

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

## **Nature Conservancy of Canada - Ontario Region Comments**

The Nature Conservancy of Canada's (NCC's) Ontario Region is pleased to provide commentary to the Government of Ontario regarding the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health public consultation.

We recognize the work completed to date with the government's Made-in-Ontario Environment Plan. As then Environment Minister Rod Phillips stated, these consultations can improve the effectiveness of environmental policies to ensure a balanced approach between a healthy environment and a healthy economy. In addition, NCC supports the approach of working with conservation organizations, businesses, Indigenous communities and the public to improve environmental policy

As stakeholders who have a nearly 60-year track record of delivering tangible results and solutions to protect land for future generations, there is an opportunity for all of us to work together to achieve the government's goals on clean air and water, addressing climate change and conserving our waterways and lands. NCC was pleased to have been recognized in the Made-in-Ontario Environment Plan<sup>1</sup> as a trusted partner in conserving watersheds and greenspace.

In Ontario, NCC staff and partners play key roles in the protection of Great Lakes area habitat. Together, we are developing and implementing strategies that are helping improve the current state of the health of the Great Lakes today and for future generations of Ontarians.

### **NCC's work in the Lake Erie basin:**

In Ontario, NCC is currently implementing 15 Natural Area Conservation Plans (NACPs). Of these 15, 14 are implementing high priority acquisition and conservation actions in the Lake Erie, Lake Ontario, Lake Huron and Lake Superior watersheds. Three NACPs encompass watersheds draining into Lake Erie – specifically Pelee Island (Western Lake Erie Islands Natural Area), a large portion of southern Essex County (Essex Forests and Wetlands Natural Area) and the southern portion of Bayham Township and Norfolk County (Southern Norfolk Sand Plain Natural Area). Key conservation actions implemented through NACPs that are most relevant to the Lake Erie Lakewide Action and Management Plan are the conservation and restoration of wetlands, riparian areas and associated uplands in agricultural landscapes.

The loss of wetlands (often exceeding 70% in areas of southern Ontario) and natural cover in our watersheds is a contributor to the phosphorus issues in our Great Lakes, particularly Lake Erie. Wetland creation and restoration has been a particular focus of

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<sup>1</sup> Ontario, *Made in Ontario Environment Plan*, p.47

NCC's work in both the Southern Norfolk Sand Plain NACP, which drains into the eastern Lake Erie basin, and in the Western Lake Erie Islands NACP, which drains into the western Lake Erie basin.

In the Southern Norfolk Sand Plain Natural Area, through fee simple acquisition, NCC has permanently protected 5,700 acres, restoring 1,700 of these acres to natural cover, including 90 acres of created wetlands. An additional 2,600 acres of coastal wetland has been protected by a Conservation Easement Agreement. In addition, NCC has been working in partnership with MNR, ECCC, and a host of private landowners on a landscape restoration project in the coastal wetlands of Long Point and Turkey Point removing *Phragmites australis*; 3,200 acres of wetlands have been restored. Pelee Island in the Western Lake Erie Islands Natural Area, 1,055 acres are now permanently protected with 138 acres restored to natural habitat, including 10 acres of restored wetlands. In the Essex Wetlands and Forests Natural Area, NCC, along with our partners have conserved 855 acres since 2000.

Over the next five years, NCC will continue to focus on targeted, science-based land securement and restoration in our Lake Erie Basin Natural Areas. Habitat creation and restoration activities will focus on wetlands, riparian areas, and uplands to improve and connect natural cover, buffer existing natural areas and provide natural buffers between surface water and land-based activities associated with nonpoint sources of pollution. Continuing to work with partners on the control of *Phragmites australis* in the coastal wetlands of Lake Erie is another high priority for NCC. Connecting people with nature is also a priority for NCC and this will be achieved through programs such as Conservation Volunteers, Nature Talks and Nature Destinations to increase public engagement and enhance appreciation and stewardship of these areas.

Achieving progress on the goals set out in the Great Lakes Water Quality Agreement (2012) will take commitment from multiple sectors, leadership, coordinated effort and resources.

Below are NCC's comments regarding the draft Canada-Ontario Great Lakes Water Quality Agreement.

### **General Comments:**

- The document needs to include timelines for anticipated achievement of results and/or milestones.
- The plan does not identify what the specific anticipated results will be; a further step should be taken to determine what these results may be and what mechanisms will achieve the intended results. For example: Annex 8, Result 1 identifies determining priority habitats in need of protection as an action but does not include how this could be achieved through COA and under what timelines.
- The plan needs to ensure that results-based actions are measurable and quantifiable to demonstrate success.

- A commitment to funding is necessary; without adequate funds the Annex goals will not be achieved. Consistent reductions in funding present very real challenges to the agencies already implementing this work.
- The plan does not address plastic pollution which is a significant issue in our lakes, rivers, creeks and streams.

### **Priority: Protecting Waters**

**Annex 1:** Nutrients: address nutrients and reduce the occurrence of harmful and nuisance algal blooms and zones of hypoxia.

#### Result 1

- An assessment of the effectiveness of Best Management Practices on overall nutrient reduction and watershed health should be considered to determine effectiveness and identify specific practices that are more effective than others, taking into consideration regional differences in environmental conditions. Such an assessment would also help inform a whole-farm approach, which is recommended in several Lake Erie documents.
- Linking whole farm approaches to landscape level plans and watershed strategies would enhance the impact of individual farm approaches. The watershed planning framework using precision conservation technology, a practice proposed by the USDA Agricultural Research Service in Ames, Iowa, could be a way to incorporate whole farm approaches into a watershed, sub-watershed, or catchment areas. This approach would ensure that in-field, edge of field, and below field activities are interconnected across the landscape, and direct the protection and restoration of natural features to locations where they can be most functional for nutrient reduction goals. Community engagement activities, and the addition of appropriate cost-share incentives would be required.

### **Priority: Protecting Habitat and Species.**

**Annex 7:** Aquatic Invasive Species

- Annex 7 should be broadened to include coastal and nearshore invasive species that have significant impacts on the ecosystem services and functions provided by these systems.
- *Phragmites australis* has been deemed Canada's worst invasive because of its widespread presence, impacts on natural hydrological and nutrient cycles and threat to biodiversity in the Lake Erie basin. NCC is currently working with government partners and community stakeholders to forward the Emergency Use Registration (EUR) program along the Lake Erie's north shore. The EUR program brings Canada on par with American efforts on the other side of the Great Lakes and is an important step towards the registration of a water-safe

herbicide in Canada and Ontario. Continued strong support from MNRF in leading the EUR program will ensure the rapid restoration of these critical coastal wetlands and limit impacts to Species at Risk.

**Annex 8: Habitat and Species. *Continue efforts to restore, protect, and conserve the resilience of Great Lakes native species and their habitats.***

Result 1

- Before further baseline surveys are conducted, COA and partners should review existing conservation plans that identify high priority habitats for protection and restoration. NCC, Carolinian Canada, Conservation Authorities, local land trusts, etc have engaged in planning processes similar to what is described in Annex 8. Making good use of existing plans will save time and resources, allowing for more on the ground work.
- Building on these strategies would incorporate land already acquired for conservation and help identify places where additional land acquisition activities may conserve greatest resilience for habitat and species.

Result 3

- Stewardship and restoration should include focusing restoration activities on fragile and marginal land, flood prone areas, riparian areas, and other below-field locations, COA and partners can improve regional water quality while increasing natural cover. There are many examples across southwestern Ontario where this work is happening.
- Riparian buffers can significantly improve water quality in streams and rivers that drain to Lake Erie and build resilience to climate change in agricultural landscapes. Yet formal protection and strategies to connect private and public riparian areas are lacking in Ontario. Conservation tools such as the Buffer Laws and Buffer Ordinances that are used in the US, often protect both private and public riparian areas. New Brunswick has a Watershed Protection Program for all properties located within designated watersheds. Buffer bylaws are beginning to appear in Ontario, but they only include protections for public lands. Strategies for encouraging bylaws that incorporate both public and private land, with appropriate incentives, should be considered in order to gain the full benefits of intact riparian buffers. Such strategies should include waterfront residential and recreation properties where even a small, two-metre buffer could help reduce runoff and nutrient inputs.

**Additional Considerations for Annex 8:**

- Collaborative effort is needed to ensure that wetlands that perform critical functions such as flood attenuation and nutrient filtration are protected from conversion. This requires going beyond the “no net loss” concept. “No net loss” does not address situations where wetlands are irreplaceable. Site conditions are

often key to wetland function and cannot easily and effectively be created elsewhere. A “net gain” would better contribute to phosphorus reduction goals.

- Conservation Severances should be explored to enable landowners in the Lake Erie basin and elsewhere to have the option of efficiently severing and selling the natural heritage portion of their properties to conservation organizations, such as NCC.
- Developing limited-time tax incentive programs, like the USDA Conservation Reserve Enhancement Program (USDA CREP) which uses matching Federal and State dollars to address specific conservation issues (often water quality), would be a potential solution for improving landowner interest in water quality projects that require land retirement, particularly in priority watersheds. The Alternative Land Use Services model is an Ontario based example that has the potential to achieve similar results.
- Lake Erie seiche events (wind-driven tides) can be among the most dramatic in the Great Lakes basin. Ensuring the health of coastal wetlands, particularly in the western basin, will contribute to overall improvements in water quality. Innovative projects that use a two-stage wetland design and incorporate phosphorus filters enable natural water flow between the nearshore and coastal areas, provide various habitat niches, and present phosphorus research opportunities. Such approaches should be encouraged and supported wherever possible, especially for the western basin of Lake Erie. For privately owned coastal properties, an appropriate incentive program to overcome additional costs would be helpful.
- Protecting fish and fish habitat may involve restoration of stream connectivity in SW Ontario. The Lakes and Rivers Improvement Act (LRIA) regulates all aspects of dam management (design, construction, maintenance, decommissioning). LRIA requires dam owners to have engineered drawings for most work, and navigating the process can be time-consuming and inefficient. The requirements for dam decommissioning, for example, can be cost prohibitive for private landowners, even for relatively simple and small dams. There are hundreds of small privately-held dams found on the agricultural landscape in southwestern Ontario that directly impact water quality, temperature and fish passage. The Province should be prepared to work with landowners interested in dam management and in particular dam decommissioning efforts that benefit water quality. A practical process and guidance document that is compatible with the objectives of the LRIA and cost effective for the landowner would go a long way to restoring southwestern Ontario watercourses and Lake Erie health.
- The National Marine Protected Areas program is mentioned in the preamble to Annex 8, but no result speaks to supporting or enhancing this program specifically.
- Sections of lakes and rivers under federal jurisdiction do not appear to have enough protection under current legislation. The Department of Fisheries and Oceans protects lake/river area, with little regard for loss of habitat and species on the shoreline itself. The result is a surge of estate homes with large yards and no vegetation buffer, leading to poorer water quality.

## **Priority: Engaging Communities – From Awareness to Action**

### **Annex 11: From Awareness to Action**

- Connecting Canadians to nature can be an effective approach for generating community interest in conservation. Where feasible, NCC properties are restored with public access in mind. NCC's Nature Destinations website lists 36 properties nation-wide that are highlighted as top destinations. In Ontario, there are currently two Nature Destinations: Hazel Bird Nature Reserve in the Lake Ontario watershed, and Backus Woods in the Lake Erie watershed. Many other NCC properties have public trails and interpretive signage. A similar initiative could be undertaken to connect people living in the Great Lakes watershed with trails in their area.
- Well connected water trails for boating, canoeing, and/or kayaking, could be another trail-type that link communities and support local economies. A good balance between coastal conservation and human activity is necessary, particularly in places where development is minimal and natural coastal environments can still be protected.
- Investment into a public-facing, interactive website for COA partners such as the Lake Erie Action Plan (LEAP) to report activities and for the public to monitor progress is a worthwhile cost for long term efficiencies and data management.

### **Greenlands Conservation Program**

The Nature Conservancy of Canada has a track record of success across Canada in protecting our most important natural areas. These are the places that clean our air, filter our water and offer Ontarians a place to spend time in nature.

Our work is focused in the ecosystems that are most at risk of disappearing, including many in the Great Lakes region. These are places where Ontarians work and play. Through place-based conservation action and community engagement, we still have a chance to ensure that these important natural areas provide key ecosystem services and act as a buffer to climate change.

NCC has previously proposed a partnership with the Government of Ontario to maximize progress towards Ontario's 2020 conservation targets through the Greenlands Conservation Partnership.

Over the last thirteen years, NCC has successfully demonstrated that it can leverage private sector donations with public funding to achieve real conservation results including in wetlands areas in and around the Great Lakes. To this end, NCC is proposing that the Government of Ontario invest \$30 million in the Greenlands Conservation Partnership. This funding will be matched by NCC, at a ratio of least 1:1, with funds from other sources to achieve maximum value to taxpayers.

The result of this partnership would be the conservation of more than 24,300 hectares (60,000 acres) of conserved land and freshwater, an area almost seven times the size of St. Thomas, Ontario. These conserved areas would be managed and strategically restored for native species with a focus on species at risk while leveraging sources of funding outside of government.

The Greenlands Conservation program is a \$30 million public investment to realize \$60 million invested in land and wetlands conservation, clean air and water, climate change resilience and nature-based recreation.

NCC proposes a “ramp-up” for this funding partnership which would work as follows:

- \$5 million in year 1
- \$7.5 million in year 2
- \$7.5 million in year 3 and
- \$10 million in year 4

NCC and Ontario’s community land trusts stand ready to work with the government to enable a cost-effective and value-added program that, at a minimum, will double provincial government funding and facilitate tangible conservation outcomes in key communities across the province. The outcome of this partnership will be strategic conservation of Ontario’s most significant and threatened natural landscapes (including those in the Great Lakes region) and the species at risk found in these places.

## **Conclusion**

As stakeholders who have more than a track record of more than 50 years delivering tangible results and solutions in protecting land for future generations, NCC welcomes the opportunity to work together to achieve the government’s goals on clean air and water, addressing climate change, and conserving land and greenspace.

NCC looks forward to working closely with the Governments of Ontario and Canada as they implement measures of the agreement.

If you have questions or require more information, please contact Mike Hendren, Regional Vice President, Ontario Region for the Nature Conservancy of Canada. Mr. Hendren can be reached at:

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