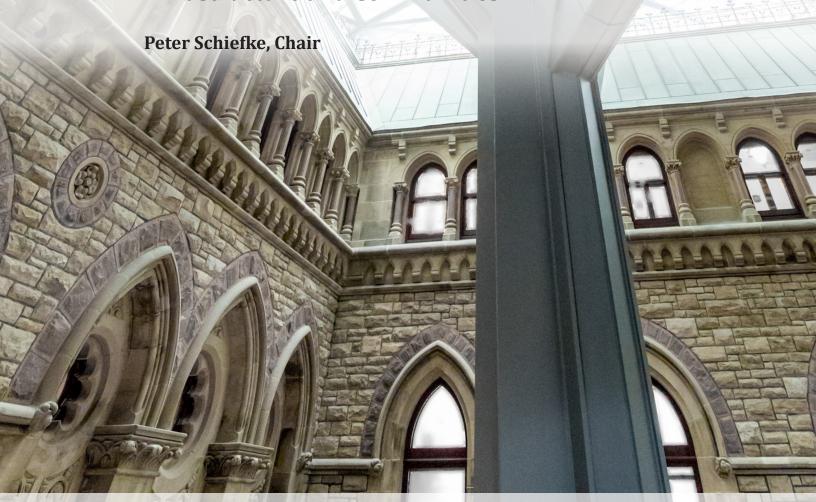


REDUCING THE IMPACT OF COMMERCIAL SHIPPING ON SHORELINE EROSION IN THE GREAT LAKES-ST. LAWRENCE CORRIDOR

Report of the Standing Committee on Transport, Infrastructure and Communities



APRIL 2023 44th PARLIAMENT, 1st SESSION Published under the authority of the Speaker of the House of Commons

SPEAKER'S PERMISSION

The proceedings of the House of Commons and its Committees are hereby made available to provide greater public access. The parliamentary privilege of the House of Commons to control the publication and broadcast of the proceedings of the House of Commons and its Committees is nonetheless reserved. All copyrights therein are also reserved.

Reproduction of the proceedings of the House of Commons and its Committees, in whole or in part and in any medium, is hereby permitted provided that the reproduction is accurate and is not presented as official. This permission does not extend to reproduction, distribution or use for commercial purpose of financial gain. Reproduction or use outside this permission or without authorization may be treated as copyright infringement in accordance with the *Copyright Act*. Authorization may be obtained on written application to the Office of the Speaker of the House of Commons.

Reproduction in accordance with this permission does not constitute publication under the authority of the House of Commons. The absolute privilege that applies to the proceedings of the House of Commons does not extend to these permitted reproductions. Where a reproduction includes briefs to a Standing Committee of the House of Commons, authorization for reproduction may be required from the authors in accordance with the *Copyright Act*.

Nothing in this permission abrogates or derogates from the privileges, powers, immunities and rights of the House of Commons and its Committees. For greater certainty, this permission does not affect the prohibition against impeaching or questioning the proceedings of the House of Commons in courts or otherwise. The House of Commons retains the right and privilege to find users in contempt of Parliament if a reproduction or use is not in accordance with this permission.

Also available on the House of Commons website at the following address: www.ourcommons.ca

REDUCING THE IMPACT OF COMMERCIAL SHIPPING ON SHORELINE EROSION IN THE GREAT LAKES-ST. LAWRENCE CORRIDOR

Report of the Standing Committee on Transport, Infrastructure and Communities

Peter Schiefke Chair

APRIL 2023
44th PARLIAMENT, 1st SESSION

NOTICE TO READER
Reports from committee presented to the House of Commons
Presenting a report to the House is the way a committee makes public its findings and recommendations on a particular topic. Substantive reports on a subject-matter study usually contain a synopsis of the testimony heard, the recommendations made by the committee, as well as the reasons for those recommendations.

STANDING COMMITTEE ON TRANSPORT, INFRASTRUCTURE AND COMMUNITIES

CHAIR

Peter Schiefke

VICE-CHAIRS

Mark Strahl

Xavier Barsalou-Duval

MEMBERS

Taylor Bachrach

Vance Badawey

George Chahal

Angelo Iacono

Annie Koutrakis

Chris Lewis

Leslyn Lewis

Dan Muys

Churence Rogers

OTHER MEMBERS OF PARLIAMENT WHO PARTICIPATED

Larry Maguire

CLERKS OF THE COMMITTEE

Carine Grand-Jean

Michael MacPherson

LIBRARY OF PARLIAMENT

Parliamentary Information, Education and Research Services

Dana Fan, Analyst

Geneviève Gosselin, Analyst

Alexandre Lafrenière, Analyst

THE STANDING COMMITTEE ON TRANSPORT, INFRASTRUCTURE AND COMMUNITIES

has the honour to present its

ELEVENTH REPORT

Pursuant to its mandate under Standing Order 108(2), the committee has studied the impact of commercial shipping on shoreline erosion and has agreed to report the following:

TABLE OF CONTENTS

SUMMARY	1
LIST OF RECOMMENDATIONS	3
REDUCING THE IMPACT OF COMMERCIAL SHIPPING ON SHORELINE EROSION IN THE GREAT LAKES–ST. LAWRENCE CORRIDOR	
Introduction	5
Shipping and Erosion	5
State of the Shoreline	7
A Multi-Stakeholder Approach	8
Shoreline Protection Program	9
Speed Reductions	
Conclusion	11
APPENDIX A LIST OF WITNESSES	13
APPENDIX B LIST OF BRIEFS	15
REQUEST FOR GOVERNMENT RESPONSE	17
SUPPLEMENTARY OPINION OF THE CONSERVATIVE PARTY OF CANADA	19
SUPPLEMENTARY OPINION OF THE BLOC OUÉBÉCOIS	21

SUMMARY

On 14 November 2022, the House of Commons Standing Committee on Transport, Infrastructure and Communities (the Committee) began a two-meeting study on the impact of commercial shipping on shoreline erosion. The Committee heard that several environmental factors and factors related to human activity, such as the passage of ships and pleasure craft, can have an impact on shoreline erosion.

Witnesses highlighted the impacts of erosion on private property and public infrastructure along the shoreline. To stop erosion, they support a multi-stakeholder approach involving all levels of government but argued that the federal government needs to take the lead on this issue.

In addition to speed reduction measures, witnesses called for the implementation of shoreline stabilization measures. Some witnesses called on the federal government to set up a protection program for shorelines affected by shipping on the St. Lawrence River, noting that such a program was eliminated in the late 1990s. Witnesses also said that several shoreline stabilization solutions exist, such as grey infrastructure, revegetation or a hybrid model, some of which may be more appropriate than others depending on the circumstances. Some witnesses argued that more knowledge about these solutions is needed in Canada.

LIST OF RECOMMENDATIONS

As a result of their deliberations committees may make recommendations which they include in their reports for the consideration of the House of Commons or the Government. Recommendations related to this study are listed below.

Recommendation 1—Shoreline Protection Program

That the Government of Canada re-establish a shoreline protection program in areas of the St. Lawrence River where erosion is due in large part to shipping, in particular where the channel is narrow and more exposed to wake, in conjunction with provincial and municipal governments, Indigenous groups, industry and scientific experts.

Recommendation 2—Leveraging Research

That the Government of Canada continue to invest in research that focusses on providing technical guidance to help assess best solutions to shoreline erosion, depending on circumstances and better leverage existing research and federal programs.

Recommendation 3—Inventory of Affected Areas

That the Government of Canada draw up an inventory of the areas affected by erosion along the Great Lakes and St. Lawrence Waterway and shipping channels, and that it identifies the most vulnerable sites where an intervention should be prioritized.

Recommendation 4—Funding Applied Research

That the Government of Canada support research aimed at finding the most appropriate way to protect the banks and to protect their ecosystems from damage caused by vessel traffic.

Recommendation 5—Measures to Reduce Speed

That the Government of Canada evaluate the effectiveness of current voluntary speed reduction measures for commercial vessels and consider applying them on a larger scale through formal regulations.

Recommendation 6—Enhancement and Restoration of Riparian Environments

That the Government of Canada explore the possibility of setting up a fund for the restoration and enhancement of riparian environments affected by erosion that would be financed by the commercial users of the river corridor.



REDUCING THE IMPACT OF COMMERCIAL SHIPPING ON SHORELINE EROSION IN THE GREAT LAKES-ST. LAWRENCE CORRIDOR

INTRODUCTION

On 3 February 2022, the House of Commons Standing Committee on Transport, Infrastructure and Communities (the Committee) agreed to undertake a study of the impact of commercial shipping on shoreline erosion. The Committee held two meetings on this study in November 2022. It heard 12 witnesses and received four briefs.

The following sections summarize discussions with various stakeholders about factors that contribute to erosion, impacts on shoreline infrastructure and measures that should be put in place to protect shorelines.

SHIPPING AND EROSION

"It is ... challenging to determine the relative contribution of ship waves to shoreline erosion. Nonetheless, ship-induced waves can be the dominant source of shoreline erosion at some locations in sufficiently narrow lowland rivers with low currents, limited wind waves, and high ship traffic."

Colin Rennie,

Professor, Civil Engineering, University of Ottawa (As an individual)

Various witnesses discussed the relative impact of commercial shipping on shoreline erosion versus other contributing factors. In his <u>brief</u>, Colin Rennie, a professor of civil engineering at the University of Ottawa, explained that some studies have shown that ship waves can suspend shoreline and bank sediments. If these sediments are transported further by currents or wave action, it can lead to bank recession. He said that the impact of a ship wake on shoreline erosion depends on a number of factors, including the power of the waves, the water surface elevation with respect to the bank, and bank characteristics that determine bank stability. Mr. Rennie also said in his brief that the waves produced by a ship depend on many factors, including the size of the



ship, the speed of the ship, the river depth, and how near the ship passes to the shoreline.

<u>James Bryant</u>, Director of Watershed Management Services for the Essex Region Conservation Authority, agreed, saying that the impact of ship wakes on erosion is less pronounced in Lake Erie than in the Detroit River, which is much narrower, resulting in ships passing much closer to the shoreline. <u>Carine Durocher</u>, Vice-President of the Comité pour la protection des berges du Saint-Laurent (CPBSL), said that studies conducted in the early 2000s showed that commercial shipping could account for more than 50% of shoreline erosion in areas where the channel is close to the shoreline, a statistic also highlighted in the CPBSL's <u>brief</u>.

In addition to factors related to human activity, like shipping, witnesses pointed out that erosion is also caused by natural factors, such as currents, ice movement, fluctuating water levels, or waves caused by storms. The relative importance of natural factors or climate change on shoreline erosion versus shipping also depends on the location.

Jean-François Bernier, a research assistant at Université Laval, explained that winds and storms that cause large waves have a more significant impact in larger bodies of water. He noted:

The gigantic waves of two or three metres that can be observed in the Magdalen Islands don't break in the fluvial section of the St. Lawrence. ... Ship and boat wake thus creates waves in a system where waves otherwise are few.

Like other witnesses,² Mr. Rennie made several recommendations in his brief to increase understanding about shoreline protection strategies. For example, he recommended further research into the "relative importance of ship waves versus currents" in bank erosion processes and the suitability of various "ecological engineering approaches for stabilization of St. Lawrence River shorelines" when subjected to river and shipping conditions. Philippe Murphy-Rhéaume, Director of Canadian Policy for the Great Lakes and St. Lawrence Cities Initiative, said he believes that the future Canada

Standing Committee on Transport, Infrastructure and Communities (TRAN), Evidence, 1st Session, 44th Parliament: Colin Rennie (Professor, University of Ottawa (brief)); James Bryant, (Director of Watershed Management Services, Essex Region Conservation Authority); Maud Allaire (Mayor, City of Contrecoeur, and Member, Cities Initiative, Great Lakes and St. Lawrence Cities Initiative [GLSLCI]); Roy Grégoire (Resident of Saint-Ignace-de-Loyola, [As an individual]); Colin Rennie (Professor, University of Ottawa, [As an individual]); Jean-François Bernier (Research Assistant, Université Laval, [As an individual]) and Patrick Lajeunesse (Professor, Université Laval, [As an individual]).

TRAN, *Evidence*: <u>Allaire</u> (GLSLCI); <u>Bryant</u> (Essex Region Conservation Authority); and <u>Philippe Murphy-Rhéaume</u> (Director of Canadian Policy, GLSLCI).

Water Agency could be responsible for centralizing information and studies on coastal resilience.

In their <u>brief</u>, the municipalities of Visitation-de-l'Île-Dupas and Saint-Ignace-de-Loyola and the RCM of D'Autray argued that the passage of pleasure craft also has an impact on shorelines. <u>Mr. Bryant</u> suggested that recreational boaters travel closer to the shoreline and tend to outnumber ships. The municipalities therefore emphasized the importance of continuing to educate boaters "on the environmental aspects of the speed of their crafts."

STATE OF THE SHORELINE

'[Erosion] is simultaneously a public safety, environmental and quality-of-life issue."

Mayor, City of Contrecoeur, and Member, Cities Initiative, Great Lakes and St. Lawrence Cities Initiative

In her testimony, <u>Micheline Lagarde</u>, Chair of the Comité pour la protection des berges du Saint-Laurent, said that erosion continues despite protective structures, and that some of these structures are even "collapsing," which was also pointed out by other witnesses.³ <u>Mr. Bernier</u> said that at least 300 km of shorelines in the fluvial section of the St. Lawrence River "show signs of erosion as a result of the seaway." <u>Ms. Lagarde</u> also argued that the costs of maintaining or repairing the structures are beyond the reach of shoreline property owners and that the expertise of coastal engineering experts is needed to find "innovative and sustainable" solutions.

In its <u>brief</u>, the CPBSL said that the shoreline protection walls built in the 1960s and 1970s are no longer "best practice." Similarly, <u>Mr. Bernier</u> explained that grey infrastructure, like walls, can have the effect of increasing current speed and the energy of waves, which can have negative effects on the environment. In his <u>brief</u>, Mr. Rennie said that "hardening a riverbank can increase erosion processes elsewhere in the river." However, <u>Mr. Bernier</u> and <u>Patrick Lajeunesse</u>, a professor at Université Laval, explained to the Committee that natural shorelines are also subject to erosion, and that some

TRAN, *Evidence*: <u>Allaire</u> (GLSLCI); <u>Jean-Luc Barthe</u> (Mayor, Saint-Ignace-de-Loyola) and <u>Bryant</u> (Essex Region Conservation Authority).



islands in the fluvial section of the St. Lawrence River are losing around one to two metres of shoreline per year.

In their testimony, some witnesses highlighted the impacts of erosion on their community. They spoke about the psychological and financial stress experienced by shoreline property owners,⁴ the risk of flooding, damage to public infrastructure, and the emergency work required to protect them.⁵ Mr. Bryant said that, in the Essex region, bank erosion can lead to flooding with "catastrophic" consequences. Witnesses also expressed the view that erosion can lead to the loss of biodiversity, particularly due to the accumulation of sediment in fish habitat and breeding grounds.⁶

A MULTI-STAKEHOLDER APPROACH

"[T]his is a complex problem that requires multiple angles to address. Yes, perhaps partnerships ... with municipalities and other tiers of government are needed to work together to identify possible solutions, including shoreline stabilization. My thought is that the federal government can show leadership in this issue."

Jeff Ridal,

Executive Director, St. Lawrence River Institute of Environmental Sciences

In its <u>brief</u>, the CPBSL noted the "myriad municipal, provincial and federal regulations that apply to the shoreline." Shoreline erosion on the St. Lawrence River falls under the jurisdiction of both the provincial and federal governments, as well as under the delegated powers of municipalities. Ms. Lagarde also said that, in discussions with federal departments, including Transport Canada and Fisheries and Oceans Canada, she was told that the issue wasn't their responsibility. To address the confusion, witnesses

⁴ TRAN, Evidence: Micheline Lagarde (Chair, Comité pour la protection des berges du Saint-Laurent [CPBSL]);
André Villeneuve (Mayor, Municipality of Lanoraie); and CPBSL (brief).

TRAN, *Evidence*: <u>Allaire</u> (GLSLCI); <u>Bryant</u> (Essex Region Conservation Authority); and Municipality of Visitation-de-l'Île-Dupas, Municipality of Saint-Ignace-de-Loyola and Regional County Municipality (RCM) of D'Autray (<u>brief</u>).

TRAN, *Evidence*: CPBSL (<u>brief</u>); Municipality of Visitation-de-l'Île-Dupas, Municipality of Saint-Ignace-de-Loyola and RCM of D'Autray (brief) and Allaire (GLSLCI).

For example, federal jurisdiction over shipping (*Constitution Act, 1867*, section 91(10)) and provincial jurisdiction over private property (*Constitution Act, 1867*, section 92(13)).

suggested a multi-stakeholder approach while emphasizing that the federal government needs to take the lead on this issue.⁸

Mr. Murphy-Rhéaume said he hoped that commitments by the federal government, including a strengthened Freshwater Action Plan and National Adaptation Strategy, would include measures to stop shoreline erosion. He also pointed out that the Great Lakes and St. Lawrence Cities Initiative 2020–2030 action plan, which was drafted in concert with other organizations, makes several recommendations to stop erosion. He said he believes the plan could provide a basis for the federal government to create a program in Canada similar to the Great Lakes Restoration Initiative in the United States, which he said devotes "a lot of funding" to shoreline resilience. He also pointed out that the International Joint Commission is an important stakeholder in terms of water management in the Great Lakes and the St. Lawrence River, given its responsibility for managing water levels.

Shoreline Protection Program

Witnesses argued that, because the federal government has jurisdiction over shipping, and has promoted shipping on the St. Lawrence River, it should therefore be responsible for the impacts of that shipping. André Villeneuve, Mayor of the Municipality of Lanoraie, also argued that the very existence of a federal shoreline protection program until the 1990s is "a bit of a tacit admission" of the federal government's responsibility. Maud Allaire, Mayor of the City of Contrecoeur and member of the Great Lakes and St. Lawrence Cities Initiative, and Jean-Luc Barthe, Mayor of the Municipality of Saint-Ignace-de-Loyola, also brought up this program. According to Mr. Barthe, the program's cancellation left a few kilometres of unfinished riprap work on the island of Saint-Ignace-de-Loyola.

In its <u>brief</u>, the CPBSL states that in 1966 the federal government began protective work in areas of the St. Lawrence River where more than 50% of the bank erosion was attributable to shipping. According to the CPBSL, the program was transferred from the Department of Public Works to the Canadian Coast Guard in 1982 as it was considered to be "seaway maintenance and security." In 1993, the federal government cut funding to the maintenance of protective structures; only the construction of new ones were funded. The program was eliminated altogether in 1998. The federal government cited

⁸ TRAN, Evidence: Murphy-Rhéaume (GLSLCI); Villeneuve (Municipality of Lanoraie); and Lagarde (CPBSL).

⁹ TRAN, *Evidence*: <u>Lagarde</u> (CPBSL); <u>Grégoire</u> (As an individual); CPBSL (<u>brief</u>) and <u>Villeneuve</u> (Municipality of Lanoraie).



budgetary concerns at the time and noted that the program was not one of its "core responsibilities."

Some witnesses recommended that the federal government re-establish a similar program to protect shorelines affected by marine transportation on the St. Lawrence River. ¹⁰

Ms. Lagarde said that existing structures should be maintained. Where no structures are left, she suggested developing "green structures," speaking later of solutions to stabilize shorelines that provide "an exchange between land and water." Shoreline revegetation was also brought up by Mr. Lajeunesse and Mr. Rennie, who in his brief noted that, because it takes time for vegetation to establish, revegetated shorelines may be at risk during the early phases of restoration efforts. Mr. Rennie also said that, in cases where banks with established vegetation are eroded, the solution may be a combined approach that "consists of vegetating the bank above the water line and armouring the bank toe below the water line." Mr. Bryant said that shoreline naturalization techniques are generally not recommended for the Essex region because they "can't withstand the wave energy that's out there from the natural forces." Mr. Murphy-Rhéaume argued:

What we need ... is a centre of excellence or a series of technical guidance that municipalities can rely on in order to understand best solutions with respect to whether natural infrastructure, traditional infrastructure or a hybrid solution could be implemented in their given circumstances.

Speed Reductions

Some witnesses said that voluntary speed reduction zones have been put in place along the St. Lawrence River to protect areas that are more vulnerable to erosion. ¹¹ In its <u>brief</u>, the CPBSL pointed out that, although the voluntary speed limit seems to be respected by most ships, "this measure alone is insufficient or … the prescribed speeds are still too fast to respect the integrity of the banks," a view shared by <u>Ms. Durocher</u>. In the same vein, <u>Ms. Allaire</u> called on the federal government to study the possibility of regulating the speed of pleasure boats and their distance from the shorelines of the St. Lawrence River.

¹⁰ TRAN, Evidence: Lagarde (CPBSL); Barthe (Saint-Ignace-de-Loyola) and Villeneuve (Municipality of Lanoraie).

TRAN, Evidence: Jeff Ridal (Executive Director, St. Lawrence River Institute of Environmental Sciences); CPBSL (brief); Carine Durocher (Vice-Chair, CPBSL) and Grégoire (As an individual).

<u>Mr. Rennie</u> said he thought it made sense to make regulations requiring vessels to travel at speeds and distances that reduce wave height, but he emphasized that "shorelines along rivers in general need some kind of stabilization."

In their <u>brief</u>, the municipalities of Visitation-de-l'Île-Dupas and Saint-Ignace-de-Loyola and the RCM of D'Autray made several recommendations related to the application of the <u>Vessel Operation Restriction Regulations</u> (VORR). Under the VORR, local authorities can ask that the federal government restrict the use of commercial vessels or pleasure craft on bodies of water. This may include speed restrictions or prohibitions on the operation of any vessel. Their recommendations include streamlining the administrative process for municipalities wanting to apply under the VORR for issues related to bank erosion, expediting the approval of applications, and providing funding support to smaller municipalities that wish to apply under the VORR but lack the resources to do so.

CONCLUSION

During the course of the study, stakeholders explained that, depending on the location, shoreline erosion can be caused by a number of factors, including shipping and natural factors like the movement of ice. Witnesses put forth solutions, such as reducing the speed of ships and pleasure craft or implementing shoreline stabilization measures. Witnesses supported a multi-stakeholder approach involving all levels of government, but believe the federal government must take the lead on this issue. Some witnesses recommended that the federal government implement a shoreline protection program and suggested that various strategies (grey infrastructure, revegetation or a hybrid model) could be applied in different locations.

APPENDIX A LIST OF WITNESSES

The following table lists the witnesses who appeared before the committee at its meetings related to this report. Transcripts of all public meetings related to this report are available on the committee's <u>webpage for this study</u>.

Organizations and Individuals	Date	Meeting
As an individual	2022/11/14	38
Jean-François Bernier, Research Assistant, Université Laval		
Roy Grégoire, Resident of Saint-Ignace-de-Loyola		
Patrick Lajeunesse, Professor, Université Laval		
Comité pour la protection des berges du Saint- Laurent	2022/11/14	38
Carine Durocher, Vice-Chair		
Micheline Lagarde, Chair		
Great Lakes and St. Lawrence Cities Initiative	2022/11/14	38
Maud Allaire, Mayor, City of Contrecœur, and Member, Cities Initiative		
Phillipe Murphy-Rhéaume, Director of Canadian Policy		
Municipalité de Saint-Ignace-de-Loyola	2022/11/14	38
Jean-Luc Barthe, Mayor		
As an individual	2022/11/16	39
Colin Rennie, Professor, University of Ottawa		
Essex Region Conservation Authority	2022/11/16	39
James Bryant, Director of Watershed Management Services		
Municipalité de Lanoraie	2022/11/16	39
André Villeneuve, Mayor		

Organizations and Individuals	Date	Meeting
St. Lawrence River Institute of Environmental Sciences	2022/11/16	39

Jeff Ridal, Executive Director

APPENDIX B LIST OF BRIEFS

The following is an alphabetical list of organizations and individuals who submitted briefs to the committee related to this report. For more information, please consult the committee's webpage for this study.

Comité pour la protection des berges du Saint-Laurent
Municipalité de la Visitation-de-l'Île-Dupas
Municipalité de Saint-Ignace-de-Loyola
Municipalité régionale de comté de D'Autray
Perron, Yves, M.P. Berthier-Maskinongé, Québec
Rennie, Colin

REQUEST FOR GOVERNMENT RESPONSE

Pursuant to Standing Order 109, the committee requests that the government table a comprehensive response to this Report.

A copy of the relevant *Minutes of Proceedings* (Meetings Nos. 38, 39 and 61) is tabled.

Respectfully submitted,

Peter Schiefke Chair

Conservatives call for fiscal responsibility in addressing shoreline erosion

Introduction

Conservative Members of Parliament on the Standing Committee on Transport, Infrastructure and Communities would like to thank the Committee, its staff, analysts, and number of witnesses who shared their valuable insights concerning the impact of commercial shipping on shoreline erosion.

While the Conservative Members support the general direction of the report, we are concerned that the report might give the government license to create a costly new bureaucracy that will do little to ameliorate shoreline erosion.

For this reason, we are tabling this supplementary report. Conservatives recommend:

That the Government of Canada allow shoreline protection projects to be considered for existing federal infrastructure funding programs.

Background:

Budget 2023

In the recently tabled budget, the Liberal government of Justin Trudeau announced billions of dollars in new spending. Projected federal government spending in the next fiscal year is expected to be \$151 billion more than it was the year before the Trudeau government first took office. This works out to be \$10,000 more per year for every family.

Fueling this higher spending in part has been an increase in the size of the public service which has grown by 80,000 employees.

As the size and cost of the federal government has rapidly expanded there has been a corresponding decline in the service Canadians receive from their government in areas from health care to border control from immigration to passport services.

Conclusion

Conservatives are calling on the federal government to address the issue of shoreline erosion in a fiscally responsible manner. We believe that within existing budgets, programs, and departments sufficient expertise and resources exist to address shoreline erosion.

The record of this government has been clear, ever-expanding budgets and new programs are no guarantor of better outcomes.



Supplementary opinion Report on shoreline erosion

By the office of Xavier Barsalou-Duval

Presented to The Standing Committee on Transport, Infrastructure and Communities

April 6th 2023

Introduction

First, the Bloc Québécois salutes the committee members and staff for the professionalism they have shown and the work they have accomplished during this study. We also warmly thank all the witnesses who took the time to share their experience and expertise with the committee.

The problem studied is important not only for the environment, fauna and flora, but also for public safety, the quality of life of residents and the integrity of their properties.

Although we celebrate the work done, the committee's recognition of the issue of erosion and its desire to arrive at real solutions, we are of the opinion that the multifactorial origin of shoreline erosion must in no way serve as a pretext for the government to shirk by not recognizing the obvious responsibility of the federal government in this unavoidable aspect of the problem that we have studied: commercial navigation.

Recognizing exclusive federal jurisdiction to warrant action

As several witnesses pointed out, erosion is a complex issue with multiple causes:

"In addition to factors related to human activity, like shipping, witnesses pointed out that erosion is also caused by natural factors, such as currents, ice movement, fluctuating water levels or waves caused by storms."

However, witnesses highlighted the disproportionate impact of commercial marine navigation on shoreline erosion, especially on the narrower passages of the St. Lawrence seaway:

"Carine Durocher, Vice-President of the Comité pour la protection des berges du Saint-Laurent (CPBSL), said that studies conducted in the early 2000s showed that commercial shipping could account for more than 50% of shoreline erosion in areas where the channel is close to the shoreline, a statistic also highlighted in the CPBSL's brief."

Witnesses from the research community supported the assertion that commercial navigation has a significant impact on shoreline erosion. Professor Colin Rennie of the University of Ottawa explains:

"Studies have shown that ship waves can suspend shoreline and bank sediments. If these sediments are transported further by currents or wave action, it can lead to bank recession."

In order to ensure that residents know who to contact to obtain programs to mitigate the impacts of commercial shipping on erosion, it is important to remember that this is an area that is the sole responsibility of the federal government.

According to Section 92(10) of the Canadian Constitution, the provinces cannot act on:

"Lines of Steam or other Ships, Railways, Roads, Telegraphs, and other Works and Undertakings connecting the Province with any other or others of the Provinces, or extending beyond the Limits of the Province"

Witnesses from the municipal sector also raised a former federal program as implicit proof of the responsibility of this level of government to act on the effects of commercial navigation on erosion. The mayor of Lanoraie rightly asserts that the existence of programs until the 1990s would be "a bit of a tacit admission" of the responsibility of the Government of Canada.

Conclusion

The first recommendation of the report is important and reads as follows:

"That the Government of Canada re-establish a shoreline protection program in areas of the St. Lawrence River where erosion is due in large part to shipping, in particular where the channel is narrow and more exposed to wake, in conjunction with provincial and municipal governments, indigenous groups, industry and scientific experts."

We would first like to reiterate that commercial shipping is not just one factor among others in the causes leading to erosion in the fluvial corridor, but a central element.

We would also like to mention that despite the importance of working together with the other stakeholders and especially with the Government of Quebec, action to mitigate the impacts of commercial shipping on shoreline erosion must above all come from the federal government.

While our societies are considering the best practices for reconciling economic development with respect for the environment, the issue of commercial shipping and the federal government's responsibility towards protecting ecosystems and shoreline properties cannot be ignored and is even conditional on the social acceptability of the economic exploitation of the maritime potential of the St. Lawrence.

It is therefore with the greatest optimism, but also with the greatest insistence, that we urge the federal government to implement the recommendations contained in this report, and to do so without delay.