

COALITION FOR RESPONSIBLE AND SUSTAINABLE NAVIGATION

BRIEF ON MANAGING CANADA'S FRESHWATER RESOURCES

SUBMITTED TO THE HOUSE OF COMMONS STANDING COMMITTEE ON  
ENVIRONMENT AND SUSTAINABLE DEVELOPMENT FOR ITS STUDY ON THE  
ROLE OF THE FEDERAL GOVERNMENT IN PROTECTING AND MANAGING  
CANADA'S FRESHWATER RESOURCES

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The Coalition for Responsible and Sustainable Navigation is a national non-profit organization created in 2013 by a group of waterfront residents concerned about the environmental impact of the use of powerful and unconventional vessels on Canada's waterways. The objectives of the Coalition Navigation are to ensure that legislative parameters are based on the best possible science and to raise awareness among all stakeholders of the importance of having navigation legislation that truly reflects the environmental tolerances of Canada's waterways. This approach is preferred because it prevents irreparable environmental damage to our natural heritage.

Given the nature of our organization's activities, we work primarily with Transport Canada on regulating waterway navigation. In this regard, we have produced guidelines for drafting regulations that are consistent with environmental science. This roadmap permits the use of bathymetric charts as indicators of the categories of motorboats allowed on lakes and rivers.

For example, according to Blais and Prairie, 2014,<sup>1</sup> and Raymond and Galvez-Cloutier, 2015, a wake boat whose ballasts are engaged requires a passage of 600 metres and a water depth of at least 5 metres to prevent environmental degradation.<sup>2</sup> Therefore, this type of craft should operate only on waterways with a shipping corridor that meets these criteria.

It is important to note that, despite the environmental nature of our efforts, they fall mostly within the regulatory jurisdiction of Transport Canada. Unfortunately, while adding new regulations under existing legislation does not require parliamentary approval, only ministerial approval, the department accepts amendments only after a very tedious process. Indeed, the process for making a regulatory change for a given lake or waterway is very lengthy and complex. For example, Transport Canada requires multiple consultations, over a period of three to six years, and a nearly 100% consensus of waterfront residents before agreeing to amend the regulations concerning vessel traffic on a waterway. Consequently, the department approves an average of only three new regulations per year, meaning that the success rate of actions to protect a lake and its environment is low.

In our view, this situation reflects the limitations of current federal environmental management. Complex environmental issues fall into the lap of departments with little awareness and inappropriate tools. For example, the *Vessel Operation Restriction Regulations* are under the jurisdiction of Transport Canada. These regulations outline possible navigation restrictions that local organizations and waterfront municipalities can

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<sup>1</sup> Mercier-Blais, Sara, and Yves Prairie, *Projet d'évaluation de l'impact des vagues créées par les bateaux de type wakeboat sur la rive des lacs Memphrémagog et Lovering*, 2014. Université du Québec à Montréal, 31 p. [in French only]

<sup>2</sup> Raymond, S., and Galvez, R., *Impact de la navigation en milieu lacustre – Étude sur la remise en suspension des sédiments : Cas du Lac Masson et du Lac des Sables*, 2015. Université Laval, 30 p. [in French only]

put in place on their waterways. However, the environment is not listed as a valid reason for a restriction—only navigation and safety standards are.<sup>3</sup>

Furthermore, the *Safe Boating Guide* and the *Vessel Operation Restriction Regulations* both appear to indicate that the environmental issues of interest to us are covered by guides rather than regulations. The *Safe Boating Guide* states that “[a] boat’s wake can damage other vessels, docks and the shoreline. It can also be a risk for swimmers, divers and people on small boats that might capsize. Be aware of how your boat’s wake might affect others when choosing your speed. You will be responsible for any damages or harm you cause. Personal Watercraft (PWC) – Be aware of the impact your PWC can have on the environment. Avoid high speeds near shore.”

The *Safe Boating Guide* also provides some green boating tips: “Avoid shoreline erosion – watch your wake and propeller wash. Obey all speed limits for better fuel economy.”

In other words, local restrictions may apply to some Canadian waterways to promote public safety and responsible boating. For example, motorboats or recreational towing activities may be banned, and maximum engine power or speed limits imposed. While these restrictions may benefit the environment, they do not allow for a comprehensive restrictions based on environmental science. The problem, then, is the ability of local authorities to impose the restrictions necessary to protect the waterway and the difficulty of using environmental protection as a justification for restrictions.

We believe that the solution lies in the coordinating role that the Canada Water Agency must play with the three departments involved in the protection and regulation of waterways: Environment, Transport and Fisheries and Oceans Canada. **We believe that the Agency must play a central role in preserving and properly managing our waterways by developing pan-departmental initiatives that can pool the resources necessary to effectively manage environmental issues and by supporting a Canada-wide initiative to manage navigation based on the bathymetric impact of pleasure craft.** In other words, since freshwater management is multi-faceted and involves multiple stakeholders, the Agency must be able to bring these various components together in a unified and consistent approach.

Indeed, it is in terms of conservation that coordination becomes most meaningful. As described earlier, the process of regulatory change is long and tedious. This is particularly distressing when it inhibits conservation initiatives in sensitive ecosystems. The case of the Columbia River in British Columbia is an excellent example. Local stakeholders wanted to prevent the use of high-powered boats between Fairmont Hot Springs and Donald Station. This 150-km stretch is part of the Columbia Wetlands system, the largest such system in Canada. Despite how important this area is to the region’s biodiversity, local stakeholders had to persevere through 15 years of federal

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<sup>3</sup> *Vessel Operation Restriction Regulations* (SOR/2008-120). Online: <https://laws-lois.justice.gc.ca/eng/regulations/sor-2008-120/>.

bureaucracy to achieve their goals.<sup>4</sup> This red tape is incompatible with the speed of action needed to effectively protect our aquatic ecosystems. By coordinating local protection initiatives with government departments, the Canada Water Agency has the potential to shorten the time it takes to process regulatory amendment requests.

Similarly, sound management of our waterways requires policy based on scientific research. In our case, this policy must incorporate impact assessments of pleasure boating based on bathymetry and boat wakes.

More specifically, the initiative aims to develop a signature for each class of boat based on its wake.<sup>5</sup> That is, the distance required for surface waves and wash to dissipate at depth is measured.

The next step is to establish the tolerance threshold for waterways based on their bathymetric characteristics.<sup>6</sup>

This refers to determining the relationships between the waterway's characteristics, such as depth, area and sediment transport, in order to develop a benchmark. Lastly, the relationship between these two factors enables establishing the carrying capacity of our waterways while allowing boats of an appropriate size to navigate in the appropriate waterways.

Given that national reach is necessary to have a significant impact, the Canada Water Agency could coordinate or at least disseminate the findings of these types of studies and make the information public—that is, to water stakeholders (research, governance, users, etc.). That way, it would become the preferred source of information to educate citizens and local private and public organizations about the environmental impacts of wakes in freshwater waterways. This is vital, as the number of pleasure craft continues to increase while the tolerance threshold remains the same.

In short, the Canada Water Agency has the potential to improve and democratize waterway governance by developing a bathymetric impact assessment policy and coordinating local regulatory initiatives with the relevant government departments.

However, since freshwater is a joint responsibility of the provincial and federal governments, the Agency will need to include the provinces in this Canada-wide strategy for responsible water management.<sup>7</sup> This would involve working with the

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<sup>4</sup> *CBC News*, “Environmentalists laud motor restrictions on Columbia River,” British Columbia, *CBC News*, October 2016.

<sup>5</sup> Boat wake: Wave action produced by the wash of passing ships and boats.

<sup>6</sup> Bathymetry: The science of measuring the depths and relief of ocean floors.

<sup>7</sup> All levels of government have been assigned water protection responsibilities. The key legislative powers of provincial governments give them a major role in and responsibility for freshwater management. In the provincial governments of Quebec and Ontario, this responsibility is dispersed among a number of agencies and ministries. These specific responsibilities include water licensing, water supply, pollution control, and hydroelectric and thermal power development. The provincial and federal governments share jurisdiction over water issues in the

provinces to ensure effective knowledge sharing across the country while coordinating research initiatives that take place in federal jurisdictions. Establishing funding programs for research on topics under federal jurisdiction, such as responsible maintenance of waterways or the impact of commercial traffic on aquatic ecosystems, would also be in order. With different areas of responsibility, amalgamating these data would provide the basis for a comprehensive picture of the state of freshwater in Canada.

As established earlier, freshwater management in Canada is multi-faceted. It reflects political boundaries, historical allocation of legislative authority, and settlement and use patterns. In that respect, watersheds are subject to the overlapping laws, policies and priorities of the federal government, provincial governments, various agencies and organizations, industry, the private sector, and Indigenous communities and municipalities within those watersheds.

The federal government could certainly play a more effective role in watershed protection by providing, among other things, a clear legislative framework that specifies the roles and responsibilities of the various levels of government and stakeholders and possible actions depending on the context.

More concretely, it could ensure that activities that it regulates do not degrade watersheds. Indeed, it seems necessary to pause the development of the Chalk River Near Surface Disposal Facility project. This project was designed by Canadian Nuclear Laboratories at the request of the Harper government. Its priorities were to reduce the risk of the waste already generated and the cost to taxpayers by “revitalizing” the site, demolishing more than 100 buildings and constructing new nuclear facilities by 2025.<sup>8</sup>

The riskiness of this project stems from a number of factors that are listed in the environmental impact report prepared by Canadian Nuclear Laboratories. It describes how the risks of the project are deemed acceptable because the criteria considered important are the project cost and timeliness.

We believe that, for a project that could affect water safety and quality and therefore pleasure boating on the Ottawa and St. Lawrence rivers, the priority should be maintaining the site and minimizing the risk of contaminating a portion of the Ottawa River watershed.

In this respect, the Agency could develop project acceptability criteria consistent with the logic of preservation and sound management that drives the bathymetric impact

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areas of agriculture, health and environmental protection. The federal government has jurisdiction over fisheries, toxic substances, navigation, federal lands, nuclear safety, transboundary issues and international relations. In some areas of federal jurisdiction, such as fisheries management and fish habitat protection, the federal government has delegated certain powers through agreements with provincial governments, conservation authorities, industry associations and conservation groups.

<sup>8</sup> Golder Associates. *Environmental Impact Statement, vol. 1: EIS Report*. March 2017. Document prepared for Canadian Nuclear Laboratories. Project No.: 1547525. 990 p.

assessment initiative. This could establish the role of the federal agency as a consistent contributor to responsible governance of our resource.

The federal government's responsibilities, however, do not end at home. From a global perspective, Canada is the third-largest country in terms of renewable freshwater reserves. Nearly 9% of its territory is covered by freshwater, or approximately 900,000 km<sup>2</sup>.<sup>9</sup>

This abundance imposes a responsibility in terms of resource management and preservation.

Indeed, the development of initiatives that provide solutions, such as a bathymetric impact policy, is easily transferable outside the Canadian context. Once tested and refined, these projects can be exported internationally depending on the nature of the needs. Similarly, Canada, being proud of its experience, could help foreign countries develop alternative solutions to specific issues. Moreover, getting private companies involved in managing freshwater in foreign countries is possible, but must be limited to introducing techniques and technologies that will improve resource quality and increase availability. It should not be used for appropriation or commercialization. In this regard, financial institutions could set up programs to finance expertise export initiatives that promote international cooperation.

In addition, given the complex nature of international relations, Global Affairs Canada, in partnership with the Agency, could adopt a clear mandate to provide support and supervision based on the Canadian approach. This would ensure both oversight of the actions of private companies and consistency of exchange initiatives with the needs of the foreign countries involved.

In conclusion, **creating the Canada Water Agency would offer the opportunity to effectively preserve the health of our waterways by coordinating local navigation regulation initiatives with the relevant government departments. It would also enable sound management of the resource by paving the way for a policy of bathymetric impact assessment of pleasure craft.** These two values would guide responsible and consistent Canada-wide freshwater governance.

We recognize the enormity of the task, but the Coalition Navigation is here to provide the technological tools and legislative drafting guidelines required to support the Canada Water Agency in its mission of preserving and properly managing water.

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<sup>9</sup> Nature Conservancy Canada. *Freshwater 101*. Online. <https://www.natureconservancy.ca/en/what-we-do/resource-centre/conservation-101/freshwater-101.html>. Accessed May 13, 2021.

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