

Great Lakes Executive Committee Meeting Summary

June 10-11, 2025

OPENING REMARKS

Great Lakes Executive Committee (GLEC) Co-Chairs, Véronique Hiriart-Baer (Canada Water Agency, CWA) and the U.S. GLEC Co-Chair, Teresa Seidel (U.S. Environmental Protection Agency, EPA) welcomed participants to the June 2025 GLEC Meeting in Chicago, Illinois.

Under Business Items, the Co-Chairs called for approval of the December 2024 GLEC Meeting Summary draft and the day's agenda.

A list of meeting attendees is found in Appendix A.

DISCUSSION SESSIONS

Great Lakes Water Quality Agreement Updates

GLEC Secretariats Jamie Schardt (EPA) and Carla Torchia (CWA) began the session by providing an overview of the Review of Operation and Effectiveness of the Canada-U.S. Great Lakes Water Quality Agreement (GLWQA or Agreement). The review found that the governments have been developing Binational Priorities for Science and Action (BPSAs) consistent with the approach described in the Agreement. No corrective actions for BPSA development was deemed necessary. They also noted that the majority of historical BPSAs were completed successfully and in a timely manner. The review also noted that when challenges arose in implementing a BPSA, the countries continued to engage in discussions and share updates on policies and progress as a practical means of managing these situations. No significant impacts to Great Lakes water quality were identified as a result of these challenges.

The review also identified two binational efforts that require additional attention to improve the operation and effectiveness of the Agreement: i) the streamlining the publication of Lakewide Action and Management Plans (LAMPs) and ii) reviewing the Chemicals of Mutual Concern (CMC) screening process and previously published strategies to identify the appropriate path forward for this binational effort. The GLEC Secretariats then introduced the 2026-2028 Binational Priorities for Science and Action. Proposed high-level 2026-2028 BPSAs were released for GLEC feedback.

The session concluded with an overview of major products and events expected in 2025, including (1) the State of the Great Lakes 2025 report and (2) the 2025 Progress Report of the Parties, both of which are slated for GLEC red-flag review in 2025. Early details regarding the Great Lakes Public Forum were shared, including the initial theme "*Clean Great Lakes waters for everyone, through cooperation and partnerships.*"

Annex 1 – Areas of Concern (AOCs)

Annex Co-Lead Andrea Schaller (EPA) introduced speakers Heather Williams (Wisconsin Department of Natural Resources, WDNR) Wade Strickland (WDNR) and Kevin Shafer (Milwaukee Metropolitan Sewerage District, MMSD) to present an update on the Milwaukee Great Lakes Legacy Act

project. After providing an overview of prior sampling and contaminant analysis, the team introduced the current plan to remove over 2 million cubic yards of contaminant sediment. Updates on the construction of the dredge material management facility were provided – including an uncovered shipwreck! Updates on other restoration projects in third ward, car ferry, greenway, and county parks were also highlighted.

Mark Chambers (CWA), on behalf of Annex 1 Co-Lead Kate Taillon, then introduced Rupert Joyner (CWA) to speak on sediment remediation in three priority areas of the St. Clair River AOC. A history was given for all three sites, including pre-remedial activities and considerations. Placing an erosion-resistant cover or cap in all sites and subsequent monitoring were showcased.

Annex 7 – Habitat and Species

Annex Co-Lead Sean Backus (CWA) introduced Dan Moore (Central Lake Ontario Conservation Authority) to present on improving climate resilience of Lynde Shores coastal wetland. Three projects have been undertaken to improve the biological and physical integrity of the wetland: i) reestablishment of a beach nourishment / artificial reef, currently in the data collection and numerical modelling stage, ii) restoring wetland refugia and adaptive capacity in the Whitby area, currently in the design stage, and iii) completed wetland interspersed restoration around Lynde Creek.

Annex Co-Lead Lead Medley (EPA) introduced Carl Platz (U.S. Army Corps of Engineers) to discuss Lake Erie's Port Clinton coastal wetland restoration. Overall, the project restored and expanded almost 14 acres of coastal wetland, removed invasive plant species and revegetated 12.2 acres of the site, and expanded a 1.4-acre wetland. The two project goals were to i) restore coastal wetland habitat at the site through creation of shallow ridge and swale microtopography and ii) reduce dominance of invasive plant species and replace them with native vegetation.

Annex 3 – Chemicals of Mutual Concern (CMCs)

Annex Co-Leads Meaghan Kern (EPA) and Steve Clement (ECCC) presented a briefing on their recommended nomination of Radionuclides as a candidate CMC. After summarizing the CMC nomination and designation process, screening results were presented in accordance with CMC criteria. Radionuclides were not recommended as a CMC due to the lack of harm occurring at current release levels and extensive management programs in place.

Annex 4 – Nutrients

Annex Co-Leads Santina Wortman (EPA) and Steve Clement (ECCC) opened the session, introducing a suite of State and Province speakers to provide a detailed nutrient picture.

Santina Wortman provided an overview of the U.S. Action Plan for Lake Erie, recapping federal agency roles and current science initiatives / partner projects. Key accomplishments include i) ramping up state & federal conservation programs, ii) municipal source reductions, iii) planning and targeting implementation, amongst others. Significant future work will be necessary to reach a total 40% reduction in phosphorus input.

Santina Wortman introduced Gary Kohlhepp (Michigan Department of Environment, Great Lakes, and Energy) to speak on Michigan's Domestic Action Plan (DAP). Gary expanded on the first phase of the Michigan DAP updated in 2025, centered primarily on point source phosphorus control. A recent operational manual for wastewater utilities in Michigan was highlighted, geared mainly to water

resource recovery facilities and wastewater treatment facilities. Ongoing nutrient monitoring and conservation practice implementation & tracking was also underscored.

Santina Wortman then introduced Joshua Griffin (Ohio EPA) and Terry Mesher (Ohio Department of Agriculture) to speak on Ohio's Domestic Action Plan. The plan has four center tenants: i) agricultural best management practices, ii) wetland restoration and enhancements, iii) community support for home sewage treatment system remediation, and iv) watershed planning. H2Ohio, led by the Ohio Department of Natural Resources, is improving water quality by working with over 3,200 farmers while also preserving and improving over 18,000 acres of wetlands. Combined with other projects and initiatives, nutrient management is being managed through a multifaceted approach across the basin.

Santina Wortman then introduced Tim Bruno (Pennsylvania Department of Environmental Protection) to speak on Pennsylvania's Domestic Action Plan. Several statewide grants were highlighted – including i) Growing Greener Grants, ii) Coastal Resource Management Coastal Zone Grants, iii) Agriculture Conservation Assistance Program (ACAP) - along with Pennsylvania VinES Program, recent legal changes, and monitoring efforts.

Santina Wortman then introduced Shannon Dougherty (New York State Department of Environmental Conservation) to speak on New York's efforts to reduce nutrient runoff. Shannon provided i) an overview of New York's phosphorus regulations, including draft numeric water quality guidance values currently under review, ii) efforts to support the Annex 4 Lake Erie and Lake Ontario task teams, including the shoreline Cladophora survey, and iii) several projects and management efforts to support the U.S. Lake Erie DAP.

Steve Clement introduced Ngan Diep (Ontario Ministry of the Environment, Conservation and Parks, MECP) on behalf of Leo Luong (MECP), who discussed the Canada-Ontario Lake Erie Action Plan (LEAP). The plan aims to reduce phosphorus loads through 120+ actions and commitments from Canada, Ontario, and 30+ partners. Through their 2024 Evaluation and Update Report, no clear downward trend in phosphorus loads was found, reflecting a more dynamic system. Significant action has been taken by partners with positive results – enhanced and sustained LEAP action is required. The six LEAP Priorities for Action were discussed with examples.

Steve Clement introduced Tatianna Lozier (Upper Thames River Conservation Authority), to present on the Upper Thames Phosphorus Reduction Initiative. Best Management Practices (BMP) are being implemented at multiple scales across the watershed, with prioritization for areas contributing the highest phosphorus runoff. The effort incorporated 595 projects between 2024 to 2025 and stresses the strength of local champions and education outreach as well as field and water quality inspections.

Annex 2 – Lakewide Management

Annex Co-Leads Andrea Schaller (EPA) and Sean Backus (CWA) opened the session.

Sean Backus introduced Chris Houser (University of Waterloo) to present on a coastal change monitoring program engaging citizen scientists. Chris discussed how public citizens can contribute to the project by snapping pictures at installed stands at coastal sites. Instructions invite them to submit the pictures to the project's repository, which then aggregates them for long-term trend analysis.

GLEC MEMBER UPDATES

Joy Mulinex, executive director for the Ohio Lake Erie Commission, provided an update on state activities within Ohio. These included: i) finalizing the 2025 Lake Erie Protection & Restoration Plan, which documents ongoing work and addresses priority needs regarding Ohio's portion of Lake Erie, ii) sponsoring an Ohio DAP update Webinar on July 2nd, and iii) publishing EPA's 5th nutrient mass balance biannual report. Additionally, a new Lake Erie license plate is being sold to help support the Lake Erie Protection Fund.

Carl Platz, Great Lakes Program Manager for the U.S. Army Corps of Engineers, highlighted several of the ways the Army Corps supports the Great Lakes Water Quality Agreement. The Corps continues to support Annex 1 through sediment remediation and habitat restoration management actions, along with technical support. For Annex 3, the Corps continues to collaborate with U.S. Geological Survey, U.S. Fish and Wildlife Service, Michigan and Wisconsin on a Great Lakes Restoration Initiative-funded research project studying effects and toxicity of Perfluoroalkyl and Polyfluoroalkyl Substances in the aquatic environment. Lastly, for Annex 6, the Corps is assessing proposals and awarding contracts supporting the construction of the Brandon Road Invasive Carp project.

Jessica Jock, Remediation and Restoration Program Manager of the Saint Regis Mohawk Tribe (SMRT) Environment Division, provided details on good news and projects in the St. Lawrence River Area of Concern at Massena/Akwesasne. Significant work has been done to fit lake sturgeon with telemetry tags and propagate freshwater mussels. SMRT is also embarking on a four-year project to collect fish (including sturgeon, eel, walleye and perch) to update consumption advisories for the area. Additionally, seeds were collected to support a native plant nursery for shoreline stabilization and restoration. Black ash log harvesting for basket making has continued with harvest from remote areas less effected by emerald ash borer. A joint videography effort has allowed for documentation and telling of SMRT's story at the Lake River AOC and role in recovery.

Jesse Freyen, acting Director at the National Oceanic and Atmospheric Administration Great Lakes Environmental Research Laboratory, provided updates on ongoing critical restoration habitat projects across multiple areas of concern, including i) aquatic vegetation restoration and shoreline reconstruction at the Ralph C. Wilson Junior Centennial Park, ii) support for the harmful algal bloom and hypoxia program field season, iii) research targeting invasive muscle control technologies, and iv) a lead role in organizing the Great Lakes Modeling Workshop in June.

Emily Finnell, Great Lakes Senior Advisor and Strategist at the Michigan Department of Environment, Great Lakes and Energy, highlighted several AOC updates and efforts underway within the state. Within Michigan, efforts are underway to continue delisting the Muskegon Lake AOC, assessing drinking water in the Saint Clair River AOC and beach closings in the Clinton River AOC, remediating contaminated sediment in the Rouge and Detroit Rivers, and restoration for four habitat and species projects. The State of Michigan just released updated DAPs and will be hosting a state of western-lake-Erie conference. Additionally, microplastic monitoring efforts will begin this summer, with the goal of creating a comprehensive state microplastic strategy in the fall.

Will Meeks, Midwest Region Regional Director with the U.S. Fish and Wildlife Service, recapped recent agency organizational challenges and reasserted the agency's commitment Great Lakes.

Richard Balla, supervisor of EPA's watershed management branch in the New York City office, praised partnerships with the Saint Regis Mohawk Tribe and the New York State Department of Environmental Conservation. The Lake Ontario 2023 to 2027 draft LAMP is currently with the Annex 2 Co-chairs for review. There are plans for a Lake Ontario cooperative science and monitoring initiative meeting later this year. In the next twelve months, two BUIs are expected to be removed along with a finalized action list for the Niagara River AOC. Work is underway to implement the Annex 4 2023-2025 BPSAs for Lake Ontario by testing a phosphorus load estimation tool.

Glenn Skuta, Watershed Division Director at State of Minnesota Pollution Control Agency, provided updates regarding state funding. Following a special session, the state budget was passed and shows favorable signs for the Clean Water Fund. A million dollars is projected to be available for five Lake Superior conservation districts. Regarding AOCs, the last Minnesota remediation site finished this year, and the last habitat site will be getting underway next year. The statewide nutrient reduction strategy's 10-year update will be going on public notice next month.

Jonathan Arnold, executive director for Parks Canada, highlighted some ongoing efforts by the agency. A new national urban park is expected in Windsor. Within the Rouge National Urban Park, 25 hectares of aquatic and terrestrial ecosystems in 21 sites has been restored; in a contaminated site in the inner harbor, a feasibility study is underway to assess sediment remediation. Cooperative efforts are underway to track and monitor both native whitefish and invasive grass carp populations, as well as manage invasive water soldier, European water chestnut, and phragmites. Within the Detroit River, an intended national urban park will receive barrier islands to bolster fish habitat.

Melissa Fabian Mendoza, Director of the Canadian Nuclear Safety Commission, updated on the construction of a small modular reactor at the Darlington site near Lake Ontario. Following environmental assessments and a five-day meeting in April, Ontario Power Generation received the authorization to construct the BWRX 300 reactor.

Jennifer Keyes, Director of the Ontario Ministry of Natural Resources, provided an update on Ontario's commercial scale geological carbon storage legislation. The re-introduce legislation reached a second reading in the House before their summer pause. It is anticipated the debate will resume in the fall, with ideal implementation early January 2026. If constructed, the storage will contribute to the achievement of Ontario's emission reduction targets, ensure public safety, and protect the environment.

Kevin Rath, member of the Thames Bluewater Métis Council, presented on the Métis Guardians Environmental Program. Prioritized work includes water chemical monitoring, eDNA monitoring, and fish reporting. Twenty new guardians will be joining this team across all nine regions, allowing for augmentation in the number of sampling sites.

COMMISSION AND OBSERVER COMMENTS

Roger Knight, Fishery Management Specialist for the Fishery Commission, provided updates and announced several new commissioners. Regarding ongoing actions, the sea lamprey control program is in full operation for 2025. Roger emphasized the dual role of dams as barriers in the sea lamprey control program, as well as potential passage opportunities for native fish. Currently, the commission is in the middle of building a new state-of-the-art fish pass research facility to better design barriers to meet

both goals. Lastly, the Committee has developed a position statement supporting interjurisdictional fisheries management in support of holistic management efforts going forward.

Heather Stirratt, Director of International Joint Commission Great Lakes Regional Office, provided updates on behalf of the Science Advisory Board as well as contributing remarks towards the Agreement progress. The Great Lakes Science Advisory Board has released two reports since the December GLEC meeting – the first on the ecological risks of microplastics, and the second on winter science. Separately, progress developing the triennial Assessment of Progress Reports continued well.

Eric Brown, Senior Advisor for External Relations at the Great Lakes Commission, announced the Commission is celebrating its 70th year and invites those present to attend in Duluth, Minnesota. Tom Crane's retirement was also shared.

John Jackson, chair of the Great Lakes Ecoregion Network, shared that a date has been set for discussion between the party that proposed radionuclides as a CMC and the governments. A preventative perspective is stressed regarding chemicals of mutual concern, as well as a general sentiment of operating as a team with communication and mutual support.

Sydney Currier, Office program coordinator for the Invasive Species Center, first flagged the International Conference on Aquatic Invasive Species occurring in August in Belfast, Ireland, and the provided updates on detection of invasive water soldier in lake Simcoe and hydrilla in Hillman's Marsh. Multi-partner efforts were then mobilized to survey these, with further management and treatment option exploration underway.

Closing Remarks – Review of Action Items and Next Meeting

GLEC Co-Chairs, Véronique Hiriart-Baer (CWA) and Teresa Seidel (EPA) thanked participants for their attendance and restated the importance of partnerships and cooperation. It was noted that the next GLEC meeting will be replaced by the triennial Great Lakes Public Forum and the next GLEC meeting will be hosted by Canada in June 2026.

Action items:

- GLEC members and observer feedback* on draft BPSAs requested by July 25, 2025. (These were included in your briefing package.)
- GLEC member and observer feedback* on the Chemicals of Mutual Concern (CMC) Annex Co-Lead recommendation that radionuclides should not be designated as a candidate CMC by September 5, 2025.
- EPA and CWA to share the State of the Great Lakes report and Progress Report of the Parties this summer for GLEC member red-flag review.
- EPA and CWA to share update on 2025/2026 Great Lakes Public Forum when available.

* Feedback to be sent to glwqa@epa.gov and glwqa-aeqgl@ec.gc.ca

APPENDIX A:

GLEC Meeting Participants June 10-11, 2025 – virtual and in-person

1. Jessica Lienhardt (Great Lakes-St. Lawrence Legislative Caucus)
2. Daria Gundermann (ORISE / U.S. Environmental Protection Agency)
3. Wade Strickland (Wisconsin Department of Natural Resources)
4. Trent Desaulniers (Superior North Shore Métis Council)
5. Thomas Parr (National Park Service)
6. Harold Peterson (United States Bureau of Indian Affairs)
7. Jess Lienhardt (Great Lakes-St. Lawrence Legislative Caucus)
8. Gail Krantzberg (Booth School of Engineering Practice and Technology)
9. Fe de Leon (Canadian Environmental Law Association)
10. Roger Knight (Great Lakes Fishery Commission)
11. Jon Hortness (United States Geological Survey)
12. Carolyn Junemann (USDOT Maritime Administration)
13. Matthew Powell (Environment and Climate Change Canada)
14. Anna Sharkova (Environment and Climate Change Canada)
15. Lawrence Gunther (Blue Fish Canada)
16. Joy Mulinex (Ohio Lake Erie Commission)
17. Sydney Currier (Invasive Species Centre)
18. Luca Cargnelli (Canada Water Agency)
19. Lynn Bouvier (Fisheries and Oceans Canada)
20. Sarah Kielek-Caster (Government of Ontario)
21. Natalia Yarkova (Ontario Ministry of Agriculture, Food and Agribusiness)
22. Andrea Martin (Ontario Ministry of Agriculture, Food and Agribusiness)
23. Kim Woodhouse (Georgian Bay Forever)
24. Meredith Denning (Georgian Bay Association)
25. Alan Stratton (Georgian Bay Association)
26. Jonathan Arnold (Parks Canada Agency)
27. Mark Chambers (Canada Water Agency)
28. Kendra Axness (Wisconsin Department of Natural Resources)
29. Melissa Fabian Mendoza (Canadian Nuclear Safety Commission)
30. Chris Houser (University of Waterloo)
31. Erin Clark (Fisheries and Oceans Canada)
32. Catherine Masson (Trent University)
33. Veronique Hiriart-Baer (Canada Water Agency)
34. Carla Torchia (Canada Water Agency)
35. Ash Kumar (Canada Water Agency)
36. Roger Santiago (Canada Water Agency)
37. Timothy Bruno (Pennsylvania Department of Environmental Protection)
38. Glenn Skuta (MN Pollution Control Agency)
39. Chris Winslow (Ohio Sea Grant and Ohio State University's Stone Lab)
40. Carolyn Johns (Toronto Metropolitan University)
41. Rupert Joyner (Canada Water Agency)

42. Clint Woods (Indiana Department of Environmental Management)
43. Robert Lugar (Indiana Department of Environmental Management)
44. Carl Wodrich (Indiana Department of Environmental Management)
45. Carl Platz (U.S. Army Corps of Engineers)
46. Breanna Green (International Joint Commission)
47. Oliver Dumville (International Joint Commission)
48. Jim Lehnert (New York State Department of Environmental Conservation)
49. James Jennings (Illinois Environmental Protection Agency)
50. Gary Kohlhepp (Michigan Department of Environment, Great Lakes, and Energy)
51. Kirk Beckmann (U.S. Coast Guard)
52. Darren Vogt (1854 Treaty Authority)
53. Jessica Jock (Saint Regis Mohawk Tribe)
54. Ryan Bowie (Chiefs of Ontario)
55. Allison Voglesong Zejnati (International Joint Commission)
56. Cristina Giannetas (Ontario Ministry of the Environment, Conservation and Parks)
57. Jo Werba (International Joint Commission)
58. Terry Mescher (Ohio Department of Agriculture)
59. Laura Jones (Canada Water Agency)
60. Felicia Minotti (Global Affairs Canada)
61. Jo-Anne Rzaeki (Conservation Ontario)
62. Steve Clement (Canada Water Agency)
63. Elizabeth Everhardus (Ontario Ministry of the Environment, Conservation and Parks)
64. Ngan Diep (Ontario Ministry of the Environment, Conservation and Parks)
65. John Wilson (International Joint Commission)
66. Ted Briggs (Ontario Ministry of the Environment, Conservation and Parks)
67. Dan Galarneau (Canadian Forest Service)
68. Hilary Oakman (Fisheries and Oceans Canada)
69. Jacqueline Barry (Métis Nation of Ontario)
70. Jesse Feyen (National Oceanic and Atmospheric Administration)
71. Teresa Seidel (Environmental Protection Agency)
72. Jamie Schardt (Environmental Protection Agency)
73. Kristen Arnold (Indiana Department of Environmental Management)
74. Sadie Stevens (Forest Service)
75. Rod Whitlow (Indigenous Great Lakes Network)
76. Laura Desaulniers (Métis Nation of Ontario)
77. Kevin Rath (Métis Nation of Ontario Great Lakes Advisory Group)
78. Caryn MacLoughlin (Métis Nation of Ontario)
79. Lindsay Rogers (Métis Nation of Ontario Great Lakes Advisory Group)
80. Grant Robbins (Métis Nation of Ontario - Thunder Bay Métis Council)
81. Tracie Greenberg (Environment and Climate Change Canada)
82. Leo Luong (Ontario Ministry of the Environment, Conservation and Parks)
83. Jean Richardson (Métis Nation of Ontario)
84. Anne Gosselin (Environment and Climate Change Canada)
85. Melissa De Young (Pollution Probe)

86. Jane Shimono (Transport Canada)
87. Mimi Santano Carrasco (Ministry of Natural Resources and Forestry)
88. Stephen Marklevitz (Ministry of Natural Resources and Forestry)
89. Jennifer Keyes (Ministry of Natural Resources and Forestry)
90. Darlene Dove (Ministry of Natural Resources and Forestry)
91. Daryl McGoldrick (Environment and Climate Change Canada)
92. Ena Humphries (National Oceanic and Atmospheric Administration)
93. Lawrence Gunther (Blue Fish Canada)
94. Bonnie Fox (Conservation Ontario)
95. Jim Roy (Environment and Climate Change Canada)
96. Emily Finnell (Michigan Department of Environment, Great Lakes, and Energy)
97. Andrea Schaller (Environmental Protection Agency)
98. Brad Hill (Environment and Climate Change Canada)
99. Tatianna Lozier (Upper Thames River Conservation Authority)
100. Sergio Paulo (Agriculture and Agri-Food Canada)
101. Bridget Brown (Great Lakes and St. Lawrence Cities Initiative)
102. Eric Brown (Great Lakes Commission)
103. Elizabeth Malloy (Environmental Protection Agency)
104. David Garmon (United States Nuclear Regulatory Commission)
105. Meaghan Kern (Environmental Protection Agency)
106. Leah Medley (Environmental Protection Agency)
107. Robert Gioia (International Joint Commission)
108. Heather Stirratt (International Joint Commission)
109. Jennifer Thomas (Fisheries and Oceans Canada)
110. Will Meeks (United States Fish and Wildlife Service)
111. Ram Yerubandi (Environment and Climate Change Canada)
112. Jean-François Hould (Québec Government Office in Chicago)
113. John Jackson (Great Lakes Ecoregion Network)
114. Allison McPhee (Fisheries and Oceans Canada)
115. Anna Bisson (United States Fish and Wildlife Service)
116. Jasmine Jarjour (International Joint Commission)
117. Elizabeth LaPlant (Environmental Protection Agency)