

Dated: May 26, 2021

Canadian GLEC Secretariat  
Great Lakes Environment Office  
Environment and Climate Change Canada  
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**Re: Consultation on the Draft of Canada's Great Lakes Strategy for Perfluorooctane Sulfonate (PFOS), Perfluorooctanoic Acid (PFOA), and Long-Chain Perfluorocarboxylic Acids (LC-PFCAs) Risk Management (referred to herein as the Draft Strategy)**

Dear Members of the Canadian GLEC Secretariat,

Thank you for the opportunity to comment on the Draft Canada's Great Lakes Strategy for PFOS, PFOA, and LC-PFCAs Risk Management. HEN is a non-profit organization that propels climate action and environmental sustainability in Halton Region by educating and building awareness in our community. We reach out to municipal, provincial, national and international governments on issues that impact local environmental sustainability and climate resiliency. Our organization strives to provide relevant, science-based input to governments on policies, legislation, regulation, programs and initiatives to help improve consideration of broader perspectives. HEN also supports consideration of other organization's sound advice and recommendations.

The Draft Strategy provides *opportunities for additional Canadian actions to address data gaps and better achieve key commitment under the GLWQA by minimizing the release of PFOS, PFOA, and LC-PFCAs identified as Contaminants of Mutual Concern (CMC) to the Great Lakes basin. Actions can be considered by a variety of stakeholders, including industry, academia, and non-government organizations.*"<sup>1</sup> The summary table of actions is included below.

As synthetic chemicals, PFOS, PFOA, and LC-PFCAs are produced to be used in a wide variety of industrial and consumer products. Many of the PFAS compounds are 'forever chemicals'<sup>2</sup>, persistent, bioaccumulative, and toxic. These characteristics contribute to their presence throughout much of the Great Lakes region.<sup>3</sup>

Within this consultation, HEN has drawn from cited footnotes to emphasize support to:

- Implement the 16 actions within the Draft Strategy to continue ongoing actions, begin new actions, and enhance risk management<sup>1</sup>
- Close the identified gaps that present barriers to progress to reduce the impact of CMCs<sup>1</sup>



- **Assign timing and responsibilities, and establish key accountability measures within the Draft Strategy to support transition to implementation and make the commitments to actions clear**
- Develop a binational strategy for designated PFAS instead of two separate approaches – one for Canada, and one for the U.S.; a coordinated binational strategy would move to more effective implementation and action<sup>3 4</sup>
- Use a precautionary approach to promote management including regulation of PFAS as a class<sup>5 4</sup>, designating the class as CMC, and assigning more aggressive timelines for their regulation.
- Continue and expand research to better understand contaminant cycling within the ecosystem and interactions with PFAS and other contaminants that can potentially increase harm<sup>3</sup>; address key research needs as stated by Murray and Jackson<sup>4</sup> related to PFAS sources and releases, cycling, human exposures and effects, and exposures and effects across fish and wildlife populations.
- Operationalize zero discharge and virtual elimination applied to the class of PFAS and CMCs overall, and action the overarching principles already embedded in some policies that are not being integrated into operations and programs. New science is showing that levels previously thought to be safe for fish, wildlife and people are lower, and the interaction between chemicals in the environment may pose more risk than that represented in risk assessments of the individual chemicals.<sup>6</sup>

Of particular note are the recommendations in the U.S. National Wildlife Federation's (NWF) *The Science and Policy of PFASs in the Great Lakes Region: A Roadmap for Local, State and Federal Action*. Some of these are represented in the 16 actions listed in the Draft<sup>1</sup>; however, there are additional points of relevance that can be drawn from the NWF's Roadmap.

In our research on the issues related to risk management of CMCs, an important one that needs remedy is expressed by Murray and Jackson<sup>6</sup>. There is a "Failure to explicitly address disproportionate impacts of toxic chemicals in Indigenous communities, communities of colour, and low-income communities."<sup>6</sup>

It is imperative that the Federal government ensure that other legislation moving through the review process harmonize with the risk management strategies for CMCs. This is critical to integrate recommendations, policies and programs and make sure that there are no gaps in opportunities to legislate, regulate and enforce actions. Such is the case as with Bill C-28: Strengthening Environmental Protection for a Healthier Canada Act. Proposed amendments must not undermine or conflict with existing or potentially strengthened approaches to risk management of contaminants in the Great Lakes and more broadly, our Canadian and global environment.<sup>7</sup>





The leading facilitator for Climate Action and Environmental Sustainability in the Community of Halton

The Canadian government has an incredible opportunity to address PFAS's significant detrimental impacts on human health, aquatic life, wildlife and the environment, and healthy ecosystems with equitable and economic effectiveness. Several organizations have done extensive analysis with important recommendations that should be factored into the Strategy for Risk Management as noted.

Thank you for your consideration of our comments. We would be available to provide additional details to support our submission.

Best Regards,  
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Cindy Toth, HEN Board Vice Chair

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## Footnotes

- (1) Draft Canada's Great Lakes Strategy for PFOS, PFOA, and LC\_PFCAs Risk Management. (2021, April). <https://binational.net/wp-content/uploads/2021/04/20210419-DRAFT-GLStrategy-PFOS-PFOA-LC-PFCAs.pdf>
- (2) Toxics-Free Great Lakes Binational Network, Healthy Great Lakes Program (a Program of the Canadian Environmental Law Association) and National Wildlife Federation. (2020, June 22). The Growing Threat of PFAS, “the Forever Chemicals”, and Contamination in the Great Lakes Basin – A Strategic Discussion on Further Steps around Binational Citizen Action. [Webinar] <https://cela.ca/pfas-us-contamination/>
- (3) Murray, M.W., and Salim, O. (2019, September). The Science and Policy of PFASs in the Great Lakes Region: A Roadmap for Local, State and Federal Action, National Wildlife Federation, Great Lakes Regional Center, Ann Arbor, MI. <https://www.nwf.org/Educational-Resources/Reports/2019/09-09-19-PFAS-Great-Lakes>
- (4) Murray, M., Jackson, J., (2021, April 14). PFAS and the Great Lakes: The Need for Binational Action [Guest Blog], <https://cela.ca/guest-blog-pfas-and-the-great-lakes-the-need-for-binational-action/>
- (5) Kwiatkowski, C.F., et al. (2020, June 30). Scientific basis for managing PFAS as a chemical class, Environ. Sci. Tech. Lett. 7, 8, 532; 543. <https://pubs.acs.org/doi/10.1021/acs.estlett.0c00255>.
- (6) Murray, M., Jackson, J., (2021, April 21). Zero Discharge & Virtual Elimination of toxic Chemicals in the Lakes: Yesterday, Today and Tomorrow [Guest Blog]. <https://cela.ca/guest-blog-zero-discharge-virtual-elimination-of-toxic-chemicals-in-the-great-lakes-yesterday-today-and-tomorrow/>
- (7) Castrilli, J.F. and de Leon, F., (2021, April 15). Long Awaited Amendments to CEPA: The Good, The Bad, and the Ugly on Chemicals and Environmental Rights [Blog]. <https://cela.ca/blog-long-awaited-amendments-to-cepa-the-good-the-bad-and-the-ugly-on-chemicals-and-environmental-rights/>



*ES Table A. Summary of Canada's Great Lakes Strategy Actions for PFOS, PFOA, and LC-PFCAs.*

Category of Action				
Regulations and Other Risk Mitigation and Management Actions	Compliance Promotion and Enforcement	Pollution Prevention	Monitoring, Surveillance, and Research Efforts	Environmental Quality Guidelines
<b>Actions</b>				
1. Review regulations, guidelines, and advisories in other jurisdictions, and update Canadian health advisories and guidelines to match current scientific understanding  2. Amend or develop new regulatory controls in response to human health and ecological assessments and new data  3. Establish inventories of known sources where possible	4. Continue to undertake outreach activities to raise awareness of the regulations among known and potential stakeholders  5. Continue to develop and distribute plain language guidance materials and factsheets on the regulations  6. Continue to track reported activities allowed under specific exemptions (e.g. laboratory use)  7. Take enforcement measures including issuing warnings, environmental protection compliance orders, or directions; and when appropriate, collect evidence for prosecution	8. Research and ensure safe end-of-life management practices for products containing PFOS, PFOA, LC-PFCAs, and their salts and precursors, and communicate these results  9. Enhance support to industry associations and firms who seek to phase out or improve risk management within their sector	10. Continue monitoring in environmental media in the Great Lakes and publish results in a variety of publications and open access data portals  11. Use monitoring and modelling to better characterize sources  12. Address gaps in monitoring, toxicity, and exposure data  13. Coordinate standardized analytical methods binationally to ensure data uniformity and comparability across jurisdictions  14. Develop innovative, cost-effective tools and approaches for monitoring, measuring, and reducing releases from various sources	15. Establish and implement additional guidelines for surface waters for the protection of aquatic life  16. Establish and implement guidelines for soil and groundwater for the protection of environmental and human health

