



July 31, 2012

Carolyn O'Neill
Manager
Ministry of the Environment
Integrated Environmental Policy Division
Land and Water Policy Branch
Great Lakes Office
135 St. Clair Avenue West, Floor 6
Toronto, Ontario M4V 1P5

Dear Ms. O'Neill:

**RE: Conservation Ontario Comments on Ontario's Draft Great Lakes Strategy
(EBR Registry # 011-6418)**

Overall, Conservation Ontario is very supportive of the Province's initiative to protect the Great Lakes - St. Lawrence River Basin. The Province is to be commended in the comprehensiveness of Ontario's Draft Great Lakes Strategy which recognizes the interconnection between the Lakes and the contributing watersheds. It is supportive of an ecosystem approach to the Great Lakes St. Lawrence Basin encompassing, surface and ground water quality and quantity, habitat and species, and consideration of climate change.

In determining our ongoing and future role, Conservation Ontario's review of the Strategy is particularly focused on the Future Actions to meet the 6 Goals (listed below) with regard to where the greatest opportunities lie and where there may be gaps.

- 1: Empowering Communities
- 2: Protecting Water
- 3: Improving Wetlands, Beaches and Coastal Areas
- 4: Protecting Habitats and Species
- 5: Enhancing Understanding and Adaptation
- 6: Ensuring Environmentally Sustainable Economic Opportunities and Innovation

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SOME KEY POINTS

Conservation Ontario supports the inclusion of Principles to guide the implementation of the Strategy (and Act). Such principles must guide Great Lakes related decision making and input in all fora – principles such as science based priority setting and decisions; integration and collaboration; prevention of harm; citizen involvement; and application of the precautionary principle in existing and future Great Lakes responsibilities.

Conservation authorities could be key partners for every aspect of the Strategy and are referenced throughout; they would provide a distinct watershed perspective at the Great Lakes Guardians' Council table.

Aligning the goals and objectives of the anticipated new Canada Ontario Agreement (36) and the draft Great Lakes Strategy is essential. Opportunity to do this should be provided once the new Great Lakes Water Quality Agreement is released.

Conservation Ontario supports the requirement for a Great Lakes Strategy and feels it needs additional emphasis on accountability for effective delivery and progress reporting. The alignment of priorities and 'buy-in' of all Great Lakes Ministries is key to the success of the Great Lakes Protection Act and Strategy, along with assignments of accountability and reporting (see CO submission on Bill 100, the proposed *Great Lakes Protection Act*). Moving from a broad Strategy to specific collaborative work plans (deliverables, budget, lead responsibility) will be necessary to achieve desired outcomes.

The full potential of Ontario's Draft Great Lakes Strategy (and proposed GL Protection Act) can only be met with resources achieved through leveraging provincial and other partner investment. To ensure that there is delivery of the needed science, a process and funding thereof must be put into place to encourage, evaluate and fund science initiatives aimed at gathering the basic knowledge that will be needed to achieve the objectives of the Act. Provincial support is needed to move existing programs and plans into delivery tools addressing Great Lakes concerns (see additional comments under 5. *Enhancing Understanding and Adaptation*).

Conservation Ontario supports that targets must be set. Without targets it may be difficult to do what is needed to save the Great Lakes. Targets should be established collaboratively, be science-based, and consistent with the Vision and Goals established for the Basin (see additional comments under 5. *Enhancing Understanding and Adaptation*).

1: Empowering Communities

Reviewing the Strategy every nine years makes sense for making goals clear to people who are engaged or those researching Ontario Great Lakes policy, but there should be a commitment to a timeframe for progress reports that inform all Ontarians. To ensure desired outcomes are being achieved, progress

reporting of achievements against the Vision and Goals needs to occur. For example, a “minor” report should be completed once a year or every two years, with a “major” report being completed every five years. Ideally these should be coordinated with Great Lakes Water Quality Agreement reporting. Such reporting will keep the Great Lakes’ community engaged.

The Great Lakes Guardians’ Council would strongly benefit from a watershed perspective which could be provided by representatives of Conservation Authorities and/or Conservation Ontario. Conservation Authorities should be included on the Great Lakes Guardians' Council, recognizing their significant role in watershed planning, shoreline management and protection, watershed stewardship and ecological monitoring. Additionally, it is noted that the Great Lakes Guardians’ Council is loosely defined in the Act and that the membership of the Council may vary from meeting to meeting, presumably depending on the items on the agenda. This may lead to inconsistencies in the advice from such an ad hoc Council. To enable commitment and continuity, it is suggested that the Council include a core defined group of members (including a representative of Conservation Authorities) and invite additional members, subject to the needs of the agenda, as is provided for in the draft legislation. The Council should operate with terms of reference and procedures including regular meetings with specified minimum frequencies.

Conservation Authorities facilitate partnerships to implement watershed and Great Lakes shoreline initiatives. They work with schools, community groups, NGOs, municipalities, the provincial and federal governments and individual residents in their watersheds. Building on these partnerships will be fundamental to the success of the Great Lakes Strategy.

Ontario needs a commitment to long-term, sustainable resourcing by the provincial government at the necessary scale through programs like the local community action fund. It is recommended that the Community Action Fund embrace a whole Basin approach (i.e. St. Lawrence and Great Lakes) and fund proposals from watersheds anywhere in the Basin with a view that some ‘base’ effort/engagement should be encouraged everywhere and with greater effort/emphasis and support for priority areas which may be under consideration for targets and/or geographically focused initiatives. There need to be incentives for both levels of effort. In general, if we do not undertake action throughout the Basin we will have significant issues restoring and maintaining a healthy shoreline because cumulatively, all parts of the Basin are having an impact on the Great Lakes.

With respect to community action fund project selection and the disbursement of such funds, it is recommended that:

- A mechanism be established to ensure that grants are awarded to projects that fulfill set (or identified) strategic priorities, for example, in local watershed plans (or shoreline plans); and,
- There should be consideration for project proposals to include multi-partners (i.e. to confirm local buy-in, partnerships upfront) and recognition that a certain proportion of budget may be applied to staff time as an eligible expense. This should specifically include support costs for facilitation/coordination of actions within an area.

Overall, the Strategy should specifically support the role of conservation authorities to influence and engage community groups, landowners and others to implement actions based on what is reported through conservation authority Watershed Report Cards (WRCs) as well as the targets identified in watershed and other plans and strategies. Conservation authorities have a role in implementing local actions and in coordinating/facilitating necessary watershed or shoreline actions (i.e. informally, through local initiatives that are based on watershed science and local partnerships or, formally, through undertaking a geographically focused initiative as a public body). The ability to track progress and measure success would be enabled (see additional comments below with regard to Great Lakes' targets).

2: Protecting Water

While the introduction (p.38) refers to watershed approaches such as Lake Simcoe work, the Strategy should also acknowledge the opportunities to build on other existing planning frameworks, such as watershed plans prepared by CAs and municipal stormwater management strategies. (This would be consistent with the introduction to the Wetlands section).

There lacks an explicit connection to watershed-based management or Integrated Watershed Management. Reference should be made to promoting and supporting Integrated Watershed Management as a tool in general and in geographically focused initiatives to protect the Great Lakes. The Strategy should recognize the role of local watershed or shoreline management plans in setting locally relevant quantifiable targets. The strategy should acknowledge that these can include those that are focused on inland lake management, e.g. Lake Simcoe, Kawartha Lakes, etc. since a geographically focused initiative for an inland lake in the Great Lakes St. Lawrence Basin can improve the cumulative impacts of activities on the Great Lakes.

Conservation Ontario supports the Great Lakes St. Lawrence Cities Initiative "Declaration on Water Sustainability" which specifies, among other priorities, the need to "increase support for the development and implementation of naturalized infrastructure to more effectively manage rural stormwater run-off around the Great Lakes St. Lawrence basin".

The proposed actions listed on page 37 include a number of actions related to strengthening municipal water, waste water and stormwater management. We strongly agree with the promotion of low impact development (LID) approaches that minimize stormwater run-off and support increased infiltration but the Strategy should provide caution regarding the quality of water allowed to infiltrate based on provincial ground and surface water trends (e.g. salt). Additionally, the Strategy should more strongly reinforce the importance of Green Infrastructure and Low Impact Development practices in both new development and retrofit contexts.

The Strategy should include, under Future Actions, reference to follow through on Ontario's *Building Together* recommendation to assist municipalities' protection or establishment of green infrastructure,

such as urban forests, wetlands, stormwater ponds, and green roofs, to reduce costs and keep waterways and lakes healthy.

The Strategy supports the continued implementation of sustainable stormwater practices (i.e. LID) for the purposes of having more pilot sites (37-38). Given that this Strategy is meant to guide us for the next 9 years we should not only be encouraging pilot sites but also requiring better stormwater management. The MOE's Guide to Stormwater Management does recommend that a treatment train approach be used; however, there is only a need to meet the minimum requirement. The Strategy has the ability to work with and strengthen the MOE's Storm Water Management Planning and Design Manual (2003). Updating the MOE 2003 Manual to provide greater direction and clarity on LID would greatly support undertaking action 'c' on pages 38 and 39 (i.e. provide guidance and a streamlined/standardized approvals process for sites incorporating low impact development practices). Further, the Draft Strategy should reference the need to update the MOE Stormwater Management Planning and Design Manual (2003) to complement the 2010 stormwater policies mentioned in the Strategy to allow practitioners to utilize a wider range in tools in the climate change adaptation process and to protect human life and property. The Province is also encouraged to promote the use of the results of water budget studies to enhance guidance related to factors used to calculate infiltration.

Conservation Ontario supports the Provincial development of tools and websites such as water budget and climate change tools but urge the Province to provide some level of financial support to partners to do the work with appropriate standards and deadlines. These analyses would provide the Province with the results needed to support the development of Provincial and Federal climate change water conservation policies and bi-national adaptive management for Great Lakes' water level regulation.

Include quantification of surface and groundwater contribution to the Great Lakes, identifying challenges, and finding sustainable solutions. Overall water balance of Great Lakes system is a key driver and lacks emphasis in the Strategy (p.40).

Item h) on page 40 speaks to regulations, stewardship, etc. Avoiding duplication and the opportunity for one window service delivery should be noted.

3: Improving Wetlands, Beaches and Coastal Areas

The goal statement should include specific reference to shorelines i.e. improving wetlands, beaches, **shorelines**, and coastal areas. Some thoughts for a subsection to identify future actions as has been done for beaches, wetlands and coastal areas, are: shoreline naturalization programs through partners, education and communications on best management practices to enhance shoreline areas, identifying areas for protection and prescribing planning and by-law restrictions on new developments and activities; moving to one-window permitting to ensure consistency in approach to shoreline activities, etc.

The Strategy should recognize the role of local watershed or shoreline management plans in setting locally relevant quantifiable targets.

Shoreline alterations are noted as a pressure but potential solutions are never listed as with other impacts referenced in the Strategy. Shoreline alterations are a major issue for the Great Lakes shoreline especially in areas where more than 80% is hardened and much of it is already under private ownership. Further hardening needs to be better scrutinized and alternatives developed that meet the Great Lakes' ecological requirements and protection of life and existing property.

All wetlands in the Great Lakes basin need to be protected and the most pressing, immediate need is no-touch protection of all remaining coastal wetlands of any size or class in the Basin. Greater emphasis is recommended for supporting and promoting coastal wetland restoration projects and initiatives, including monitoring. Recognition of the value of coastal wetland monitoring programs is needed. The health of coastal wetlands is crucial for many species and their survival as these areas provide breeding and rearing habitat, refuge, and foraging opportunities for many native species, including threatened and endangered species. It is recommended that the Strategy identify support of new and existing coastal wetland monitoring programs to evaluate a) the health of wetlands and their biotic communities, b) changes in health over time, and c) susceptibility to climate change and lake level changes, and, d) responses to restoration enhancement projects.

It is recommended that in addition to strengthening the protection for coastal wetlands and natural features in the PPS, that recognition and protection of connected natural heritage systems in all watersheds is important in improving the health of coastal wetlands and the Great Lakes-St. Lawrence River Basin.

Intensification, particularly in the Greater Golden Horseshoe Growth Plan area, is resulting in millions of cubic metres of excavated soil with no provincial strategy to address its relocation. Lake shoreline infilling is considered by some to be the best option for dealing with the excess soil. The Strategy should commit to a comprehensive examination of the soil management issue (which extends beyond the GGH) and its resolution.

4: Protecting Habitats and Species

Healthy, connected and diverse habitat within a watershed supports healthy conditions downstream. In urban and urbanizing watersheds it is a challenge to not only protect habitat, but to achieve protection of appropriate setbacks/buffers. Support of the development and implementation of watershed and shoreline management plans and identification and implementation of natural heritage systems should be encouraged and promoted as an important tool in protecting the health of the Great Lakes. This would be consistent with the Lake Ontario Biodiversity Conservation Strategy.

An important challenge to note is the hardening of lakeshores that destroys habitat and interrupts important coastal sediment regime processes. As indicated in the previous section, further hardening needs to be better scrutinized and alternatives developed that meet the Great Lakes' ecological requirements and protection of life and existing property.

Conservation Ontario supports the Great Lakes St. Lawrence Cities Initiative "Declaration on Water Sustainability" which specifies, among other priorities, the need to "increase support for the development and implementation of naturalized infrastructure to more effectively manage rural stormwater run-off around the Great Lakes St. Lawrence basin". Green infrastructure is a necessary component to achieve sustainability of local water resources and protection of water quality and resilience of watershed and shoreline biodiversity. The Strategy should recognize that Green Infrastructure is more than just Low Impact Development for stormwater management. Understanding of the functioning of our watersheds and the relationships between natural cover and our hydrologic systems (e.g. water budgets, etc) is integral for implementing green infrastructure initiatives that will benefit: climate change adaptation, stormwater management (both urban and rural), creation of green jobs, space and habitat for wildlife, etc.

Additionally, broader development and intensification further threatens the ability of the lakeshore natural areas to act as a bioregional corridor. Great Lakes Shorelines should be recognized, protected and restored as bioregional corridors similar to areas such as the Niagara Escarpment, Oak Ridges Moraine and Greenbelt. The urban nature of some shorelines would dictate a different approach than these pieces of legislation but the function is there and it could be better managed/supported.

The Strategy also references reviewing the PPS to support Great Lake protection – for example strengthening protection for coastal wetlands and other natural features. It is recommended that the PPS include provisions that would protect and enhance natural heritage systems, which recognizes the importance of a connected system and its ecological link to each of the Great Lakes.

5: Enhancing Understanding and Adaptation

Conservation Ontario strongly supports the need for monitoring and analysis to be **built upon and expanded** (not just sustained) so that science knowledge and capacity is enhanced. For example, many conservation authorities partner with the province on existing streamflow and water chemistry monitoring networks that were designed for watershed planning and flood management purposes, and not for estimating tributary loading of contaminants to the Great Lakes. As a result, the Province should continue to partner with conservation authorities in the operation and expansion of its Provincial Water Quality Monitoring Network program to better assess potential impacts to the Great Lakes from pollutants transported in tributaries draining into the Great Lakes.

The conservation authorities are the custodians of the watershed characterization, water budgets and assessment reports developed through the *Clean Water Act* and these will be important tools to

increase the effectiveness of water management in Ontario, including the planned assessment of climate change impacts on water budgets. Further to proposed Future Actions c) and i) it is suggested that the province capitalize on the science knowledge and capacity developed to support source protection plans by continuing to fund conservation authorities once source protection plans are complete, refocusing this expertise onto Great Lakes issues (e.g. enhanced science research, monitoring and reporting linked to climate change impacts). Regional groupings of CAs could shift according to the Great Lakes issue being addressed e.g. southeast shores for rural stormwater management and coastal impacts, etc. and the source water protection science would be expanded beyond the objective of drinking water quality and quantity. For example Intake Protection Zones do not necessarily correspond with important groundwater areas (i.e. recharge and discharge areas) needed to sustain water dependent ecological features (e.g. wetlands, brook trout spawning habitats, nearshore spawning areas etc.).

Further support is needed to protect groundwater quality and quantity for healthy ecosystems, including the Great Lakes.

The Strategy should reference support for additional pilot sites to further the understanding and science related to sustainable stormwater management.

It is supported that science and targets are accomplished collaboratively. Conservation Ontario strongly advocates that both the Strategy and the Act be supported by a science based understanding of specific and particular physical, chemical and biological processes at play within each of the Great Lakes (including their coastal zones/sub-basins). Successful achievement of the Strategy's and Act's stated objectives requires a science-based determination of each Lake's limits of carrying capacity, resilience, productivity, and other similar metrics. Such an understanding includes the recognition and reconciliation not only of how land side abatement efforts may or may not result in meaningful lake responses, but also of the inability of the Great Lakes to accommodate all current humans wants and still maintain ecosystem health. It is from science-based understandings that the Strategy and Act might be best used to curtail activities that push the Great Lakes near or beyond their ecosystemic limits, and to use any observed proximity to such limits as a reasonable and appropriate mechanism for identifying areas of greatest need and/or concern for geographically focused initiatives.

With regard to Sharing and Communicating Science, it is recommended that the "where possible" be deleted so that there is a clear and strong commitment to improvements in the management, analysis and communication of information and data. Some experience to date is that much of the data related to ongoing or completed studies specific to the Great Lakes is scattered and very decentralized translating to duplication and likely significant and unnecessary expenditures when local initiatives are undertaken. Some form of centralized access to Great Lakes data that is regularly updated/maintained is strongly encouraged.

6: Ensuring Environmentally Sustainable Economic Opportunities and Innovation

Conservation Ontario supports collaboration on research, development and demonstration of new innovative environmental technologies services and practices, as well as further exploring the value of Ecosystems.

Conservation Ontario's 2011-2015 Strategic Plan articulates its vision to be the partner of choice for managing and adapting to climate change and growing the green economy. The CO strategy supports a role for Conservation Authorities in the advancement and promotion of innovative technologies, programs and perspectives for the strategic development of the green economy. This is very much in alignment with innovative technologies and programs presented in Ontario's Draft Great Lakes Strategy that includes support for initiatives like Showcasing Water Innovation.

CAs continue to work with farmers and government to address agriculture and rural run-off management through delivery of technical and financial services and programs supporting the adoption of environmental farm practices. CAs are also working with the above stakeholders and researchers to enhance the development of those practices, in watersheds where stresses have been identified. The province should continue to support this work.

The Strategy should commit to development of a stronger, funded, conservation agenda for the creation of green jobs that support the environment and human well being. For example, green jobs that result from the application of rural and urban best management practices in stewardship projects or green infrastructure initiatives involving low impact development technologies.

Conservation Ontario supports the engagement of the business and industry sectors for their investments in solutions for sustainable Great Lakes resources that helps to ensure their ongoing economic success.

Resources for Learning More

The Province is encouraged to include the Conservation Ontario website (www.conservationontario.ca -- What We Do/Protect Water/Great Lakes) as an additional resource on p. 63.

Conclusion

There are many references to conservation authorities and watersheds in Ontario's Draft Great Lakes Strategy such that conservation authorities collectively are well positioned to be key supporters for implementing the strategy. In implementation of the Strategy and Act, the Conservation Authorities are prepared to assist the province in achieving Great Lakes protection through:

- Providing the support and advice of watershed management and science practitioners at municipal/provincial tables where strategic priorities are set for action and funding, and for development of specific work plans;
- Providing opportunities for public engagement and collaborative decision-making in watershed and shoreline plans or studies;
- Serving as an operational, science-based delivery agent representing watersheds and shorelines with a history of engagement in monitoring, modeling and research partnerships, etc.;
- Serving, in partnership with a range of important stakeholders, as an on the ground, local delivery agent of:
 - stewardship/capital assistance programs,
 - land use planning advice and development regulations,
 - education and communications/outreach ; and,
- Providing efficiencies of shared capacity and resources.

Overall, Conservation Ontario is very supportive of the Province's initiative to protect the Great Lakes - St. Lawrence River Basin, and, looks forward to supporting the completion of an Ontario Great Lakes Strategy and participating in its implementation. If you have any questions regarding these comments, please contact Bonnie Fox, Manager of Policy and Planning at ext 223.

Sincerely,



Don Pearson,
General Manager

cc: All Conservation Authorities, Chief Administrative Officers