine whether new mitigation strategies could be necessary (adaptive management).

The environmental assessment will indicate whether an environmental monitoring and/or follow-up program is required. If one is required, the environmental assessment will describe the activities of the environmental oversight and/or monitoring program. The environmental monitoring and follow-up programs must be appropriate to the scale of the project and the issues addressed in the environmental assessment.

5.11 Conclusions and recommendations concerning the decision

At the end of the environmental assessment, the responsible authorities will conclude whether or not the project is likely to have significant adverse effects on the environment following the implementation of appropriate mitigation measures.

In the conclusion, the main project issues will be summarized along with the main recommendations indicating that the project will have no significant adverse effects. These recommendations will enable the responsible authorities to make decisions on the environmental assessment, in accordance with section 20 of the *Canadian Environmental Assessment Act*.

If the responsible authorities conclude that the project is not likely to cause significant adverse environmental effects, taking the implementation of appropriate mitigation measures into account, they will be able to proceed with their respective authority.

5.12 References, annexes, plans and photographs of the site, if applicable

The environmental assessment will satisfactorily provide the relevant references, annexes, plans and photographs.

6 Environmental assessment contact

Anyone wishing to obtain additional information or provide comments on any aspect of the environmental assessment of the New Bridge for the St. Lawrence can visit the project Web site (<http://www.tc.gc.ca/eng/programs/bridges-new-bridge-for-the-st.lawrence-2757.htm>) or contact the environmental assessment team by e-mail at the following address: nppsl-env-nbfs1@tc.gc.ca

Appendix A: Departmental Expertise applicable to this Project

Department	Role	Expertise
Transport Canada (proponent and federal co- ordinator)	RA	<ul style="list-style-type: none"> • Navigation.
Fisheries and Oceans Canada	RA	<ul style="list-style-type: none"> • Precarious fish species; • Fish and fish habitat; and • Fish habitat compensation.
Environment Canada	RA	<ul style="list-style-type: none"> • Water quality; • Air quality; • Management of contaminated soils; • Sediment management; • Migratory birds and habitat; • Species at risk; and • Wetlands.
Health Canada	FA	<ul style="list-style-type: none"> • Health risk assessment of a contaminated site and risk management; • Effects of air quality on human health; • Metal contamination of traditional foods (for example, fisheries); • Quality of drinking and recreational water; and • Impact of noise.
Federal Bridge Corporation Limited / Jacques Cartier and Champlain Bridges Incorporated	FA	<ul style="list-style-type: none"> • Oversight, ownership and management of assets specified in the project.
St. Lawrence Seaway Management Corporation	FA	<ul style="list-style-type: none"> • Constraints on commercial and recreational navigation on the Seaway and in the Small Laprairie Basin; and • Access, maintenance of activities and the construction of infrastructure on the dike and in the Small Laprairie Basin.

RA — Responsible authority

FA — Federal authority