June 13, 2019 **BY EMAIL & REGULAR MAIL**

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Dear Mr. Bateman and Mr. Goffin:

RE: Toward a new Canada-Ontario Agreement: Expectations and Recommendations

In a time of climate and biodiversity crises, the Canada-Ontario Agreement (COA) Respecting the Great Lakes Ecosystem must guide our region in creating climate resilient communities and healthy ecosystems for people and nature to thrive. A renewed COA must set clear targets, investments, actions, and timelines. Decisions around policy, restoration, and protection of the Great Lakes – St Lawrence River ecosystem should integrate the knowledge and expertise of all governments of the region, inclusive of federal, provincial, and indigenous governing bodies. We are supportive of many elements in the proposed structure of the upcoming COA, which highlights key environmental issues such as reducing plastic pollution, road salt use, untreated and undertreated wastewater, and nutrient loading in Lake Ontario. Commitments to focusing on action and increasing transparency within areas of concern (AOC) are steps in the right direction for improving ecosystem health and community trust. We would like to see the proposed upcoming COA dive deeper on topics of governance, the implementation of coastal resilience efforts and habitat protection, knowledge building, plastics pollution, stormwater management, and continuing on past targets/commitments regarding nutrient reduction.

We have specific recommendations and expectations on all elements described above, elaborated in detail through this letter. This letter represents our initial thinking on the COA renegotiation and we expect to continue to participate and provide feedback over the next several months. We trust this initial feedback will be duly considered in the ongoing drafting of COA.

Leadership

The Great Lakes – St Lawrence Region includes many governments overseeing and managing our waters. We recommend integrating indigenous governance into the Canada-Ontario Agreement to become a tri-governance instrument in future: The Canada-Ontario-Indigenous Agreement, wherein indigenous governments are acknowledged as rights holders and contribute directly to decision-making. Bringing Indigenous leaders to the table at the conception of renegotiation must be a new standard going forward. We must turn our focus to the entirety of the Great Lakes – St Lawrence ecosystem and integrate perspectives from northern to southern Ontario. It is only through such a process that we can work towards reconciliation and the integration of indigenous values into the improvement of region for all generations to come.

Resilience through habitat creation

The Great Lakes are experiencing steady temperature increases, which is predicted to alter the climate of the surrounding region. Over the **next 3 years**, the natural vegetation along the shorelines of the Great Lakes and their tributaries need to be restored to create climate resilient communities. It is imperative that we begin to invest in native coastal habitats that make our shorelines resilient to flooding as we are expected to receive more frequent extreme rain events which exceed six inches in rainfall, exceeding culvert and storm sewer capacity[1]. The scientific community has warned us of wetter springs and winters, with summer events being more intense than we have historically experienced. Naturalized shorelines and wetlands provide capacity for water storage and slow drainage flows from developed areas. In addition, they provide sediment trapping and pollutant filtering abilities to improve water quality[2]. In medium-sized southern Ontario cities, it is estimated the flood mitigation wetlands provide is valued at upwards of $1.44-million under intensified land use conditions[3]. The 2017 flooding of Lake Ontario, the Ottawa River, and the St. Lawrence River resulted in $223-million in insured losses in Ontario and Quebec[4]. In early April of 2018, the Insurance Bureau of Canada reported severe weather

[1] An Assessment of the Impacts of Climate Change on the Great Lakes. The Environmental Law & Policy Centre. 2019: http://elpc.org/wp-content/uploads/2019/03/Great-Lakes-Climate-Change-Report.pdf
[2] Great Lakes Wetland Conservation Action Plan: 2005-2010 Highlights Report. www.glwcap.ca
[3] Combatting Canada's Rising Flood Costs: Natural infrastructure is an underutilized option. September 2018. Insurance Bureau of Canada: www.ibc.ca/on/resources/studies
[4] Insurance Bureau of Canada. Media Release. Spring flooding in Ontario and Quebec caused more than $233 million in insured damage.

damages resulted in over half a billion dollars in the past year of insured losses in Ontario[5]. We **recommend** an **investment** be made allowing municipalities or watershed groups the means to restore lost wetlands along urban rivers and lowlands to limit damage by flooding as well as provide carbon sequestration and habitat creation benefits. The Canada-Ontario Agreement should continue the previous work on the Great Lakes Wetlands Conservation Action Plan in working to create, enhance, rehabilitate, and restore 6000 hectares of coastal wetlands. This **investment** should integrate both the cost of plant species, as well as the cost of site evaluation and staff time to deliver restoration work. Leveraging and improving the Ontario Wetlands Evaluation System would help steer the science behind restoration in both northern and southern Ontario. Further, protection of existing wetlands and coastal vegetation complexes would leverage carbon sequestration abilities[6] and critical habitat for fisheries[7].

A Healthy and Thriving Ecosystem

The federal and provincial governments have established many Great Lakes research institutions (i.e. Department of Fisheries and Oceans, Ministry of Environment and Climate Change, Ministry of Environment Conservation and Parks, Ministry of Natural Resources and Forestry, conservation authorities). These institutions are supplemented by the research underway at Ontario universities and colleges, which investigate local nuances that aid in the comprehensive understanding of the ecological and anthropogenic pressures facing our Great Lakes – St Lawrence ecosystem. Importantly, we need to employ a comprehensive investigative lens when examining the issues facing the Great Lakes – St Lawrence ecosystem. We **recommend** consulting with researchers and academia to define what local nuances along our coast and shorelines constitute healthy ecosystems.

To learn from our past, establish food security, and set better environmental standards for the Indigenous peoples of the Great Lakes – St Lawrence region, we **recommend** convening traditional knowledge holders to define a healthy and thriving Great Lakes – St Lawrence ecosystem. The Canada-Ontario Agreement should be used to allow Indigenous peoples to find ways to develop their own environmental standards and use these standards to review all activity

[5] Insurance Bureau of Canada. Media Release. Early April Storm causes more than $85 million in insured damages across Ontario and Quebec.
[6] Kayranli, B. *et al*. 2010. Carbon Storage and Fluxes within Freshwater Wetlands: a Critical Review. *Wetlands*, 30:111–124

[7] Stephenson, D. 1990. Fish Reproductive Utilization of Coastal Marshes of Lake Ontario Near Toronto. Journal of *Great Lakes Research*, 16(1): 71-81

within their territory as per the 2008 Water Declaration of the First Nations in Ontario[8]. **Invest** in establishing a program to support indigenous standards of healthy ecosystems in this COA to support and inform future ecosystem decisions.

Nutrients

Nutrient runoff pollution causing harmful algal blooms remains one of the biggest threats to the Great Lakes. The last year has seen some progress on this issue, with the release of the Canada-Ontario Lake Erie Action Plan (COLEAP), however the implementation plan, due in February, has not yet begun. With the 2019 algae season looming and the bloom projected to be severe[9], we now risk another year of inaction which Lake Erie simply cannot afford. While the proposal to extend the work done on Lake Erie and to draft a domestic action plan for Lake Ontario and other Great Lakes is a great idea, we should focus on implementing the plans we have before drafting new ones. We must act quickly and with a strong investment in order to turn the tide on harmful algal blooms (HABs) and phosphorus pollution in the Great Lakes. We **recommend** publishing a plan of action for Lake Erie and beginning the implementation phase for the COLEAP before beginning a similar process for Lake Ontario. In addition, we recommend reviewing the COLEAP for limitations and lessons learned to inform the approach to a nutrients reduction strategy for Lake Ontario.

An example of a limitation in COLEAP is the reliance on voluntary measures to achieve phosphorus reduction targets. Research demonstrates that voluntary actions will not be enough to curb HABs and to achieve our phosphorus loading target of 40 percent total phosphorus reduction, and that our targets are likely insufficient to address the growing threat of HABs[10]. Governments must work cooperatively to identify watershed scale solutions to phosphorus pollution, and the collective impact of phosphorus loading into Great Lakes tributaries. The limits of voluntary measures should be mitigated through precision regulation in regions that contribute the most intense phosphorus loading to the watershed. In order to make real progress on the nutrients issue across the Great Lakes, we need strong rules that have enforcement mechanisms all polluters can be accountable to, especially in key regions with high levels of phosphorus loading. We **recommend** investing in innovative solutions and targeted regulations

[8] Water Declaration of the First Nations in Ontario. 2008. Section *Environment*. www.onwa.ca
[9] National Oceanic Atmospheric Administration: Western Lake Erie Harmful Algal Bloom Early Season Projection. June 6 2019.
[10] Watson, et al. 2016. The re-eutrophication of Lake Erie: Harmful algal blooms and hypoxia. *Harmful Algae*, (56) pg. 44-66

to reduce phosphorus pollution in Lake Erie, and applying a precision conservation[11] approach to all Great Lakes – St Lawrence ecosystem nutrient reduction strategies and regulations.

Plastic Pollution

Plastic is entering the Great Lakes at an alarming rate of 10,000 tonnes per year[12]. The impacts of plastic pollution are far reaching through our region and have severe impacts on ecosystems, habitat, drinking water and water quality in the Great Lakes – St Lawrence ecosystem. Therefore, we strongly agree that plastic be added as a harmful pollutant under Annex 2, and identified as a priority area for action. There are several actions and policies governments can implement to address the plastic pollution issue and reverse course by limiting and eventually eliminating plastic entering the environment. Ontario should shift the responsibility of waste collection and recovery to the producers that cause plastic waste and set ambitious collection targets for all types of plastics. Producers should also cover the cost of clean ups for the plastics that they are unable to collect and recover. Ontario is the biggest polluter in Canada, and every year 1.5 billion plastic bottles enter the environment, waterways and landfills[13]. In adopting a deposit return system for plastic bottles in Ontario we can capture up to 95 percent of plastic bottles and significantly reduce the amount of plastic waste entering the Great Lakes. We **recommend** that Ontario follow the lead of other provinces in Canada by adopting a deposit return system for plastic beverage containers and set minimum collection targets above 80%.

There is also a dire need for federal action on plastic pollution by creating a national strategy for combating plastic pollution. Canada needs strong waste policies that hold producers responsible, keep problematic plastics out of Canada, and dramatically increase the reuse and recycling of plastics. We **recommend** the strategy include the following elements:

1. A ban on hard to-recycle and toxic plastics,
2. 30% minimum recycled content in new products in 2025 and increasing to 75% in 2030, and
3. Binding collection targets for plastic packaging, for which producers are responsible.

[11] Great Lakes St. Lawrence Collaborative Strategy. 2019. Nutrient Issue Table Draft Recommendations. www.westbrookpa.com/glslcollab/
[12] Hoffman, M and Hittinger, E. 2016. Inventory and transport of plastic debris in the Laurentian Great Lakes. *Marine Pollution Bulletin*.
[13] Turning the Plastic Tide. 2016. Environmental Defence Canada. https://environmentaldefence.ca/report/turning-the-plastic-tide/

Implementing strong waste reduction policies at all levels of government is essential to addressing plastic pollution in the Great Lakes – St Lawrence ecosystem. We **expect** the addition of plastic as a harmful pollutant to be followed with comprehensive action, and targets for plastic reduction and extended responsibility to plastic producers.

Road Salt and Stormwater

We applaud the addition of road salt reduction as a key priority for COA. Noting the importance of reducing road salt for the protection of our environment and economy, we **recommend**:

1. Establishing a Provincial Water Quality Objective (PWQO) to help identify and address the specific environmental needs of Ontario's aquatic species at risk that are more susceptible to chloride levels as set out by the Canadian Council of Ministers for the Environment (CCME) and place Ontario as the environmental stewards of Canada's Great Lakes. A PWQO seeks to protect the natural environment and water.
2. Regulating the activity of road salt application, including implementing a training, certification and reporting program for medium to large-scale road salt applicators. Completion of certification in approved application techniques and technologies should be a minimum for an industry applying a known environmental toxic substance at medium to large-scale for the protection of water.
3. Developing liability benefits in the province of Ontario for public and private holders of an audited training and certification in which proper winter conditions, snow and ice removal techniques, and substance quantities are tracked and recorded as evidence for maintaining public safety and environmental health.

Wastewater

The proposed new Annex for Stormwater and Wastewater will hopefully represent an opportunity for governments to address raw sewage contamination in the Great Lakes caused by combined sewer overflows. Combined sewer overflows (CSOs) in particular are a major source of pollution and contamination. When sewers overflow they pollute our lakes with raw sewage, industrial wastes, toxic substances and debris from sanitary sewage and plastic pollution[14]. The contamination can have serious impacts to aquatic species and habitat, as well as lead to beach closures and loss to recreation and tourism revenue across the Great Lakes. Therefore, by

[14] Our Living Waters. 2018. *Combined Sewer Overflows*. https://www.ourlivingwaters.ca/combined_sewer_overflow

addressing CSOs many other goals of COA are also achieved including the reduction of many harmful pollutants and the restoration efforts of AOCs.

The proposed action to "work with municipalities to improve monitoring and reporting of wastewater bypasses and overflows" does not give us confidence that governments will commit to transitioning combined systems to modern systems and limiting overflows in the future. While monitoring and publishing information on combined overflows to the public is an important task, we **expect** that governments will actively pursue phasing out combined sewer overflows through financial partnership with all levels of government. We **recommend** establishing targets, timelines and timelines for combined sewer phase out in the Great Lakes – St Lawrence region.

Toxics

We **recommend** that the governments take a precautionary and preventative approach to toxics in the Great Lakes – St Lawrence ecosystem. 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 – St Lawrence region.

Because discharges are increasingly the result of consumer product use (everything from home cleaning products to flame retardants added to upholstery), it is crucial that the harmful chemicals are not contained in the products in the first place. We **recommend** that the governments adopt preventative approaches, such as informed substitution and extended producer responsibility, in order to address toxic chemicals in Great Lakes – St Lawrence ecosystem.

In addition to existing chemicals of mutual concern that are already the focus of the current COA, we **recommend** that the governments seek to address radionuclides, sulphates, per- and polyfluorinated substances (PFAS).

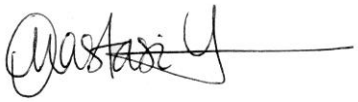
Further, we **recommend** that the governments develop a comprehensive strategy for addressing emerging substances, which includes a rapid identification and screening process.

Conclusion

In summary, we are pleased with many elements proposed for the structure of COA and new areas for action. We expect these new elements, along with existing annexes and priority areas, will be strongly supported by investment and action. We also expect that progress will be easily measurable with targets, timelines, and accountability measures. Our Great Lakes – St Lawrence

region is facing serious threat from climate change, harmful algal blooms, plastic pollution and ecological break down at an increasing rate. Therefore, to address these increasingly severe threats, the terms set by this agreement for the next five years must be stronger than it ever has. This iteration of the Canada-Ontario Agreement is our opportunity to show leadership in the protection of the Great Lakes – St Lawrence ecosystem, and we hope governments will approach this task with that responsibility top of mind.

Sincerely,



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