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Re: Proposed new Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health (ERO 019-0198)

Dear Representative of Ontario Carolyn O'Neill and Representative of Canada,

Thank you for the opportunity to comment on the proposed Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health, 2020.

The Green Infrastructure Ontario (GIO) Coalition is a multi-sectoral alliance comprised of private sector companies, industry associations, municipal and regional governments, community groups, and not-for-profit organizations. GIO represents over 150,000 people working in the green infrastructure sector. Together, we promote the implementation of green infrastructure across Ontario by providing a united voice for this vital and growing sector.

Green infrastructure includes everything from tree-lined streets, wetlands, urban parks and gardens, to green roofs, meadows, woodlots, grassed areas, urban and rural agriculture, soils, and bioswales[1]. Green infrastructure is vital to improving Great Lakes water quality and ecosystem health. Runoff from urban and rural areas, caused by changes in land development, is a major contributor to many of the water quality issues experienced in the Great Lakes and highlighted in this agreement. Green infrastructure has a key role in reducing runoff volumes, pollution, and filtering out the contaminants that are negatively impacting our lakes. Green infrastructure can also be used to reduce the occurrence of combined sewer overflows, by reducing the volume of stormwater entering sewer systems. Robust natural areas are essential for maintaining healthy populations of the native species that live in and around the lakes. Green infrastructure also helps us to mitigate and adapt to a changing climate – living green infrastructure (including healthy soils) sequesters carbon, and helps our natural and built ecosystems survive under

[1] Green infrastructure is formally defined in the 2014 Ontario Provincial Policy Statement (PPS) as the "natural and human made elements that provide ecological and hydrological functions and processes. Green infrastructure can include components such as natural heritage features and systems, parklands, stormwater management systems, street trees, urban forests, natural channels, permeable surfaces, and green roofs."

severe weather events. We are pleased to see the role of green infrastructure highlighted in several of the Annexes, including:

- Annex 1: Nutrients
- Annex 3: Wastewater and stormwater
- Annex 8: Habitat and species
- Annex 10: Climate change and resilience

We would like to offer the following recommendations for consideration during implementation of this agreement:

1. **Allocate at least $100 million in Federal funding annually to implementing the agreement in Ontario, and 15% of infrastructure funds to green infrastructure.**

   At least $100 million in Federal funding should be provided annually to implement the actions outlined in this agreement[2]. For the portion of that funding dedicated to infrastructure, GIO advocates for at least 15% of funds to be dedicated to green infrastructure, as defined in the Ontario Provincial Policy Statement (see footnote 1). GIO would also like to note that the current Federal green infrastructure funding program uses a different definition of green infrastructure that includes many other measures that would not fall under GIO's definition of green infrastructure. We recommend that this definition be revisited and made consistent with the Ontario Provincial Policy Statement definition.

2. **Implement a "consider green infrastructure first" policy.**

   Several of the annexes commit to investing in actions that will result in improved outcomes for the Great Lakes. These include:

   - Setting and achieving phosphorus reduction targets for Lake Erie and Lake Ontario (Annex 1);
   - Improving wastewater and stormwater management to reduce the release of excess nutrients and other harmful pollutants (Annex 3);
   - Restoring habitat for species native to the Great Lakes (Annex 8);
   - Ensuring communities are better prepared to adapt to climate change and build resilience (Annex 10).

   While many different types of measures may be required in order to achieve these goals, GIO recommends that green infrastructure should always be considered first, before engineered grey infrastructure solutions. Green infrastructure is often a more cost effective solution with multiple co-benefits for people and for the environment[3]. It can sometimes be left out of traditional decision-making processes unless explicitly singled out. A green infrastructure first policy will ensure that all the benefits of these investments are realized.

[2] This number aligns with recommendations outlined in the Great Lakes Action Plan 2030, developed by a wide range of partners under the Great Lakes and St Lawrence Collaborative.
[3] See "Green versus Gray: Nature's solutions to infrastructure demands" (Talberth, J. et al, Solutions, Vol 4. Issue 1, January 2013) for examples from several cities where green infrastructure solutions have been selected over grey based on cost-effectiveness.

3. **Set watershed-based, enforceable, measurable targets for reducing pollution from stormwater and sewer overflows.**

   Annex 3, on Wastewater and Stormwater states that "controlling the upstream sources of pollution, as well as these routes of pollution, is more effective – and less expensive – than cleaning up pollution after it reaches the lakes". GIO strongly supports this approach. Green infrastructure has a key role both in reducing the volume (and hence the pollution) carried by urban and rural runoff, as well as in reducing the occurrence of combined sewer overflows, which are caused when older combined sewer systems are overwhelmed by large amounts of rainfall.

   In many U.S. cities, where the Environmental Protection Agency has required cities to eliminate overflows and reduce pollution, green infrastructure has been found to be the most effective and cost effective solution[4]. GIO recommends implementing watershed-based, ambitious, measureable, enforceable targets for reducing stormwater and wastewater pollution. A green infrastructure first policy (see recommendation 2) will ensure that the best solutions are considered first.

4. **Finalize and release the Low Impact Development Stormwater Management Guidance Manual.**

   One of the commitments under Annex 3 is that Ontario will develop a new stormwater management policy. For several years, the Province has been developing a Low Impact Development (LID) Stormwater Management Guidance manual, which clarifies previous policies and emphasizes the need to reduce runoff volumes with green infrastructure rather than solely taking an end of pipe approach. Significant time and resources have already been invested in the development of this manual (GIO has been sitting on an advisory committee since 2016). GIO recommends that this manual be the basis for the new stormwater management policy and that it be released for implementation as soon as possible.

5. **Include green infrastructure as a key tool for building resilience to climate change.**

   Green infrastructure helps communities adapt to a changing climate, including reducing flood risk, reducing the urban heat island effect, and increasing food security. GIO recommends that green infrastructure measures be included wherever knowledge and information about climate adaptation is being shared (for example, in the online tool being developed by Ontario mentioned in Annex 10: Climate change impacts and resilience). GIO would be pleased to have the opportunity to share case studies and relevant research on the connection between green infrastructure and climate change.

6. **Prioritize green infrastructure in funding support for community projects.**

   Annex 11, From Awareness to Action, commits both Canada and Ontario to supporting community projects that help restore, protect and conserve the Great Lakes. Green infrastructure provides a key opportunity for engaging communities to take action. It can often be designed and installed at a relatively low cost, with the engagement of volunteers, at a range of different types of sites (both urban and rural). It is often visible, above the ground, so can be used as a demonstration and educational tool. Green

[4] See for example New York City's Green infrastructure plan and its updates, Green City, Clean Waters (Philadelphia) and Milwaukee's green infrastructure plan.

infrastructure projects, even at a small scale, create positive long term environmental impacts, which actually appreciate in value over time as plants and trees become established. Private property owners can also be engaged to install green infrastructure on their own properties. Community green infrastructure projects can be the first step towards more widespread adoption of green infrastructure, which will result in positive, measurable impacts on the Great Lakes as well as other co-benefits within communities.

7. **Maintain the important watershed-based work of the Conservation Authorities.**

   The success of the Canada-Ontario Agreement depends on experienced 'boots on the ground' to build green infrastructure, do the studies necessary to determine how much of what and where, and monitor the outcomes of this work – a role that has been filled by the Conservation Authorities. The recent changes to the Conservation Authorities Act de-emphasize the importance of this work and leave it to partner municipalities as to whether they want to contribute to it or not. Protecting and restoring the Great Lakes requires more than a piecemeal approach to ecosystem management and restoration. The issues of today are too large and the stakes too great. We must support the only organizations that are collectively tackling watershed planning, monitoring, stormwater, tree planting, invasive species, and habitat restoration, among other activities.

We would be pleased to provide any additional information that may be required. Please contact Jennifer Court, Executive Director of the Green Infrastructure Ontario Coalition at jcourt@greeninfrastructureontario.org with any questions.

Sincerely,

Deborah Martin-Downs, Steering Committee Chair

Green Infrastructure Ontario Coalition

Jennifer Court, Executive Director

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