

Submission to

The Panel on the Future of the Trent-Severn Waterway

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Summary

This submission addresses a number of issues including the waterway definition, navigation levels and ecological issues. It is recommended that the Panel: Interpret to the public that the scope of the Waterway includes the entire watershed in which it passes; endorse the public expectations of guaranteed minimum historical depths along the Waterway; recommend appropriate budgets for dam repair and state-of-the-art forecasting so that the impact of level regulation is minimized on the reservoir lakes; recognize all of the ecological issues in the entire watershed that are affecting water quality, their decline and root causes; improve the commitment to water quality; make the positions of the municipalities generally available on the Panel's website; introduce the notion of preserving and enhancing the natural (water) capital of the TSW region and quantifying its value as an ecosystem, thereby facilitating fiscally responsible investment decisions; and, recommend a governance structure that is adequately funded, accommodating to the various interest groups, yet accountable to the general public, as outlined.

Without Prejudice

The comments offered in this document are offered in the spirit of the Panel's invitation to respond, without malice, and with the hope that the Panel's deliberations will be enhanced by its content.

Submission to The Panel on the Future of the Trent-Severn Waterway

1.0 Scope of the Independent Panel

The federal Minister has struck an excellent and comprehensive list of issues to be examined by the Trent-Severn Waterway (TSW) Panel. Missing is specific reference to maintaining and improving water quality in the system. While “assuring the future of the Waterway’s natural environment” is broadly inclusive, the commitment to water quality is low in supporting documentation. However, to the credit of the Panel, they appear to recognize that while fewer respondents raised related issues, “their concerns are no less important”. The water quality issue is addressed later in this submission under the heading Ecological Issues and again under Natural Capital.

The Panel should not be discouraged by the seemingly lack of interest in the community to directly respond to its mandate and call for response. That is the Canadian way – belief in peace, order and good government – but get out of the way if the wrong judgments are taken. Canadians appear to react rather than take the initiative in recommending policy!

2.0 “Waterway”

The general view of the public is that the “Waterway” is the navigational path (corridor¹) that wends its way from Port Severn to Trenton. All of the public communications reinforces that perception. The planning documentation correctly includes the entire watershed. While the residents of the Kawarthas are deeply indebted to the TSW, do Haliburtonians consider that they are part of the TSW and receive value there from? It is not the appropriate management of the entire set of watersheds, not just the waterway that is central to the focus of this Panel? This is more than a semantic issue that needs to be addressed at the governance stage.

3.0 Navigation Levels

The Expectations document (sections 4.6.2 and 4.6.10) correctly summarizes public expectations as to the minimum depths guaranteed (with a long history) for the Waterway. These must continue to be respected at all costs over the Victoria Day weekend to Thanksgiving Day. Certainly these expectations impact the levels of the reservoir lakes but owners there should have been well aware of the relevant history of fluctuating levels which is reflected in property values. However, reservoir lake owners are entitled to a management strategy that includes measurement (rain and snow precipitation, runoff conditions, forest canopy and ground retention factors) and forecasting using the latest in computer modeling. As well, the dams under the control of TSW and MNR must be maintained and properly regulated.

¹ Prof. Rich in discussion Paper #5, Governance

The general public is aware that infrastructure (roads, bridges, rail, sewers, waterworks etc.) in North America is failing but the declining state of our dams, usually hidden away from sight, has not entered the national consciousness nor received much media coverage.

4.0 Public Safety

For decades TSW maintained a safety marker on a large, fully-submerged table rock² in Balsam Lake near to the navigation channel. This service has been withdrawn recently by TSW for perceived liability and cost reasons. While regrettable to those boat owners who have lost motors or hulls to this artifact, and given the ready availability of GPS, provision of off-channel markers is not a service that should be restored by TSW. Navigation markers are and must continue to be an essential service.

5.0 Ecological Issues

Previous respondents report concerns about algae blooms and proliferation of aquatic weeds. In this writer's view, all of the lakes along the (navigational) Waterway are in decline. This is based on seven decades of observing change in water quality and weed growth in Balsam Lake. This lake at the top of the Kawarthas used to be clear; weeded areas were few and specific in location. There used to be a chorus of frogs in the nearby wetlands; their cacophony is now gone. Where are the frogs?

Over the years there has been:

Cause	Effect
Recovery and fill of wetlands for development.	Reduction of water filtering capacity; reduction of wild life habitat.
Building of continuous, hardened shorelines without rubble backfill ³ .	Destroys littoral zone for spawning.
Use/overuse of lawn pesticides.	Kills or genetically impairs fish and other wildlife.
Inadequate and illegal septic systems; lack of regular inspection.	Pollution – increased phosphorous load which leads to algae and underwater vegetation growth.
Use/overuse of lawn fertilizers.	As in 4. above with addition of damaging nitrate ⁴ loading.

² Togo Rock

³ TSW administers excellent regulations applying to new installations on this point but does not have the capacity to monitor.

⁴ In 1995 the author tested the water from a neighbour's groundwater well 10' from Balsam Lake and connected there to. The nitrate concentration measured at the University of Waterloo was 30 times permissible levels. The known consequence is "blue baby syndrome" in infants and possibly injurious to senior citizens with heart conditions.

Lack of buffer zones between lawns and the water's edge.	As above.
Use of soaps in the lake.	As above.
Cause (continued)	Effect (continued)
Destruction of forest canopy at shoreline and back considerably from the shoreline.	Causes high rates of water runoff in spring and after storms with accompanying sedimentation.
Road ditches and residential water courses discharge directly into water bodies without wetland filtration.	As in 8. above.
High power motor boats with damaging wakes.	Causes erosion and destroys nesting grounds of loons.

In other jurisdictions there are enforced rules that create buffer zones alongside creeks and ditches that empty into controlled bodies of water. The Province of Ontario and the City of Kawartha Lakes (COKL) are committed to creation of buffered areas on farms that raise livestock. In the writer's view COKL perceives⁵ that farms contribute the bulk of pollution to water. The contribution from lake estate owners and unregulated golf courses is a major factor too and appears not to be regulated.

6.0 Consultants' Reports and Consultations with Stakeholders

The Ecoplans Limited document is an excellent resource, rich in substance and well organized. Parks Canada is to be congratulated on engaging and providing direction to Ecoplans. It is apparent (Acknowledgements section) that a great number of government agencies – federal, provincial and municipal – were consulted. The role and probable position of both federal and provincial ministries and departments is fairly transparent given good media coverage and excellent web sites.

What is disturbing is that the policies and positions of the municipalities, with few exceptions when they have been respondents, appear to be either unknown or not available to those of us affected by TSW policy. For example, the City of Kawartha Lakes (CoKL) cuts a vast swath across the TSW control area and is hugely dependent upon its success. We the residents of this area are entitled to understand the position taken by our municipality. I expect that residents of Orillia and Peterborough, for example, would share this expectation with respect to their municipalities.

The Canals document is somewhat disappointing and was possibly misdirected in scope. The management models investigated are more relevant to "waterways" than to the appropriate management of entire watersheds with all of their attendant problems.

⁵ As reported in the Lindsay Post.

The Ecoplans governance model needs more thought and input by practitioners with experience in public management and not-for-profit organizations.

7.0 Economic Considerations

7.1 Economic Activity and Property Value

Various stakeholders offer estimates of the value of property in select areas of the watershed and of the attendant economic activity in support of tourism and recreation. While undoubtedly important, these are secondary economic factors dependent upon a large list of primary and natural factors – air and water quality, preservation of habitat for ecosystems, ability to recoup and regenerate when impacted by urbanization and overuse. What single agency or coordinating structure carries the responsibility for these primary factors? How should they be characterized? What are the long term consequences of making decisions based upon secondary factors without assessing the impact on the real value of the region’s natural capital?

7.2 Natural Capital

Natural capital provides a means of characterizing and quantifying the value of ecosystems. Natural capital refers to the natural resources and ecosystem services that make possible all economic activity, indeed all life.⁶ For example, municipalities may champion shoreline development as job creating and tax contributing but what if the ecosystem is negatively impacted? If the natural capital of the region then declines in value, the economic benefits – property values, tourism income, recreational spending - are lost.

King and Mazotta⁷ state, “For purposes of assessing the economic value of ecosystem services it is important to note that measuring the value of something using dollars does not require that it be bought and sold in markets. It only requires estimating how much purchasing power (dollars) people would be willing to give up to get it (or would need to be paid to give it up), if they were forced to make a choice”.

Ecosystem evaluation (per King and Mazotta) is an essential tool of natural capital assessment for assisting agencies to make appropriate investment decisions in a fiscally responsible way. It can be used:

- To justify and decide how to allocate public spending on conservation, preservation, or restoration (e.g. dam repair) initiatives.

⁶ *Natural Capitalism: Creating the Next Industrial Revolution*, by Paul Hawken, Amory Lovins, and L. Hunter Lovins.

⁷ Ecosystem Evaluation, Universities of Maryland and Rhode Island, <http://www.ecosystemvaluation.org/>

- To consider the public's values, and encourage public participation and support for environmental initiatives such as hydropower⁸.
- To compare the benefits of different projects or programs.
- To prioritize conservation or restoration projects.
- To maximize the environmental benefits per dollar spent.
- To quantify the impact of urbanization and development.

If the watersheds embraced by TSW are to be properly managed should not the agency replacing it be the coordinating body? It could be empowered to provide guidance in ecosystem evaluation and preservation (indeed improvement of) the region's natural capital.

7.0 Governance Structure

7.1 Consultants Recommended Model

The Ecoplans consultants advocate a governance model similar to the Lake of the Woods Control Board (LWCB). The mission⁹ of the LWCB is, "To regulate the water levels of Lake of the Woods and Lac Seul, and the flows in the Winnipeg and English Rivers downstream of these lakes to their junction, for the benefit of all users and interests". Period! It needs to be clearly understood that all five of the LWCB goals deal with water flows and water levels. The only, and modest, departure from this is in the last line of goal 5., "In particular, shoreline development plans will be evaluated, as well as activities or studies in the upper basin (Rainy and Namakan lakes) which could potentially affect the downstream area, and comments or recommendations provided as appropriate". This does not reflect responsibility or authority for the range of matters set out in the Minister's instructions to the TSW Panel.

7.2 An Alternative Governance Model

The consultants highlight the large span of policy areas (22) and attendant management issues. They also address the large range of stakeholders with conflicting objectives. Can consistent and objective decision-making flow with consensus from a Board that is composed of the diverse interests of the stakeholders? I think not. The outline of the model for the following is based on quasi-Crown agency governance, perhaps federally incorporated with limited liability, reporting to an appropriate Minister of the Crown. Its name must truly reflect its broad mandate, including protection of the region's natural (water) capital.

7.2.1 The Board

⁸ Would the proposed new scheme for hydropower in Peterborough pass such an evaluation given that there will be considerable displacement of local natural resources?

⁹ <http://www.lwcb.ca/BoardDesc/index.html#MGANDG>

- Administers a mandate that includes dedication and enhancement of the natural (water) capital in the entire watershed.
- Drawn from both the leadership of stakeholder constituencies and other interested parties. Federal and Ontario government members hold a minority of voting power.
- Board members do not represent their constituencies at the Board. They are chosen for their knowledge and experience. They act independently with due respect for conflicts of interest.
- Members meet four times a year, one of which is primarily devoted to strategic planning.
- Provides overall direction to policy initiatives.
- Recommends bilateral and multilateral agreements at the federal and Ontario level.
- Approves bilateral and multilateral agreements at other levels.
- Oversees approval and appeal process.
- Offered a nominal fee to attend and to prepare for meetings.
- Accountable to the Minister who provides an A (base) budget.
- Requests and approves a base budget, supplemented by revenues for which the Board is empowered to collect.

7.2.2 Management and Administrative Unit

The scope of the administrative unit exceeds that of a conventional Secretariat given the breadth of the current and anticipated mandate:

- Headed by a Chief Executive or Administrative Officer.
- Four Administrative Units:
 1. Finance and Administration with responsibility for HR also.
 2. Policy and Approvals
 3. Communications, Heritage and Marketing.
 4. Operations
- Advisory Committees, some standing and inclusive of essential stakeholders, but others struck on as-needed basis. The representatives, unlike Board members could (TBD) represent the interests of their respective constituencies. This is the level where the formal coordination process is derived. Consensus management is paramount so that the Board, not encumbered with wrangling, can receive refined recommendations.

The purpose of the Advisory Committee process is to address major issues such as:

- Review of proposed policies.
- Review and amendment of existing policies.
- Receive proposals and briefs.
- Impact and economic reporting.
- Ecological monitoring and reporting.
- Heritage recognition.
- Bilateral/multilateral agreements.
- Reconciliation of differences.
- Other topics as required.

8.0 Recommendations

It is recommended that the Panel:

1. Interpret to the public that the scope of the Waterway includes the entire watershed in which it passes.
2. Endorse the public expectations of guaranteed minimum historical depths along the Waterway.
3. Recommend appropriate budgets for dam repair and state-of-the-art forecasting so that the impact of 2. above is minimized on the reservoir lakes.
4. Recognize all of the ecological issues in the entire watershed that are affecting water quality, their decline and root causes. Improve the commitment to water quality.
5. Make the positions of the municipalities generally available on the Panel's website.
6. Introduce the notion of preserving and enhancing the natural (water) capital of the TSW region and quantifying its value as an ecosystem, thereby facilitating fiscally responsible investment decisions.
7. Recommend a governance structure that is adequately funded, accommodating to the various interest groups, yet accountable to the general public, as outlined.

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