The Great Lakes and St. Lawrence Cities Initiative

Great Lakes Day at Queen's Park

Tuesday, October 6th, 2015 | #GLSL_QPD

Great Lakes and St. Lawrence Cities Initiative
Alliance des villes des Grands Lacs et du Saint-Laurent

Who we are

The Great Lakes and St. Lawrence Cities Initiative is a binational alliance of over 115 mayors, collectively representing over 17 million people, who work together to protect, restore and promote the Great Lakes and St. Lawrence River.

What we do

The Cities Initiative:

1. Works to address critical issues facing the Great Lakes, including nutrient reduction, Asian carp, microplastics, climate change adaptation and mitigation, transportation of oil through the Great Lakes and St. Lawrence basin, and other issues.
2. Represents the voice of mayors at Great Lakes tables, including the International Joint Commission, committees of the Great Lakes Water Quality Agreement, the Great Lakes Fisheries Commission, and others.
3. Demonstrates and supports the leadership of cities by promoting best practices in sustainable municipal water management and other areas in the Great Lakes and St. Lawrence basin.

Chatham-Kent (Source: https://goo.gl/U1JaZ9)

Accord between the Government of Ontario and the Cities Initiative

Since 2010, the Ministries of Environment and Climate Change, Natural Resources and Agriculture, Food and Rural Affairs have collaborated and shared information on the Great Lakes under the Canada-Ontario Agreement Memorandum of Cooperation (COA MOC).

Thunder Bay (Source: http://goo.gl/ZAqAgz)

The Importance of the Great Lakes to Ontario and the World

The Great Lakes contain 20% of the earth's freshwater resources, making it the largest freshwater body in the world. It represents 84% of North American's fresh water supply.

The Great Lakes Basin is home to 90% of Ontario's population. All Ontarians rely heavily on the Great Lakes for their health and prosperity.

- The Great Lakes provide drinking water to 8.5 million Canadians.
- The Great Lakes supports 40% of Canada's economic activity, including:
  - Supporting 25% of Canada's agricultural capacity;
  - Supporting 45% of Canada's industrial capacity;
  - Contributing $180 billion to Canada-U.S. trade.
  - Sustaining a $100 million commercial fishing industry, and a $350 million recreational fishing industry.

Asian Carp


Source: http://goo.gl/Jq2h6j

Asian carp (silver, bighead, grass, and black) pose one of the most significant threats to the Great Lakes and St. Lawrence, and the discovery of grass carp in Toronto and near Point Pelee in Lake Erie in the last month have created an even greater sense of urgency to deal with the problem. Ontario MNR has worked very closely with Fisheries and Oceans Canada under MNR's 2012 Invasive Species Strategy. Together, extensive monitoring is underway, rapid response exercises have been completed, additional research is underway, much risk assessment work is being done, and close cooperation with authorities in the United States and with the Great Lakes Fishery Commission is occurring on a continuing basis. OMNR and DFO are both working with the Asian Carp Regional Coordinating Committee to bring the best possible science and government response capability to the problem.

Ontario should continue to support these efforts. In addition, there is a proposal on the U.S. side to put additional control at a location 60 miles from Lake Michigan called Brandon Road on the Illinois River which should be supported. A process to build regional consensus on a long term solution is reaching a critical point, and pressure from Canada for the most protective solution would be very helpful. Full physical separation of the Great Lakes from the Mississippi River basin in the Chicago Area Waterway System provides the most effective protection from invasive species for both watersheds, and any other approaches considered must be judged against physical barriers.

Climate Change Adaptation and Mitigation

Cities are at the forefront of climate change adaptation and mitigation. The next five years will be critical in implementing strategies to reduce emissions to reach 2020 goals and to adapt and build resiliency to current and anticipated impacts of climate change on municipal operations and community safety.

The Cities Initiative commends the Ontario Government for its commitment to reduce greenhouse gas emissions by 15% by 2020 (based on 1990 levels), and its interest in supporting a cap and trade regime as part of its strategy to reach its emissions target.

Over the last two years, the Cities Initiative has supported municipal adaptation and resiliency efforts through its Municipal Adaptation and Resiliency Service (MARS), with financial support from the Ministry of Environment and Climate Change. The Cities Initiative is currently developing a program to support municipal efforts to meet their own GHG emission targets by 2020. The Cities Initiative will look to collaborate with other international municipal networks to support this work, such as the Compact of Mayors.


Source: http://goo.gl/RZ5Vzr (Jeff J. Cashman)


Source: http://goo.gl/03HkZz

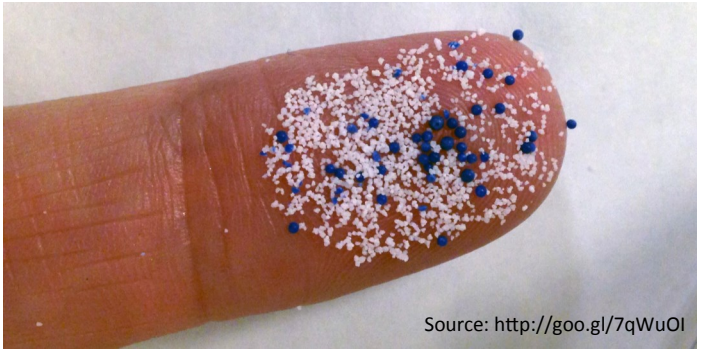
Nutrients and Toxic Algae

Over the last 20 years, levels of phosphorus have increased in Lake Erie, due largely to increased agricultural production. Municipal sewage and combined sewer overflows also contribute to the problem. Combined with mussels that filter the water, and more severe storms and warmer waters due to climate change, harmful algal blooms (HABs) have blossomed in the Western Basin of Lake Erie. Toxic cyanobacteria, or blue-green algae, can thrive in HABs. In August 2014, the City of Toledo was forced to shut down its drinking water system serving over 400,000 residents when cyanobacteria was detected in the water drawn from Lake Erie.

The Cities Initiative congratulates the Ontario Government for its leadership on this issue by joining the states of Ohio and Michigan in the Western Lake Erie Basin Collaborative, collectively adopting a target of 40% phosphorus reduction in Lake Erie by 2025.

Over the past two years, the Cities Initiative has been an active participant on the Great Lakes Water Quality Agreement's Annex 4 subcommittee, tasked with developing Canada-U.S. phosphorus reduction targets and assisting in the development of a binational strategy to reach the targets. The Cities Initiative is also working with its members and agricultural interests to develop Nutrient Action Collaboratives in the Thames River Basin and the Maumee River basin to help accelerate actions to reduce phosphorus entering tributaries that contribute nutrients to Lake Erie.

Source: http://goo.gl/d6XtkP



Source: http://goo.gl/7qWuOI

Microplastics

Microplastics degrade water quality and threaten human, animal, and ecosystem health. Microbeads, a type of microplastic, are small, round, plastics that are commonly found in items like toothpaste and facial scrub. Microplastics are small plastics that are often broken-down or broken-off pieces of larger plastic items. Microplastics also include synthetic fibers like nylon and polyester. Both microbeads and microplastics are too small to be filtered out by wastewater treatment plants, so they are discharged into bodies of water, including the Great Lakes, where they may be consumed by fish and, subsequently, humans.

Support for a ban on microbeads has picked up steam in both Canada and the U.S. in recent months. The Ontario Legislative Assembly is considering Bill 75, the *Microbead Elimination and Monitoring Act*. Other action within Ontario includes a memorandum from the Toronto City Council in support of a microbeads ban, and the Canadian federal government has signaled their intention to regulate microbeads. In addition, several U.S. states have banned microbeads, and many multinational companies that manufacture products containing microbeads have committed to voluntarily eliminate the plastics from their products over the next few years.

We encourage the Ontario government to pursue a provincial ban on microbeads and to support any federal actions to do so. Banning these aquatic contaminants is a significant step towards improved water quality in the Great Lakes and St. Lawrence.

Phragmites

The invasive plant *Phragmites* threatens wetlands, shorelines and crops in Ontario and in the Great Lakes and St. Lawrence Region. Many municipalities do not have access to sufficient resources to effectively manage Phragmites. Some municipalities are not aware of the risks of phragmites and actually plant them for erosion control. The plants spread quickly and lead to degraded water quality, decreased habitat for wetland animals, and may lead to shoreline erosion.


Source: http://goo.gl/6LRvYC (Bob Meadow)

The government of Ontario has established the Ontario Phragmites Working Group as well as the Ontario Phragmites Management Guide, both of which are key resources for effective Phragmites management practices. However, increased funding and more public awareness is needed to halt the spread of phragmites. Further support to municipalities through the Ontario Ministry of Natural Resource's Land Stewardship and Restoration Program is also needed to support Phragmites management.

In addition, Bill 37, the *Ontario Invasive Species Act*, if passed, will signficantly strengthen the Minister's authority to require actions to be taken against invasive species, and impose significant penalties.


Source: http://goo.gl/tWpb7l


Source: http://goo.gl/1EByw3

Wetlands Protection

The Ministry of Natural Resources is currently consulting with the public on Ontario's Wetland Conservation Framework, which adopts a 'no net loss' policy.

Wetlands play a vital role in the ecology of the Great Lakes, providing habitat and spawning areas for many species. The value of wetlands in filtering contaminants entering the Great Lakes is also critical. Now more than ever, wetlands must be preserved and restored to serve as a natural buffer to nutrients entering the Great Lakes and its tributaries from agricultural and urban runoff.

Contact the Cities Initiative and Follow us on Social Media

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Collingwood (Source: http://goo.gl/DUvJri)