

May 19, 2009

Carolyn O'Neill
Ministry of the Environment
Great Lakes Office
135 St. Clair Avenue West, Floor 6
Toronto, ON M4V 1P5

Dear Ms. O'Neill:

RE: Comments on EBR # 010-6105 - *Healthy Great Lakes, Strong Ontario. Talking with Ontarians about Protecting, Restoring, Using and Enjoying the Great Lakes*

The Canadian Environmental Law Association, the Canadian Institute for Environmental Law and Policy, Ecojustice (formerly Sierra Legal Defence Fund), Environmental Defence, Great Lakes United, Pollution Probe and Sierra Club Canada, are pleased to provide comments for the Ontario government's discussion paper, "Healthy Great Lakes, Strong Ontario" ("the paper").

The paper contains a list of 12 questions related to 9 strategies and 5 goals the government has proposed for restoring and protecting the Great Lakes. We have prepared comments on these strategies and goals and have incorporated answers to the government's questions wherever the context of our comments lends itself to such a response.

General Comments on the Paper

Overall, the paper is a satisfactory vision document, but it lacks fundamental principles for informing the goals and strategies proposed by the government, and the targets and timelines necessary for measuring success. We therefore recommend, first and foremost, that the principles of *precaution, prevention, accountability* and *transparency* be adopted and applied to all government policy. Providing the public with transparency helps to engage them and satisfies a 'right-to-know' mentality related to health and environmental decision making, while the principles of precaution and prevention ensure that threats to public health are properly managed now and in the future. In addition, clear targets and timelines are critical to demonstrating the government's commitment to taking action and measuring success over time.

The Five Proposed Goals

In general, we support the five proposed goals: resilient ecosystems; human health and well-being; green, diverse economies; sustainable natural resources; and strong communities. We recommend that the government adopt and apply the principles outlined above in working to achieve these goals and that targets and timelines be developed and applied to the strategies to measure progress towards the goals.

The Nine Proposed Strategies

Clean-up Great Lakes Hot Spots and the Legacy of Past Pollution

Cleaning up hotspots and the legacy of past pollution is not a new goal; it has been established since the revisions to the *Great Lakes Water Quality Agreement* in 1987. The strategy proposed in the paper does not change or accelerate those clean-up efforts; it only reaffirms work that is already being done – and done much too slowly. While there has been some progress on delisting AOCs, the progress has been severely limited by inadequate funding and a lack of sustained commitment by the federal and provincial governments. Clear timelines and targets need to be set for delisting all AOCs to ensure that progress is kept on schedule and a sustained commitment of resources must be established from all levels of government.

In this strategy, the provincial government should commit to developing a clean-up workplan with clear timelines and targets for each AOC. The plan should include financial commitments adequate to implement the plan. This plan should be prepared jointly with the AOC public advisory committee in each community. Annually, the government should report to the public on their progress in carrying out each of these plans.

We are alarmed at a trend by the governments to avoid some of the most difficult cleanups by relying on what is called “natural recovery.” This is the “do nothing” approach. This approach of leaving the sediments there and hoping that nature will gradually over the decades solve the problem is irresponsible. This is even more alarming at a time when climate change is having and is expected to have dramatic impacts on the lakes. Lowered lake levels mean that these sediments are much more likely to be stirred up by increased storm events, turning freighters and other human activities. Also intense rain events, such as those that we are already experiencing, mean that these sediments may be flushed out into the lakes spreading their toxic burden far and wide. The cleanup needs to be a true long-term cleanup.

Protect Human and Ecosystem Health from Toxics and Pathogens

In the last few years, the government has introduced a number of laws (e.g. the *Safe Drinking Water Act, 2002*; the *Clean Water Act, 2006*, the proposed *Toxics Reduction Act, 2009*) to protect human and ecosystem health from toxics and pathogens. While these laws are effective tools and should be lauded as they will undoubtedly continue to

protect human health and the environment, more needs to be done to safeguard humans and ecosystems from toxics and pathogens.

We recommend a precautionary and preventative approach be taken with toxics in the Great Lakes region. It is a fact that the only effective toxics use reduction strategy employed to date has been from an outright ban on toxics (e.g. the banning of polychlorinated biphenyls ["PCBs"] in Canada and the USA in the 1970s). The use and manufacture of substances which are known to be, or are presumed to be, toxic to human health and the environment, should be banned in the Great Lakes region.

Waste from stormwater and sanitary sewage treatment is a particular concern in the waters of the Great Lakes region. An additional strategy for tackling ongoing pollution from urban sewage and stormwater is: "stewardship action to address stormwater that picks up pollution from lawns and roads, or runoff from fields and orchards, before washing into the lakes". It should be emphasized that reducing the flow of stormwater and sewage that enters the treatment system should be a priority over treatment and retention.

Green infrastructure must be included as a strategy for protecting ecosystems from toxics and pathogens, including the use of those technologies that maximize infiltration. Examples include the use of green roofs, downspout disconnections, rain water harvesting, vegetated bioswales and urban forests to mitigate and decrease the amount of pollution from urban stormwater and combined sewer overflows entering the Great Lakes. The strategy could also include financial tools to support the development and implementation of these technologies, such as tax incentives and innovative planning tools and regulatory requirements. The development of these technologies is not only good for the environment, but good for the economy as it secures Ontario as a centre for water treatment innovation.

More work is needed on the health impacts of climate change on wildlife and humans in this region. Actions need to be taken to ensure that emerging substances of concern do not enter the ecosystem and add to the toxic legacy in the Great Lakes ecosystem. These actions should include establishing a bi-national strategy on emerging substances, rapid identification and screening, making these substances subject to the provisions of the GLWQA, establishing a public database and information clearinghouse and ensuring greater accountability by producers, users, importers and disposers of these chemicals, drugs and nanomaterials within the Great Lakes Basin. Toxic use reduction laws should be amended to capture all of the polluting sectors in the Great Lakes such as the energy and water and wastewater plants.

Restore Great Lakes Habitats and Protect Biodiversity

The Great Lakes basin is home to thousands of animal and plant species, but many are threatened or in decline due to stressors such as habitat alteration, pollution, invasive species, overharvesting and climate change. To restore and conserve habitats and protect biodiversity in the Great Lakes basin, expedient action is needed. We fully support the

activities identified in the discussion paper and recommend the following activities to enhance the strategy. However, targets and timetables for restoring habitat should be set for each lake and connecting channel. Future stresses from climate change should be compensated for in these plans.

Targets and timelines must be established for the full implementation and enforcement of Ontario's new *Endangered Species Act* to ensure the protection of the recovery and survival habitat of all threatened and endangered species in the Great Lakes basin.

The *Provincial Parks and Conservation Reserves Act* came into force in 2007 and established a new park classification titled Aquatic Class Parks which can be used, "to protect aquatic ecosystems and associated natural and cultural features for their intrinsic value, to support scientific research and to maintain biodiversity." Targets and timelines for the creation of Great Lakes aquatic protected areas need to be established.

A recommendation for a comprehensive Great Lakes invasive species strategy is outlined below.

Adapt to Climate Change

Climate change will have dramatic effects on the Great Lakes in the very near future. An increase in severe storm events will overwhelm municipal stormwater and wastewater infrastructure and bring surges of pollution into the lakes. While the province is currently reviewing its guidelines for managing stormwater to take climate change into account and to protect the environment and public health, revisions to stormwater and wastewater guidelines need to make explicit requirements for green infrastructure. The timelines for the review should also be accelerated and support for implementation of this work should be clearly articulated.

To protect our surface and groundwater resources from the threat of climate change, we recommend the Ontario government adopt a Great Lakes region cap on water consumption. This strategy is discussed in detail below.

In addition to preparing for the anticipated impacts of climate change, we recommend that the government adopt as a policy for the Great Lakes region, a drastic reduction in greenhouse gas emissions. By doing so, we would contribute to many of other goals and strategies aimed at addressing problems plaguing the Great Lakes region.

Understand and Deal with Ecosystem Change

Many of the causes of ecosystem change are already understood such as human growth and pollution, the introduction of invasive species, etc. However, the interactions and impacts of these cumulative stressors on the ecosystem are not well understood. We fully support the proposed strategy to "deal" with ecosystem change, and recommend that this issue be tackled proactively, using the precautionary principle. An incomplete

understanding of the exact pathways and relationships must not be an excuse for inaction or act as a barrier to action.

However, Ontario should constantly be seeking a more complete understanding of the physical environment and ecosystems within the Great Lakes basin in order to improve program delivery. Increased and sustained resources need to be allocated to long-term scientific study and the storage of the vast amount of scientific data that already exists for the Great Lakes. This information needs to be centralized and available to scientists, policy makers and the public to ensure accountability.

The multiple stressors of pollution, invasive species, habitat loss and climate change have ensured that few fish species remain able to naturally reproduce in the Great Lakes Basin; the fisheries are dependent on stocking programs. Fish advisories and restrictions on consumption are still widespread. Goals and timetables, science and tracking commitments and resources are needed before we can ever hope to make significant progress on restoration of the aquatic food web and ecosystem.

Immediate action must be taken to prevent the spread of species that threaten the Great Lakes and St. Lawrence River. Species like the zebra and quagga mussel, and Asian carp continue to threaten the health of Canada's freshwater environments and economies. In light of the failure of the federal government to implement ballast water treatment standards or a pre-import screening process for species in trade, Ontario must implement strong laws on invasive species arriving in the ballast tanks of ocean-vessels and imported for trade. Pressure must also be put on the federal government to set an aggressive deadline for implementation of ballast water treatment standards under the Shipping Act and improve that standard for ocean-vessels operating in the region.

The Fisheries Act should be amended to establish a precautionary pre-import screening process for species being brought purposefully into the country for trade, to ensure that they will not cause ecological or economic harm if released or escape into the wild. Steps must be taken to amend the Great Lakes Water Quality Agreement so it becomes a mechanism for advancing and coordinating efforts across the international border to halt the introduction and spread of invasive species. In the absence of federal leadership, Ontario must initiate and reach agreements with Quebec and U.S Great Lakes states to prevent biological pollution including coordination on regional standards for ballast water discharge and regulation of species in trade.

We also recommend the province pass regulations for the better management of the Great Lakes' commercial and sport fisheries. These regulations must be accompanied by an enhanced financial commitment to the bi-national institutions that implement these programs.

Influencing the Bi-National Agenda

More effective bi-national relations between the governments of Canada, Ontario and Quebec, and the USA and its Great Lakes states is essential. Too often in the past,

Ontario has played the role of silent by-stander at Great Lakes bi-national meetings. Recently, we have seen Ontario representatives playing a much more active role in bi-national meetings and are pleased to see the strategy of influencing the bi-national agenda in the consultation document. One important means of affecting the bi-national agenda is by working more closely with the federal government and Quebec in developing Great Lakes strategies.

The governments of Ontario, Quebec and Canada must work together more effectively to halt the further degradation of ecosystems, and to restore degraded ecosystems.

Enhance Lake-Based and Watershed-Based Planning and Action

Several provincial and federal Ministries are involved in implementing water laws, and laws that relate indirectly to water, in the Great Lakes basin. Some of the work by Ministries has been complementary to the work by others, but there is still much inefficiency, duplication of work and counter-productiveness concerning the implementation of many of these laws in the Great Lakes basin. We recommend that a government body for overseeing the Great Lakes region's water and related laws be created. This body's goal should be to reduce inefficiency, duplication of work and counter-productiveness so that the province's laws can be implemented more effectively.

Special attention should be given to the integration of protection efforts for all components of the watersheds, the lakes, connecting channels, the tributaries and the groundwater portions of the Great Lakes and St. Lawrence. Watershed planning must work together with lake-based or basin-wide planning and targets. This requires stronger mechanism and coordination to link these two scales of planning (for example: Places to Grow planning legislation and regulations and source water protection planning). Provincial and regional governments pursue collaborative strategies to achieve water related policy and planning priorities; this needs to be complimented by modernized legislation which would in turn support and enable watershed management.

The province of Ontario has already entered into to a process that could contribute to improving the identification and mitigation of sources of contamination to the Great Lakes: source water protection planning. This program, however, must be expanded beyond the protection of municipal water intakes to include threats to all waters in the Great Lakes basin. Discrepancies could also develop between the implementation of water protection measures between Source Water Protection Regions. To compensate for these inconsistencies, source protection planning efforts and watershed resource planning and management must be coordinated lake and basin-wide.

Increase Appreciation and Stewardship of the Great Lakes

We support the government's proposed strategy to increase appreciation and stewardship of the Great Lakes. Current survey research suggests that many Ontarians lack an awareness of the importance of the Great Lakes to both the environment and economy. What is particularly alarming about this research is that awareness of the importance of

the Lakes appears to be declining. Young people aged 35 and under are less aware of the benefits of the Great Lakes to their daily lives than the previous generation, with fewer than half of young Torontonians even knowing that their tap water comes from the Great Lakes. We cannot allow this trend to continue into the next generation.

Educating children on the environment is an excellent way to foster an appreciation of the Great Lakes. Adding Ontario's Ministry of Education to the list of ministries subject to the *Environmental Bill of Rights* would help to ensure that children are educated about the environmental problems the Great Lakes face. The Ontario curriculum should include a Great Lakes component that addresses the myth of abundance and emphasizes the connections between daily activities, land uses and our water system, as well as the importance of having sufficient water to maintain ecological services. Youth from disadvantaged urban neighbourhoods should be a focus of these education programs, because they can be more detached from often have less access to nature than their peers.

Learning to appreciate the Great Lakes should not end in the classroom. Steps also need to be taken to increase awareness of the Great Lakes' importance among adults in all age brackets. In municipalities such as Guelph, grassroots organizations have been highly successful in educating the public on the impacts of their daily activities on finite water resources and inspiring citizens to push their local officials to set the bar high on conservation and efficiency. This strategy should include financial tools to better equip local organizations to achieve these goals, as they often work on extremely tight budgets or on a volunteer basis. Programs must be accessible for youth, families and seniors across the region to allow Ontarians to better understand and enjoy the Great Lakes.

Appreciation and willingness to protect the Great Lakes will increase with a sense of ownership and empowerment; giving Ontarians a voice in the decision-making process through conducting more inclusive, interactive public consultations (ie: listening and speaking in equal proportion) has the potential to empower Ontarians. Engaging directly and appropriately with Aboriginal communities and stakeholder groups (i.e. non-governmental organizations, the agricultural sector, industry, municipal governments) is clearly important, and so is engaging with the general public through town hall forums, mail-in surveys, internet contests, etc. to raise awareness and increase overall participation in stewardship of the Great Lakes.

Appreciation can go a long way to increase stewardship, but to ensure that stewardship is adopted by all Ontarians, the province *must* use every means at its disposal. The province has adopted strong cosmetic pesticides regulations to ensure that stewardship activities are adopted province wide, but much more must be done. Strong regulations are needed to enhance water conservation efforts and reduce point and non-point pollution from single family homes, multi-unit residential, institutional, commercial, and industrial facilities.

Water conservation and efficiency initiatives will also be of the utmost importance to the Great Lakes communities of Ontario in years to come. The recent trend toward declining lake levels combined with the impacts of climate change and urban growth makes a precautionary approach to water use on the Great Lakes a necessity. It is

commendable that this strategy promotes conservation and efficiency as a means to help Ontarians live more sustainably, however, water conservation and diversion are a critical issue that warrants a separate strategy (see below)

Develop Sustainable Great Lakes Economic Opportunities

As recognized in the paper, the Great Lakes represent a globally significant economic region. Building appreciation for how the Great Lakes flow through and impact the economic heartland of the Region could enhance public support for clean-up and protection. In order to ensure that the region's economy and environment continues to thrive, steps need to be taken to ensure economic activity is in line with environmental objectives.

As part of the implementation of the province's new *Green Energy Act*, we recommend that the province develop a "smart" electricity grid quickly, and adopt the goal of generating 100 per cent of the Great Lakes region's power from renewable, non-toxic sources (e.g. solar, wind and hydroelectric power, *not* nuclear power).

Transportation within the region needs to be made more sustainable. Shipping in the region needs to be modernized so that it has less impact on the ecosystem while improving efficiencies to transport goods and people across the region. The Ontario government can invest in an electrified, high-speed passenger rail system for operation among the basin's major centres.

Enhancing the recreation and tourism value of the Great Lakes directly depends on the various recommendations made above. The provincial government must make every effort to improve and protect water quality, clean up legacy pollutants, take action against invasive species, protect water levels in the lakes and tributaries, and preserve and enhance natural habitat.

Add a Strategy on Improve Great Lakes Governance

An essential strategy that is missing from the Province's document is improving Great Lakes governance. All of the best intentions will fail to achieve their potential unless there is proper governance. We urge Ontario to add a strategy for improved governance that commits to at least the three following components:

1. Better coordination on Great Lakes programs among provincial government ministries and agencies;
2. More complete and consistent engagement of the concerned public in decision-making on Great Lakes issues; and
3. Better mechanisms for ensuring accountability to the citizens of Ontario, such as annual reporting on progress and an annual legislative committee hearing on the status of the province's Great Lakes programs; and
4. Requiring meaningful consultation and accommodation of Aboriginal interests.

Add a Strategy on Water Conservation and Diversions

As stewards of the largest freshwater reserve in the world, and among the greatest wasters of water in the world, Great Lakes area residents have the farthest to go to safeguard their water resources. We understand that the province is currently working on a provincial water conservation and efficiency strategy as required by the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement and suggest that the overarching goals of that strategy also be integrated into the *Healthy Great Lakes, Strong Ontario* document, so that the urgency of implementing aggressive water conservation strategies is reinforced and the importance of actually implementing the agreements is emphasized.

While the recent Agreement and US Compact set out prescriptive rules for water management, many Great Lakes groups are espousing the principal of **no new water use** that would encourage us to adopt a demand-side management framework and live within the resources we are given. The principle of no new water use extends to the issue of implementing a moratorium on intra-basin water diversions (from one GL watershed to another). Intra-Basin diversions contribute to stressors on the system. These include the energy intensive process of diverting water; lowered lake levels and reduced streamflow; higher evapotranspiration; increased concentration of toxins; compounded effects of climate change; and potential transportation of invasive species.

The Annex, Regional Agreement and Compact include standards for intra-basin transfers, which are incorporated into Ontario's domestic regime through the *Safeguarding and Sustaining Ontario's Water Act*, passed in spring 2007. These provisions require new regulations to become operational, however, and until the passage of these regulations, there is limited legal protection in place to protect against damaging intra-basin transfers.

While the Ontario government has identified the importance of promoting a culture of water conservation in the province, the ability for municipalities to plan the construction of pipelines to the Great Lakes has been – and will continue to be - a considerable disincentive to meaningful efforts for significant improvements in water efficiency and conservation.

We recommend the Ontario government implement a moratorium on intra-basin transfers with two components:

- a) A permanent moratorium on intra-basin transfers over 379,000 litres per day that do not return flow except for emergency situations (water used in a non-commercial project on a short term basis for safety, security, firefighting or humanitarian purposes);
- b) An interim moratorium on intra-basin transfers over 379,000 litres per day that return flow. The objective is to gain a better understanding of the risks of these transfers such as impact on water quality, consumptive use etc. and to ensure that the regulations required to minimize these risks and address uncertainties in legislative language are in place before any proposals are considered.

Conclusion:

In conclusion, we reemphasize the need for the principles of precaution and prevention to guide the implementation of measures to restore and protect the Great Lakes region, and the need for targets and timelines. If the government is truly committed to action on the issues outlined in the paper, clear targets must be set to ensure that the goals are in fact accomplished. The vision requires a focal point so that we can ensure we are on the right track.

We thank the government of Ontario for this opportunity to comment on its proposed goals and strategies to restore and protect the Great Lakes.

Yours sincerely,

Theresa McClenaghan, Executive Director
Canadian Environmental Law Association



CANADIAN ENVIRONMENTAL LAW ASSOCIATION
L'Association canadienne du droit de l'environnement

Anne Mitchell, Executive Director
**The Canadian Institute for
Environmental Law and Policy**



CANADIAN INSTITUTE FOR
ENVIRONMENTAL LAW AND POLICY
L'INSTITUT CANADIEN DU
DROIT ET DE LA POLITIQUE
DE L'ENVIRONNEMENT

Elaine MacDonald, Senior Scientist
Ecojustice



Mike Layton, Program Director
Environmental Defence



ENVIRONMENTAL | DEFENCE

John Jackson, Program Director
Great Lakes United



Fabio Tonto, Water Program Manager
Pollution Probe



Celeste Côté, National Water Campaigner
Sierra Club Canada

