

Great Lakes Executive Committee Meeting Summary

December 7, 2022

OPENING REMARKS

Great Lakes Executive Committee (GLEC) Co-Chairs, Michael Goffin (Environment and Climate Change Canada, ECCC) and Chris Korleski (U.S. Environmental Protection Agency, EPA), welcomed participants to the December 2022 GLEC meeting.

Under Business Items, the Co-Chairs discussed the draft June 2021 GLEC Meeting Summary, approved the day's agenda, and highlighted the recommendation from the Annex 3 Subcommittee on moving to Phase 2 of the PAH CMC nomination process.

A list of meeting attendees is found in Appendix A.

Action Items:

- GLEC to provide comments on the draft June 2022 GLEC Meeting Summary to the Secretariat by January 16, 2023.
- Chemicals of Mutual Concern Annex Co-Leads to complete phase 2 review of the PAH nomination, and return to GLEC with a final recommendation in June 2024.

REFLECTIONS ON THE 2022 GREAT LAKES PUBLIC FORUM

The GLEC Co-Chairs and GLEC reflected on the success of the 2022 Great Lakes Public Forum and the 50th anniversary celebrations of the signing of the 1972 Great Lakes Water Quality Agreement (Agreement or GLWQA).

Action Item:

- Secretariat to invite the Planning Advisory Committee to provide written feedback on the Great Lakes Public Forum. GLEC membership comments on Forum are welcome and should be submitted to the Secretariat.

2023-2025 BINATIONAL PRIORITIES FOR SCIENCE AND ACTION

Chris provided an update on the revisions to the 2023-2025 Binational Priorities for Science and Action based on the comments received following the Great Lakes Public Forum. The priorities are a focused list of the key science and actions to accomplish over the next three years and would be reported on in the 2025 Progress Report of the Parties. Chris noted that other binational and domestic activities will continue to support implementation of the Agreement beyond what is captured in these binational priorities.

Action Item:

- Secretariat to share a tracked version of the 2023-2025 Binational Priorities for Science and Action (BPSAs). GLEC members to provide written comments on BPSAs to the Secretariat by January 16, 2023. GLEC Co-Chairs to finalize BPSAs by March 2023.

NUTRIENTS SESSION

Nutrients Annex U.S. Co-Lead, Santina Wortman (EPA), provided an update on the examination and results of the work related to phosphorus targets for Lake Ontario. The work included examining whether the interim phosphorus concentration and phosphorus loading targets outlined in the 2012 GLWQA need to be revised to meet the Lake Ecosystem Objectives (LEOs). Santina outlined that no revisions of the Lake Ontario interim phosphorus concentration objective or phosphorus loading target are being proposed by the Annex Sub-Committee at this time, highlighting that:

- Hypoxia and harmful algal blooms (HABs) are not currently widespread issues or considered significant concerns across the lake (the whole-lake target and substance objective are likely appropriate in meeting LEOs related to hypoxia and HABs); and
- The adequacy of the interim targets to meet the nearshore nuisance algae and open water trophic status LEOs were unable to be assessed.

Next steps included broader engagement in 2023 with partners and the public on the assessment recommendations.

Action Item:

- GLEC members to provide comments on recommendations in relation to interim Lake Ontario phosphorus targets by January 16, 2023. Nutrients Annex Co-Leads to engage in 2023, and return to GLEC with a final recommendation in December 2023.

GROUNDWATER SESSION

Groundwater U.S. Annex Co-Lead, Howard Reeves (U.S. Geological Survey, USGS), provided an update on the 2022 groundwater science report, which builds on the 2016 groundwater science report and identifies new gaps and emerging issues, and highlights progress towards past identified research needs. Howard provided an overview of the 2022 report chapters, which align with the annexes of the 2012 GLWQA and focused on outlining the needs and progress identified under each chapter topic. Howard touched on couple identified gaps, including groundwater data and monitoring; integrating new sensor technologies to improve data and support decision making; and assessing urban effects on groundwater.

Action Item:

- Secretariat to work with Groundwater Annex Co-Leads to chart a path forward on GLEC review and finalization of the Groundwater Science report.

NEWS AND COMMENTS FROM GLEC MEMBERS

Melissa Fabian Mendoza (Canadian Nuclear Safety Commission, CNSC) highlighted that the CNSC regulatory oversight reports, which includes information on licensees' safety performance, for uranium

mines and mills and processing facilities will be presented December 15 and 16 to the Commission. The regulatory oversight reports related to nuclear power plants and Canadian Nuclear Laboratories (CNL) facilities were presented in November 2022. All these reports are available at the CNSC website (<https://nuclearsafety.gc.ca/>). Melissa also noted that there was a Commission hearing at the end of November 2022 for the 10-year license extension of the CNL's Port Hope Area Initiative and that the Commission's decision will be available on the CNSC website. She lastly touched on the Nuclear Waste Management Organization (NWMO) Adaptive Phased Management initiative, and two host community being considered for a deep geological repository, Ignace and South Bruce, with NWMO plans to complete the site selection by 2024.

Thomas Hoggarth (Fisheries and Oceans Canada, DFO), announced that Gavin Christie will be retiring in March 2023. Thomas noted Gavin's contributions over his career at Fisheries and Oceans Canada, through his federal role and participation through numerous other agencies and initiatives such as the Great Lakes Fishery Commission, Ontario Ministry of Natural Resources, technical committees, science advisory boards, the GLWQA and the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health.

Rick Balla, (U.S. Environmental Protection Agency Region 2) provided several Region 2 updates. Since December 2021 GLEC, two beneficial use impairments (BUIs) were removed in the Rochester Embayment Area of Concern (AOC), and one BUI was removed in the Buffalo River AOC. In the next six months, expect one more BUI to be removed in the Rochester Embayment AOC, and two more BUIs to be removed in the Buffalo River AOC. By December 2023, expect to be well underway on the delisting process of the Rochester Embayment AOC, and project an additional BUI removal in the Buffalo River AOC. Rick noted that no additional Great Lakes Restoration Initiative (GLRI) management actions are required in the Eighteenmile Creek AOC to remove the remaining BUIs and expect to have a finalized sediment management action list by December 2023 for the Niagara River AOC. He also mentioned that since last year, removal criteria and management actions for the degradation of benthos impairment at the St. Lawrence River AOC at Massena/Akwesasne have been finalized and progress is underway, including the integration of TEK into the removal criteria. Rick concluded by noting that Region 2 is engaged in the planning of the 2023 Cooperative Science and Monitoring Initiative (CSMI) field year for Lake Ontario.

COMMENTS FROM COMMISSION REPRESENTATIVES

Heather Stirratt (International Joint Commission, IJC) provided an update regarding the IJC's Triennial Assessment of Progress (TAP) report, scheduled for release in late 2023. The IJC will consider and use input collected from various engagement activities with the public and Indigenous communities on the 2022 Progress Report of the Parties in the drafting of the 2023 TAP report. The TAP will focus on three topics: climate change; emerging chemicals of concern; and science needs. Heather also discussed the release of its *Great Lakes Science Strategy for the Next Decade: Summary Report* on November 30, which proposes a strategy to comprehensively assess the science needed to understand, predict, and anticipate changes that are coming or have already occurred.

Erika Jensen (Great Lakes Commission, GLC) provided the following Commission updates or announcements:

- Continue to track progress of the federal, state and provincial commitments to reduce phosphorus into Lake Erie through Blue Accounting's Lake Erie Algae Initiative.

- Developed *Approaches for Improving Great Lakes Water Infrastructure: A Blueprint* (<https://www.glc.org/work/glwi>) to support federal, state and local officials in advancing water infrastructure projects and take advantage of the U.S. Infrastructure Investment and Jobs Act funding.
- Launched a new Blue Accounting resource focused on drinking water to help decision makers and stakeholders better understand the status of policies and programs that are implementing source water protection plans, reducing lead in drinking water, and meeting treat requirements.
- Announced Great Lakes Day in Washington March 9, 2023 and the GLC Annual Meeting May 23-25, 2023 in Chicago.

COMMENTS FROM OBSERVERS

Rebecca D’Orazio (Invasive Species Centre) noted that the Invasive Species Centre supports the increased use of community science and monitoring programs for aquatic invasive species and highlighted their work integrating eDNA sampling into voluntary based lake monitoring programs (e.g., iSample ON). Rebecca also mentioned that with greater concern on aquatic invasive plants, the Centre has been working with many partners through the Green Shovels Collaborative to develop a Phragmites Framework for Ontario; implemented a Phragmites Community Action Funding Program (awarding up to \$10,000 to 10 projects in 2022); and continued eradication efforts on European Water Chestnut and other invasive plants. Rebecca concluded with noting the continued to work with partners on education and outreach on invasive plants, including new communication tools and highlighting the 2023 Invasive Species Forum (<https://www.invasivespeciescentre.ca/event/2023-invasive-species-forum/>).

Michael Murray (Great Lakes Ecoregion Network; Toxics Free Great Lakes Binational Network) provided a highlight of key recommendations from the Great Lakes Ecoregion Network related to the 2023-2025 Binational Priorities for Science and Action.

SUMMARY OF ACTION ITEMS

Action Items from the December 2022 GLEC meeting included:

- GLEC to provide comments on the draft June 2022 GLEC Meeting Summary to the Secretariat by January 16, 2023.
- Chemicals of Mutual Concern Annex Co-Leads to complete phase 2 review of the PAH nomination, and return to GLEC with a final recommendation in June 2024.
- Secretariat to invite the Planning Advisory Committee to provide written feedback on the Great Lakes Public Forum. GLEC membership comments on Forum are welcome and should be submitted to the Secretariat.
- Secretariat to share a tracked version of the 2023-2025 Binational Priorities for Science and Action (BPSAs). GLEC members to provide written comments on BPSAs to the Secretariat by January 16, 2023. GLEC Co-Chairs to finalize BPSAs by March 2023.

- GLEC members to provide comments on recommendations in relation to interim Lake Ontario phosphorus targets by January 16, 2023. Nutrients Annex Co-Leads to engage in 2023, and return to GLEC with a final recommendation in December 2023.
- Secretariat to work with Groundwater Annex Co-Leads to chart a path forward on GLEC review and finalization of the Groundwater Science report.
- GLEC to identify any conflicts with the proposed June 2023 GLEC meeting dates (June 13-14, June 20-21, June 21-22) to the Secretariat by January 16, 2023.

GLEC MEETING PARTICIPANTS DECEMBER 1-2, 2021

1. Alesia Kurlek (Environment and Climate Change Canada)
2. Allison Voglesong Zejnati (International Joint Commission)
3. Andrew McCammon (The Ontario Headwaters Institute)
4. Ash Kumar (Environment and Climate Change Canada)
5. Barbara Slezak (Public Services and Procurement Canada)
6. Bonnie Fox (Conservation Ontario)
7. Bretton Joldersma (Michigan Department of Environment, Great Lakes, and Energy)
8. Brianne Pozzobon (Transport Canada)
9. Cale Selby (Ministry of Agriculture, Food and Rural Affairs)
10. Carl Platz (U.S. Army Corps of Engineers)
11. Carol Kim (Environment and Climate Change Canada)
12. Caroline Moellering (Little Traverse Bay Bands)
13. Carolyn O'Neill (Ministry of the Environment, Conservation and Parks)
14. Caryn MacLoughlin (Métis Nation of Ontario)
15. Catherine Masson
16. Charles (Charlie) Wooley (U.S. Fish and Wildlife Services)
17. Chloe Stuart (Ministry of the Environment, Conservation and Parks)
18. Christopher Korleski (Environmental Protection Agency)
19. Dale Hardy
20. Daniel Gurdak
21. Daryl McGoldrick (Environment and Climate Change Canada)
22. Doug Tate
23. Edwin (Ted) Smith (Environmental Protection Agency)
24. Elizabeth Everhardus (Ministry of the Environment, Conservation and Parks)
25. Elizabeth Tanzi
26. Eric Brown (Great Lakes Commission)
27. Erika Jensen (Great Lakes Commission)
28. Gail
29. Gail Hesse (National Wildlife Federation)
30. Gavin Christie (Fisheries and Oceans Canada)
31. Harold Peterson (Bureau of Indian Affairs)
32. Heather Stirratt (International Joint Commission)
33. Howard Reeves (United States Geological Survey)
34. Isabel Dunn
35. Jacob Orlandi (Environment and Climate Change Canada)
36. Jacqueline Peters (Environment and Climate Change Canada)
37. James Clift (Michigan Department of Environment, Great Lakes, and Energy)
38. James Lehnen (New York State Department of Environmental Conservation)
39. James Schardt (Environmental Protection Agency)
40. Jennifer Boehme (International Joint Commission)
41. Jennifer Day (NOAA)
42. Jennifer Keyes (Ministry of Northern Development, Mines, Natural Resources and Forestry)
43. Jennifer McKay (Environment and Climate Change Canada)
44. Jennifer Vincent (Environment and Climate Change Canada)

45. Jessica Jock (Saint Regis Mohawk Tribe)
46. Jessica Lienhardt (Consulate General of Canada in Detroit)
47. Jill Ryan (Freshwater Future)
48. Jocelyn Sherwood (Environment and Climate Change Canada)
49. John Higham (Transport Canada)
50. John Jackson (Great Lakes Ecoregion Network; Toxics Free Great Lakes Network)
51. John Marsden
52. Jon Hortness (United States Geological Survey)
53. Julia KohHatcherAyyoub (Environment and Climate Change Canada)
54. Julie Kheidr (Ministry of Northern Development, Mines, Natural Resources and Forestry)
55. Kate Taillon (Environment and Climate Change Canada)
56. Kirk Beckmann (U.S. Coast Guard)
57. Kristina Heinemann (Environmental Protection Agency)
58. Lance Yohe (International Joint Commission)
59. Laura Gynane (Ministry of Northern Development, Mines, Natural Resources and Forestry)
60. Lawrence Gunther (Blue Fish Canada)
61. Leo Luong (Ministry of the Environment, Conservation and Parks)
62. Lisa Sealock (Environment and Climate Change Canada)
63. Lizhu Wang (International Joint Commission)
64. Lorne Thomas (U.S. Coast Guard)
65. Maria Jawaid (Environment and Climate Change Canada)
66. Mark Burrows (International Joint Commission)
67. Martin Lowenfish (Natural Resources Conservation Service)
68. Matt Otto (Natural Resources Conservation Service)
69. Matt Preisser (Michigan Department of Environment, Great Lakes, and Energy)
70. Matthew Child (International Joint Commission)
71. Melissa Fabian Mendoza (Canadian Nuclear Safety Commission)
72. Michael Goffin (Environment and Climate Change Canada)
73. Michael Murray (Toxics-Free Great Lakes Binational Network)
74. Mike Weimer (U.S. Fish and Wildlife Services)
75. Nabila Taha (Environment and Climate Change Canada)
76. Nancy Goucher (University of Waterloo)
77. Nancy Stadler-Salt (Environment and Climate Change Canada)
78. Natalia Yarkova (Ministry of Agriculture, Food and Rural Affairs)
79. Oliver Dumville (International Joint Commission)
80. Pamela Finlayson (Environment and Climate Change Canada)
81. Pierre Béland (International Joint Commission)
82. Ray Nathan Budiwarman (Environment and Climate Change Canada)
83. Rebecca D'Orazio (Invasive Species Centre)
84. Richard Balla (U.S. Environmental Protection Agency Region 2)
85. Richard Hobrla (Michigan Department of Environment, Great Lakes, and Energy)
86. Robert Sisson (International Joint Commission)
87. Roger Knight (Great Lakes Fishery Commission)
88. Rupert Kindersley (Georgian Bay Association)
89. Ryan Bowie (Chiefs of Ontario)
90. Santina Wortman (Environmental Protection Agency)
91. Sarah Kielek-Caster (Ministry of Agriculture, Food and Rural Affairs)
92. Savanna Higgins

93. Scott Parker (Parks Canada)
94. Sean Backus (Environment and Climate Change Canada)
95. Sergio Paulo (Agriculture and Agri-Food Canada)
96. Shaffina Kassam (Environment and Climate Change Canada)
97. Shampa Chakraborty (Environment and Climate Change Canada)
98. Shannon Dougherty (New York State Department of Environmental Conservation)
99. Simon Belisle (Michigan Department of Environment, Great Lakes, and Energy)
100. Spencer McCormack (Little Traverse Bay Bands)
101. Stacey Cherwaty (Environment and Climate Change Canada)
102. Stephanie Swart (Michigan Department of Environment, Great Lakes, and Energy)
103. Stephen Galarneau (Wisconsin Department of Natural Resources)
104. Stephen Marklevitz (Ministry of Northern Development, Mines, Natural Resources and Forestry)
105. Steve Clement (Environment and Climate Change Canada)
106. Tammy Newcomb (Michigan Department of Natural Resources)
107. Tanya Brothen (Department of State)
108. Thomas Hoggarth (Fisheries and Oceans Canada)
109. Timothy Bruno (Pennsylvania Department of Environmental Protection)
110. Todd Nettesheim (Environmental Protection Agency)
111. Torchia, Carla (Environment and Climate Change Canada)
112. Travis Wheeler
113. Tyler Kaspar
114. Violeta Richardson (Environment and Climate Change Canada)
115. Wellsley Hamilton (Environment and Climate Change Canada)
116. Zachary Jorgenson (Bureau of Indian Affairs)