ONTARIO GREAT LAKES ACTIVITIES: AN UPDATE*

Prepared for:

Hon. Dave Levac
Speaker of the Legislative Assembly of Ontario
Great Lakes Legislative Caucus webinar
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INTRODUCTION

This paper was prepared for the Hon. Dave Levac, Speaker of the Legislative Assembly of Ontario, who will be participating in a webinar to be held by the Great Lakes Legislative Caucus on March 27, 2015. The Speaker has been asked to provide an update on Great Lakes activities from an Ontario perspective.

ONTARIO’S GREAT LAKES STRATEGY

- In December 2012 the province released Ontario’s Great Lakes Strategy. The Strategy provides a roadmap for how Ontario will employ a variety of tools and resources across ministries, and for collaborating with the broader Great Lakes community to ensure the Great Lakes waters remain usable for drinking, swimming, and fishing.

- Ontario is currently implementing actions set out in the Great Lakes Strategy that focus on a range of areas, including climate change adaptation, First Nations and community engagement, development of effective agricultural best management practices, biodiversity protection, and combating invasive species.

- Legislation introduced in the Ontario Legislature in February 2015 (Bill 66, the Great Lakes Protection Act, 2015) would, if passed, require the Minister of the Environment and Climate Change to maintain the Great Lakes Strategy and update it every six years.

CANADA–U.S. GREAT LAKES WATER QUALITY AGREEMENT

- As amended in 1987, the Canada–U.S. Great Lakes Water Quality Agreement identifies 43 Areas of Concern (AOCs). AOCs are places where the environment has been harmed, resulting in problems that include beach closures, loss of fish and wildlife habitat, restrictions on fish consumption, and contaminated drinking water. Ontario continues to work with the federal government to implement remedial action plans on the Canadian side of the Great Lakes Basin.

- A top priority under the agreement is the remediation of the Randle Reef, located within the Hamilton Harbour AOC. As the largest Canadian contaminated sediment site in the Great Lakes, the estimated cost of the Randle Reef remediation project is $140 million. The Government of Canada and the Province of Ontario have each committed $46.3 million in funding to the project. Other contributors to the funding of the clean-up include the City of Hamilton, U.S. Steel Canada, and the Hamilton Port Authority.¹

**Canada–Ontario Agreement on Great Lakes Water Quality and Ecosystem Health**

- In December 2014 the governments of Canada and Ontario signed the eighth *Canada–Ontario Agreement on Great Lakes Water Quality and Ecosystem Health*.

- First adopted in 1971, the Agreement is the main mechanism through which the governments of Ontario and Canada coordinate their shared commitments to protect the Great Lakes.

- Under the Agreement signed last December, climate change and ongoing engagement with First Nations and Métis are, for the first time, established as priorities.

- Over the next five years the two governments will focus on completing the remedial work necessary to de-list five more Areas of Concern. These are: Nipigon Bay, Peninsula Harbour, Niagara River, Bay of Quinte, and St. Lawrence River (Cornwall). The long-term goal is to de-list the remaining AOCs by 2025.²

**Implementing the Great Lakes–St. Lawrence River Basin Sustainable Water Resources Agreement**

- In 2005 Ontario, Quebec, and the eight Great Lakes states signed *The Great Lakes–St. Lawrence River Basin Sustainable Water Resources Agreement*. The main purpose of the Agreement is to regulate transfers of water out of the Great Lakes Basin.

- Consistent with other Great Lakes jurisdictions, last April Ontario’s Ministry of Environment and Climate Change posted for public comment further measures to implement the Agreement by regulating intra-basin transfers—that is, the movement of water from one Great Lake watershed to another.

- In November 2014 the Ministry announced that the decision had been made to proceed with the legislative amendments required to give effect to these regulations. Effective January 1, 2015, Ontario has put in place all the regulatory measures needed to meet its commitments under the Agreement.³

**Great Lakes Protection Act**

- As part of Ontario’s Great Lakes Strategy (mentioned earlier), the provincial government introduced *Bill 66*, the *Great Lakes Protection Act*, in February

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² E-mail from the Ministry of the Environment and Climate Change to Legislative Research Service, July 22, 2105.

2015 (earlier versions of the Bill died on the Order Paper). The main purposes of the Act are

- to protect and restore the ecological health of the Great Lakes–St. Lawrence River Basin; and
- to create opportunities for individuals and communities to become involved in the protection and restoration of the ecological health of the Great Lakes–St. Lawrence River Basin.

- The proposed Act reflects the experience acquired under existing agreements, and would provide the Government of Ontario with a more comprehensive suite of tools to address the combined stresses on the Great Lakes posed by multiple watersheds.

- Among other things, the Act would
  - enable the Minister of the Environment and Climate Change, in consultation with other governments and stakeholders, to set targets to support the reduction of algae blooms and to prevent the loss of wetlands; and
  - create the Great Lakes Guardians’ Council, composed of ministers, municipal representatives, First Nations and Métis representatives, and scientists, with a mandate to identify priorities for action.

WATER QUANTITY AND LEVELS

- Ontario’s Ministry of Natural Resources and Forestry represents Ontario’s interests in several bi-national initiatives involving the International Joint Commission (IJC).

- One such initiative is the IJC’s recent two-part study of the ecological, economic, and social effects of low water levels in the upper and lower Great Lakes and St. Lawrence River basin. The IJC released two reports in 2013:
  - the first report, the *International Joint Commission’s Advice to Governments on the Recommendations of the International Upper Great Lakes*, considered the Regulation Plan for Lake Superior outflows at Sault Ste. Marie, and whether physical changes in the St. Clair River were affecting the level of Lakes Michigan and Huron;
  - the second report, the *International Joint Commission Proposal for Lake Ontario and St. Lawrence River Regulation*, contains a proposal for managing water levels and flows in Lake Ontario and the St. Lawrence River basin.

- In June 2014 Ontario, together with the Council of the Great Lakes Region and the Mowat Centre for Policy Innovation, released *Low Water Blues: An Economic Impact Assessment of Future Low Water Levels in the Great Lakes and St- Lawrence River*. According to the report, recent water trends could
have an $18.82 billion dollar (US) impact on key economic sectors by the year 2050.

INVASIVE SPECIES

- Ontario has more invasive species than any other province or territory. Once established, invasive species can be extremely difficult and costly to control.

- In November 2014 the Ontario government re-introduced Bill 37, the Invasive Species Act, 2014. The proposed law employs a risk-based approach that considers a full range of threats, costs and benefits to the environment, society and the economy, and would establish a legislative framework for prevention, rapid response, and, where possible, eradication of invasive species.

- If passed, Bill 37 would establish Ontario as the first jurisdiction in Canada with stand-alone invasive species legislation.

- An invasive species of particular concern in Ontario is the Asian Carp. In recent years, these fish have been caught in the Great Lakes Basin, including Lake Erie, and in other tributaries of the lakes. In July 2014 the Government of Canada announced that it would be opening a new Asian Carp laboratory in Burlington, Ontario. The new lab is part of the federal government’s five-year, $17.5 million program to prevent the introduction and establishment of Asian Carp in the Great Lakes.4

OTHER DEVELOPMENTS
Transportation of Oil on the Great Lakes

- In recent years the growing North American demand for Alberta oil sands crude oil has created pressure to expand existing oil transportation infrastructure. Due to the lack of pipeline and rail capacity, a number of proposals to ship crude oil across the Great Lakes have emerged.

- One such proposal is a plan to ship Alberta crude and fracked oil from a re-constructed shipping dock in Superior, Wisconsin to the more than 20 refineries around the Great Lakes, including Sarnia, Ontario, on Lake Huron.

- In January 2014 Wisconsin’s Department of Natural Resources withheld approval of the proposal, saying more information was required from the project’s two proponents, Calumet Specialty Products and Elkorn Industries. According to media reports, Elkorn reapplied for a permit to upgrade the dock in August 2014.5

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5 “Wisconsin delays shipping proposal for crude oil via Great Lakes,” The Manitoulin Expositor (January 15, 2014), and April Van Buren, “Great Lakes racing to prepare for a new kind of oil spill,” WBEZ91.5 Chicago (September 15, 2014).
• Proposals to ship oil on the Great Lakes, as well the 2010 pipeline spill in the Kalamazoo River in Michigan, and the 2013 train derailment in Lac-Mégantic, Quebec, have attracted the attention of the Great Lakes Commission, Great Lakes municipalities, and environmental groups. For example:
  
  • In a 2013 report the US-based Alliance for the Great Lakes said that state and provincial authorities should not approve proposals to ship oil across the Great Lakes without first ensuring that they have in place effective oil-spill prevention and response policies.
  
  • In June 2014 the Great Lakes and St. Lawrence Cities Initiative, a coalition of more than 100 Canadian and US mayors, passed a resolution calling on the Canadian and American governments and private companies to improve safety measures for the transportation of oil on the Great Lakes and St. Lawrence River.
  
  • In September 2014 the Great Lakes Commission completed a one-year study of the environmental and economic implications of plans to move more oil over and around the lakes by pipeline, rail cars and ships. The Commission formally adopted the report in February 2015, and is now working “to develop a series of recommendations that addresses the environmental and economic imperatives of this issue.”

**OPG’s Nuclear Waste Plans**

• Ontario Power Generation (OPG) is the government-owned corporation that produces more than half of the electricity consumed in Ontario each day. Since it became public several years ago, OPG’s plans to build North America’s first deep rock nuclear waste storage facility at the Bruce nuclear plant in Kincardine have been the source of ongoing controversy on both sides of the border.

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6 “Oil on the Great Lakes,” *Ottawa Citizen* (December 13, 2013); “Mayors call for better protection from oil transportation spills,” *The Collingwood Connection* (June 19, 2014); Alliance for the Great Lakes, *Oil and Water: Tar Sands Crude Shipping Meets the Great Lakes?* (November 20, 2013); and “Oil transportation on Great Lakes to be studied,” CBC.ca (September 10, 2013).


9 The Great Lakes Commission (GLC) is distinct from the International Joint Commission (IJC), although the two have similar mandates. The GLC was established in the 1960s; its members include the eight Great Lakes states, with Ontario and Quebec having associate member status. The IJC was established as an independent bi-national organization by the United States and Canada under the Boundary Waters Treaty of 1909.


• The controversy centres on the fact that, although the waste would be buried 680 meters deep in limestone, the storage area would be within 1.2 kilometers (less than a mile) of Lake Huron. The proximity of the proposed waste site to the lake has raised concerns that accidental leakage could result in long-term contamination of the drinking water supply for millions of people.

• OPG officials maintain that construction and operation of the facility is unlikely to have a significant impact on groundwater in the area, due to the thick geological formations between the proposed waste site and the lake bed. Critics, however, say it is impossible to make guarantees of geological safety very far into the future.

• Significant developments over the last year include the following:
  
  • After public hearings concluded in the fall of 2013, the federally-appointed panel considering the environmental and safety issues relating to the Bruce site announced in March 2014 that it was delaying its decision. The delay was prompted, in part, by an accident in February 2014 at an underground nuclear waste facility in New Mexico.\(^\text{12}\)

  • In June 2014 the Michigan Senate unanimously passed legislation and a series of resolutions calling for reconsideration and/or cancellation of the Bruce nuclear waste facility. One resolution calls on the President of the United States, the Secretary of State, and the US Congress to ask the IJC to evaluate the proposed facility and similar facilities.\(^\text{13}\)

  • OPG has pledged not to proceed with the project without the support of the Saugeen Ojibway Nation; however, in its final submission to the review panel in October 2014, the Saugeen Nation stated that there were still “outstanding issues and uncertainties” to be resolved.\(^\text{14}\)

  • The review panel will report to the federal Minister of the Environment on or before May 6, 2015.\(^\text{15}\)

Algae Blooms

• So-called algae blooms can turn tap water toxic and harm wildlife. In the summer of 2014 an algae bloom in Lake Erie forced the City of Toledo, Ohio to impose a temporary ban on the use of lake water for drinking, cooking, or bathing. Last summer’s crisis was preceded by a massive algae bloom in


\(^{13}\) “Nuclear waste plan raises fears over Great lakes,” Windsor Star (April 19, 2014); “Michigan Senate unanimously passes legislation opposing Canadian nuclear waste dump,” The Voice (June 13, 2014); and “Nuclear waste panel wants more answers,” Toronto Star (March 25, 2014).

\(^{14}\) John Spears, “Bruce nuclear waste site is safe, says OPG.”

\(^{15}\) Telephone interview with Canadian Environmental Assessment Agency, Ottawa, March 16, 2015.
2011, which, according to National Geographic, turned Lake Erie into a “pea soup.”\(^{16}\)

- Experts say that, in addition to climate change, the runoff from fertilizers used on farms and leaky septic tanks are major contributors to the formation of algae blooms.\(^{17}\)

- In February 2015 the governments of Canada and Ontario announced the Great Lakes Agricultural Stewardship Initiative, targeted at the Lake Erie basin and the southeast shores of Lake Huron. Under this initiative, the two governments will invest $4 million annually over the next four years to help farmers improve soil health and promote environmental stewardship.\(^{18}\)

- Shared funding under this initiative will focus specifically on
  - helping producers identify ways to improve soil health, reduce run-off, and improve pollinator habitat;
  - covering the cost of equipment modification, so as to reduce the risks associated with manure application and pollinator health; and
  - encouraging the adoption of best management practices, including soil erosion control structures, cover crops, residue management, and buffer and shelter strips.


\(^{17}\) Ibid.