

ONTARIO FEDERATION OF ANGLERS & HUNTERS



Ontario Conservation Centre

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Ms. Carolyn O'Neill
Great Lakes Office
40 St Clair Avenue West, Floor 10
Toronto, Ontario
M4V1M2

Dear Ms. O'Neill:

Subject: ERO 019-0198

The Ontario Federation of Anglers and Hunters (OFAH) is Ontario's largest non-profit, conservation-based organization representing 100,000 members, subscribers and supporters, and 740 member clubs. The OFAH has a long history of engagement on Great Lakes issues and participation in the Canada-United States Great Lakes Water Quality Agreement (GLWQA). We have reviewed the draft Canada-Ontario Agreement (COA) on Great Lakes Water Quality and Ecosystem Health (2020) and submit the following comments for consideration.

General

The OFAH supports the contents of the new agreement in principle, but have four general comments. First, we welcome the inclusion and recognition of the importance of Great Lakes fisheries, but believe there are other opportunities to highlight this more specifically throughout the agreement. Fisheries are an important part of cultural heritage in Ontario for religious, medicinal, nutritional, and economic reasons. Valued at more than \$7 billion annually and supporting more than 75,000 jobs (Great Lakes Fishery Commission, 2019), a healthy Great Lakes fishery is good for the economy, communities, and the environment. Highlighting the fisheries that engage so many Ontarians will greatly enhance public and stakeholder awareness, engagement, and involvement. It will assist in the integration of the COA with Lakewide Action and Management Plans (LAMPs) called for in the GLWQA, binational Fish Community Objectives for the Great Lakes, and the Great Lakes Fishery Commission's (GLFC) strategic plan for management of Great Lakes fisheries. This consideration can be further supported by defining "conservation" in Article I Definitions, making it clear that conservation includes the sustainable use of the natural resources of the Great Lakes.

Second, it is our understanding that the last progress report for the COA was published in 2010. Since then, results are primarily disclosed in binational reports pursuant to the GLWQA making it difficult to evaluate the performance of initiatives under the COA. Progress reports should be published specifically for the COA, and stakeholders would also benefit from fiscal reporting (i.e. how and where resources are spent). The OFAH appreciates the inclusion of "accountability" in Article III Principles and additional clarity on the reporting responsibilities of the COA Executive Committee. This will improve the public's understanding of progress made under the agreement, as well as aspects that may require additional attention. Transparency would be improved if progress reporting also included a more critical evaluation of programs under the COA that have fallen short of expectations.

Possibly the most important aspect to the progress reporting is how information is communicated. There is a gap in public understanding of important issues concerning the health of the environment and actions that are taking place across the Great Lakes landscape under the COA, the GLWQA, and all of its moving parts. Governments must adhere to the "communication" principle to improve information sharing, education, and awareness of the Great Lakes. As recognized in Annex 11 (From Awareness to Action) this "...will increase overall appreciation for the Great Lakes and will motivate individuals to get involved."

Third, Section 4(f), Article V, of the agreement states that the COA Executive Committee will be responsible for holding roundtable discussions with "...invited representatives of relevant domestic Great Lakes bodies or jurisdictions that have an interest in the management of the Great Lakes and representatives of the Great Lakes community." We would like to suggest that the committee be chaired not only by Environment and Climate Change Canada (ECCC) and the Ministry of the Environment, Conservation, and Parks (MECP), but include the Ministry of Natural Resources and Forestry (MNRF), as this ministry is also signatory to the COA and has a critical role in management in Great Lakes fish and wildlife populations. Conservation organizations like the OFAH must be included in these discussions.

Finally, and from the perspective of the OFAH, most importantly, the governments of Canada and Ontario **must** remain committed to this COA and fund it sufficiently and consistently in their respective budgets (Article VIII). Without funding and functional agencies, this strong and principled agreement to restore, protect, and conserve the Great Lakes is toothless.

Annex 1: Nutrients

The OFAH supports addressing the issue of excess nutrients and reduction of harmful and nuisance algal blooms and zones of hypoxia. Much of the attention is directed towards Lake Erie, but we are also concerned that similar nutrient problems may emerge in Lakes Huron and Superior. We are seeking a commitment in the agreement for Canada and Ontario to be more pro-active in taking remedial action to research the causes or reverse the incidents of algal blooms in both of these Great Lakes while impacts of the blooms are still minimal.

A growing concern for Lake Ontario is the decline in offshore nutrients and primary production due to reduced total phosphorus. Major changes are being observed in lower trophic levels limiting prey-fish that top predators rely on. A number of hypotheses have been proposed that require further investigation including the effects dreissenids have on fish. Investing in research and monitoring of excess nutrients, but also deficits, will enhance the understanding of nutrient dynamics and facilitate new solutions to address these issues.

Environmental symptoms of excess nutrients also need to be investigated. Anglers and their families, commercial fishers, and Indigenous communities value fish as wholesome food. Toxins produced by some species of blue-green algae (e.g. microcystins) can accumulate in fish tissue and threatens fish, wildlife, and human health. Preliminary research recommends avoiding eating fish exposed to harmful algal blooms, but more research is needed to improve the understanding of this issue and the associated effects.

Improvements in rural land use and land management practices can be supported by investments in conservation programs and complementary initiatives like the Alternative Land Use Services (ALUS) Program. ALUS can assist in the reduction of nutrients through repurposing and naturalizing candidate agricultural land to provide environmental goods and services.

Annex 2: Harmful Pollutants

The OFAH supports actions identified under the COA to reduce or eliminate harmful pollutants including substances of emerging concern such as microplastics (e.g. microbeads, microfibers). The agreement states that concentrations of PCBs (polychlorinated biphenyls) and mercury are now significantly lower in fish of the Great Lakes than they were in previous decades. However, these contaminants are responsible for causing the majority of consumption advisories in the Great Lakes and thus remain the greatest risk to the angling community (MECP, 2015; ECCC/USEPA, 2019). The COA should put greater emphasis on anglers and solutions to contaminants causing consumption restrictions, and include commitments to surveillance initiatives like the MECP's Fish Contaminant Monitoring Program.

Annex 3: Wastewater and Stormwater

Improving the management of wastewater and stormwater is critical for keeping the Great Lakes clean, and to protect water quality, beaches, and public health. But in addition to these considerations, the COA should highlight that the conservation of the Great Lakes fishery also depends on the elimination or reduction of upstream sources and routes of pollution. The OFAH supports increased transparency and community awareness through timely public reporting of sewage overflows and bypasses. This will facilitate appropriate action and infrastructure investment to reduce pollution into the Great Lakes.

Annex 4: Discharges from Vessels

The OFAH supports the implementation of the commitments and priority actions of Annex 5 (Discharges from Vessels) of the GLWQA. Specific considerations pertaining to ballast water and aquatic invasive species (AIS) have been included under the Annex 7: Aquatic Invasive Species section of this response.

Annex 5: Areas of Concern

The identification of Areas of Concern (AOCs) and the implementation of Remedial Action Plans has resulted in the removal of Beneficial Use Impairments (BUIs), the restoration and delisting of several AOCs, and two AOCs recognized as being in recovery. There needs to be continued investment towards remediating and delisting AOCs, but also further commitments to ongoing monitoring, assessments, and maintenance to ensure these areas remain healthy (i.e. off the AOC list). The International Joint Commission (IJC) recommends in the most recent assessment on Great Lakes water quality (IJC, 2017) that governments continue to advance implementation of remedial actions in all remaining AOCs by "...maintaining, or accelerating, investments and action, and setting a 15-year goal for completing remedial actions at all AOCs." The OFAH supports this recommendation and believes it should be included in the COA.

Annex 6: Lakewide Management

Management actions put forth in LAMPs to address key environmental threats will require significant integration and coordination of work of many partners, including conservation authorities and stakeholder organizations. The OFAH generally supports all actions identified in LAMPs as they are critical to the health and improvement of the Great Lakes fishery. We would again like to emphasize the importance of accountability, evaluating actions by individual agencies, and the tracking and reporting of progress through annual and five-year reports. As with most goals and objectives presented in LAMPs, the COA and the GLWQA, success is dependent on sufficient funding. Resources must be allocated to the agencies involved, but an engaged Great Lakes community will also benefit from funding opportunities from the governments to enable them to undertake strategic, guided restoration projects (e.g. RFCPP, Great Lakes Guardian Community Fund, EcoAction). Planning processes that engage communities and also provide strategic direction on protection and restoration opportunities are also needed. We appreciate the recognition and implementation of the Great Lakes nearshore framework. Supplemental to actions identified in Result 3, Canada and Ontario should also identify the socio-economic value of nearshore areas.

Annex 7: Aquatic Invasive Species

Overall, we are supportive of protecting habitats and species from AIS and ensuring cooperative and coordinated efforts to reduce the threat of AIS to Great Lakes water quality and ecosystem health. However, there are some important considerations to highlight. AIS have been introduced/spread into the Great Lakes as a direct result of the release of ship ballast; therefore, the OFAH is supportive of efforts focused on preventing and controlling vessel discharges that are harmful to the quality of the Great Lakes. Existing Canadian regulations exempt domestic vessels, which pose economic and environmental risks associated with the spread of invasive species. We recognize that Canada is in the process of reviewing current Ballast Water Control and Management Regulations and proposing new regulations that would apply to Canadian vessels everywhere and vessels in waters under Canadian jurisdiction. Moving forward with these revised ballast water regulations would further reduce the risks posed to the Great Lakes by ballast water.

We agree with the need for coordinated risk assessments of potential new AIS and AIS pathways to inform prevention, monitoring, and control measures. More attention should be paid to assessing the risk of invasion pathways in order to help prioritize actions to address not only the introduction of new AIS, but the spread of new and established AIS through these pathways. Pathway risk assessments should be conducted to inform the potential development of regulations, policies, or management strategies for each pathway, with the ultimate goal of reducing the risk of introduction and/or spread of both new and existing AIS.

Ecological connectivity is essential for the effective conservation of many fish species. Fishway projects can facilitate passage and benefit a few species, but often fail to replicate natural systems. Dam removal has the potential to accommodate the greatest variety of species, but these barriers also provide ecological function in restricting the movement and spread of AIS (e.g. Sea Lamprey). There is no easy solution to the dilemma. The OFAH supports Result 4(b), developing alternatives to lampricides, and suggest further investigation into the application of modern genetic technology (i.e. gene manipulation) to manage invasive Sea Lamprey in the Great Lakes.

We support the development of coordinated federal/provincial early detection and rapid response frameworks for AIS; however, we encourage the use and/or expansion of existing watch lists, reporting and surveillance protocols, and response strategies, as opposed to the development of new ones. We encourage provincial, federal, and binational collaboration as a lot of work has been done in Canada and the United States with respect to AIS early detection and response initiatives (e.g. Asian carps) and there is no need for duplication of effort.

Ensuring cooperative and coordinated efforts to reduce the threat of AIS to the Great Lakes requires collaboration between all levels of government and ministries, as well as key stakeholder groups, like the OFAH. Partnerships and adequate funding will be critical to achieving the results outlined in the agreement. We encourage Canada and Ontario to establish permanent and sufficient funding, not only for consistent, integrated, and prioritized efforts to fight AIS, but also to enact the draft objectives, strategies, and actions presented in the COA.

Annex 8: Habitat and Species

The OFAH appreciates the inclusion of cumulative impacts in Annex 8 (Habitat and Species) because small and large habitat alterations are believed to account for the largest loss in fisheries productivity over the long term. Responsibility of cumulative impacts is difficult to isolate when dealing with multiple projects and proponents. Therefore, a tracking system such as a registry should be acknowledged in the COA (and established) as this would help identify the aggregation of harmful impacts across the Great Lakes landscape.

Annex 8 states that Canada and Ontario will prioritize opportunities for restoration. This is an important consideration because the current model for restoration activities (i.e. “random acts of restoration”) is underperforming. Projects that have the potential to result in the greatest overall benefit to the aquatic ecosystem should be prioritized and adequately funded. Moreover, additional conservation funding mechanisms should be pursued and further supported; possibly by polluters/developers (“polluter pays”; Article III Principles).

The OFAH is pleased to see providing and enhancing fishing opportunities included as a benefit of healthy and plentiful habitat and specific species focus for native species (note: the COA should also include Bloater for Lake Ontario). The conservation of native species in the Great Lakes is important, but there should be explicit recognition of the socio-economic value of naturalized species (e.g. Chinook Salmon, Rainbow Trout, Brown Trout, Coho Salmon, etc.). This will ensure that applicable sections of the COA align with binational Fish Community Objectives for the Great Lakes and the associated LAMPs called for in the GLWQA.

Strategic conservation planning initiatives such as the National Marine Conservation Area System Plan can be used to benefit aquatic ecosystems, but can also unnecessarily restrict sustainable use activities like angling. The identification of significant areas or species, and the establishment of protected areas, must be based on sound ecological criteria. The precautionary principle can precipitate action where science is lacking, but we are concerned this can lead to restrictive protectionist measures. Thus, we would like to highlight that science-based evidence should always supersede the precautionary approach. This highlights the need for having “roundtable discussions” and establishing a committee that includes conservation organizations like the OFAH, to ensure stakeholders (like the angling community) are adequately represented and not negatively impacted.

Great lakes community engagement again requires funding support to deliver stewardship.

Annex 11: From Awareness to Action

The OFAH supports Annex 11's principles of engaging local communities in the stewardship of the Great Lakes. As with the other Annexes, this will require funding and funding programs for this to happen. The OFAH is and will remain a key partner for stakeholder engagement and action with our existing community, stewardship, and citizen science initiatives (TackleShare, Invasive Species Awareness Program, Community Hatchery Program, and Lake Ontario Atlantic Salmon classroom hatcheries and angler diary programs). Many of our current programs already deliver on Results such as 1(f) and (g).

The OFAH would also like Ontario to explicitly include hunting and fishing under Result 2, as these activities create both significant economic opportunities and Great Lakes engagement, and this needs recognition and support from the province.

Closing remarks

The COA is an important mechanism by which Canada delivers on its obligations under the GLWQA. In November 2017, the IJC prepared an assessment of progress on the GLWQA and presented a number of key findings that align with the high-level recommendations the OFAH has provided in this submission:

- 1) Increasing the priority given to fisheries will help address socio-economic and ecological objectives under the COA;
- 2) Stakeholder and public engagement will benefit from transparent communication through regular progress and fiscal reports;
- 3) The angling community is an essential socio-economic component of the Great Lakes and needs to be represented at roundtable stakeholder discussions by organizations like the OFAH; and
- 4) Most critically, the objectives, strategies, and actions presented in the COA can only be achieved through sufficient and sustained financial investment by the governments of Canada and Ontario.

We appreciate the opportunity to comment on this proposal, and look forward to continuing as an important partner on Great Lakes issues.

Yours in Conservation,



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Fisheries Biologist

AW/jb

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