

## GREAT LAKES EXECUTIVE COMMITTEE (GLEC) MEETING SUMMARY

Day 1 – June 24, 2015  
Shedd Aquarium – Smith Family Office Suite  
1200 S. Lake Shore Drive  
Chicago, Illinois 60605

Day 2 – June 25, 2015  
Room 331, Ralph Metcalfe Federal Building  
77 West Jackson Boulevard  
Chicago, IL 60604

### WELCOME AND INTRODUCTIONS

Welcome and introductory remarks from Michael Goffin, the Canadian GLEC Co-Chair, and Cameron Davis on behalf of Susan Hedman, the U.S. GLEC Co-Chair, were followed by welcoming remarks from Roger Germann from the Shedd Aquarium, and introductions of meeting participants.

A list of meeting attendees can be found in Appendix A.

### DECEMBER 2014 GLEC MEETING STATUS OF ACTION ITEMS

The December 2014 GLEC Meeting Summary was reviewed by GLEC members prior to the June 2015 GLEC meeting and finalized.

All action items from the December 2014 GLEC meeting were highlighted as complete or to be addressed during the meeting.

### ANNEX UPDATES

#### Annex 1: Areas of Concern

Annex Co-Leads Wendy Carney (U.S. Environmental Protection Agency) and Jon Gee (Environment Canada, participating remotely) provided an update on the development of a *Guidance Document* on the *Area of Concern in Recovery (AOCiR)* provision in Annex 1. This guidance will assist Canadian and the U.S. agencies and Areas of Concern Remedial Action Plan implementation teams in applying the AOCiR concept.

The Annex Co-Leads also provided an overview of a *Situation Analysis*, which included a review and comparison of Canadian and U.S. agency roles and practices regarding Areas of Concern (AOCs), including delisting criteria, beneficial use impairment removals, AOC delisting, and public/stakeholder involvement. The analysis will provide information and support advice and recommendations to enhance the implementation of the *Area of Concern Annex* by Canada and the U.S.

Once available, the Guidance Document and the Situation Analysis will be posted on binational.net for review and comment.

## **Annex 2: Lakewide Management**

Annex Co-Leads Chris Korleski (U.S. Environmental Protection Agency) and John Marsden (Environment Canada) provided an update on activities to implement the commitments of the *Lakewide Management* Annex including: upcoming activities related to Lake Partnerships and their management; publishing of the 2014 Annual Lakewide Action and Management Plan Reports; continuing coordination and interaction with other Annexes; and continuing collaboration with the International Joint Commission, the Great Lakes Fishery Commission, and the Great Lakes Commission. Annex Co-Leads also discussed: their recommendations for proposed Outreach and Engagement activities at both the Annex and Partnership levels; an overview of the 2015 Lake Superior Lakewide Action and Management Plan (LAMP); guidance for the development of Lake Ecosystem Objectives including assessment criteria; and the conceptual model being considered for the nearshore framework, which will be presented as draft at the December 2015 GLEC meeting. The LAMP will be action-oriented, focusing on those actions that can be taken to protect the lake. The first step in developing an Outreach and Engagement Strategy will be a July 8<sup>th</sup> Great Lakes-wide webinar to hear Great Lakes stakeholders' ideas for outreach and engagement.

## **Annex 3: Chemicals of Mutual Concern**

Annex Co-Leads Vincenza Galatone (Environment Canada) and Louise Wise (U.S. Environmental Protection Agency) presented the first recommended set of candidate Chemicals of Mutual Concern, and described the process undertaken to select these chemicals (including the evaluation process, the considerations, and stakeholder engagement). Next steps were also highlighted including: the development of binational strategies for this first set of designated Chemicals of Mutual Concern; the consideration of a mechanism to collect, review and summarize new data when it becomes available for those chemicals where there is not sufficient information to make a determination at this time; and the evaluation of the process used to designate the first set of the Chemicals of Mutual Concern to determine whether there should be changes to the process in the future .

## **Annex 4: Nutrients**

Annex Co-Leads Susan Humphrey (Environment Canada) and Tinka Hyde (U.S. Environmental Protection Agency) provided: an overview on the proposed binational phosphorus load reduction targets for Lake Erie that were presented during the May 29<sup>th</sup> webinar for GLEC members; preliminary thinking on allocations by country for the proposed binational phosphorus load reduction targets; progress on plans to solicit public comment on the proposed targets; research efforts underway on phosphorus targets to reduce *Cladophora* in the eastern basin of Lake Erie; and examples of action underway by various jurisdictions to address toxic and nuisance algae caused by excessive nutrients. Next steps were also highlighted including: consideration of the comments received during consultations; determining allocations by country; proposed final binational phosphorus load reduction targets to be presented at the December 2015 GLEC meeting; finalization of the targets by February 2016 to achieve the time-bounded commitment outlined in the Annex; and, development of a Binational Phosphorus Reduction Strategy and domestic action plans, while on-the-ground action to reduce phosphorus continues.

## **Annex 5: Discharges from Vessels**

Chris Wiley (Transport Canada), Annex Co-Lead of the *Discharges from Vessels* Annex, provided an update on: activities related to the prevention and control of vessel discharges; considerations related to the entry into force of the International Maritime Organization's Ballast Water Management Convention, which will occur 12 months after it has been ratified by 30 countries representing 35 percent of the world's merchant shipping tonnage; studies related to ballast water; ballast water enforcement efforts; an update on a Canada-U.S. Working Group examining the movement of crude oil on the Great Lakes; and, outreach efforts at the Great Lakes Waterways Forum.

## **Annex 6: Aquatic Invasive Species**

Gavin Christie (Fisheries and Oceans Canada) and Todd Turner (U.S. Fish and Wildlife Service), Annex Co-Leads for the *Aquatic Invasive Species* Annex, provided updates on: efforts in support of the Early Detection and Rapid Response Initiative including early detection field work, response exercises, coordination and engagement efforts; pathway risk assessments and management; new regulation by Ontario (Bill 37 - Proposed Invasive Species Act), Canada (Canada – AIS Regulations under the Fisheries Act), and the U.S. (11 species will be proposed for listing under Lacey Act); and species risk assessments.

## **Annex 7: Habitat and Species**

Annex Co-Leads Lynn Lewis (U.S. Fish and Wildlife Service) and Susan Humphrey (Environment Canada), provided an update on: commitments outlined in the *Habitat and Species* Annex, including the completion and implementation of the Biodiversity Strategies for each of the Great Lakes (available on binational.net) and Lake Partnerships usage of the Strategies to prioritize and take action on the most significant stressors to native species and habitat; progress towards the development of an approach to conduct a baseline survey of the existing habitat against which to establish a Great Lakes Basin Ecosystem target of net habitat gain; cross-annex coordination with the Lakewide Management Annex and in particular the Nearshore Framework; and assessing gaps in current programs and initiatives as a first step toward a framework for prioritizing activities.

## **Annex 8: Groundwater**

Annex Co-Lead Norman Grannemann (U.S. Geological Survey) presented an overview of the draft Groundwater Science Report, which examines the impact of groundwater on the Great Lakes.

## **Annex 9: Climate Change Impacts**

Annex Co-Lead Doug Kluck (U.S. National Oceanic and Atmospheric Administration) provided an update on annex activities including: the continued production of the Quarterly Climate Impact and Outlooks; collaboration and outreach with other annex co-leads and other experts across the basin; and an overview of the *State of the Climate Science in the Great Lakes Basin* report, which is a synthesis of the available science on the observed and projected impacts of climate change in the Great Lakes Basin. Also, discussed were: the next steps for the Report including its wider distribution; making the accompanying scientific reference database available online; how to best use the information from the report in implementing the GLWQA; and a follow-up gap analysis of climate change science in the Great Lakes.

## **Annex 10: Science**

Annex Co-Leads Paul Horvatin (U.S. Environmental Protection Agency) and Ram Yerubandi (Environment Canada) presented updates on the work of Annex 10 Task Teams in addressing key GLWQA commitments, including: Efforts underway to coordinate between several Annexes on Cooperative Science and Monitoring Initiative (CSMI) activities as well as on research and monitoring priorities in Lake Erie; Lake-specific plans and timelines for CSMI activities; development of a report and workplan on data management and sharing to be presented at the December 2015 GLEC; Canadian efforts to engage First Nations and Métis in identifying Traditional Ecological Knowledge activities; and the status and timeline for developing ecosystem indicator reports and the 2017 State of the Great Lakes Report.

### **ADDITIONAL ACTIVITIES AND PRESENTATIONS**

#### **Tour of Northerly Island**

On Day 1 of the meeting, Gene Fleming and Francis Veraldi (U.S. Army Corps of Engineers, Chicago District) led a tour of the Northerly Island Great Lakes Fishery and Ecosystem Restoration Project and provided information about efforts underway to re-create several native habitats on Northerly Island, a 91-acre man-made peninsula on the Chicago lakefront, built in the 1920s.

#### **Lake Superior Environmental Monitoring Collaborative**

Susan Hedman (U.S. Environmental Protection Agency) provided an update on the Lake Superior Environmental Monitoring Collaborative, a U.S. initiative to improve on-line access to Lake Superior environmental monitoring data. Four stakeholder meetings have been held to date: one for federal, state and tribal governments in Duluth, MN in November 2014; a researcher/academic-focused meeting in Houghton, MI in March 2015; one for citizen stakeholders in June in Ashland, WI; and the most recent for the regulated community in June in Chicago. The initiative is using the U.S. Geological Survey's Science in the Great Lakes (SiGL) Metadata System for inputting data. SiGL was demonstrated at the three stakeholder meetings. Due to technical difficulties, the SiGL database was not able to be demonstrated at the GLEC meeting.

#### **Great Lakes to Great Lakes Initiative**

Susan Hedman (U.S. Environmental Protection Agency) and Dave Ullrich (Great Lakes St. Lawrence Cities Initiative) provided a presentation on their participation in a conference on Lake Tanganyika in Tanzania to kick off a new initiative to link between the Great Lakes of Africa and the North American Great Lakes. John O'Brien of the U.S. Department of State said that next steps for this "Great Lakes to Great Lakes Initiative" will be announced when a new U.S. Special Envoy to the Great Lakes Region and Democratic Republic of Congo is appointed later this summer.

### **NEWS FROM MEMBERS**

The following GLEC members provided news or updates:

- Joan Matthews (U.S. Environmental Protection Agency Region 2) noted: efforts by Region 2 towards restoring habitat in the Buffalo and Rochester AOCs, which are expected to result in the re-

designation of the AOCs in 2016; and work with the Lake Ontario Lakewide Action and Management Plan and the GLWQA Nutrients Annex to address nutrient impacts and plan appropriate binational management strategies. J. Matthews also noted Region 2's continued support for the approval of Plan 2014 for Lake Ontario water levels.

- Deborah Lee (National Oceanic and Atmospheric Administration) highlighted: NOAA's new National Water Center, which will be a resource for water prediction and forecasting; the National Weather Service's new website Great Lakes Beach Hazards; and Harmful Algal Bloom activities, including a new probabilistic model for Saginaw Bay, phosphorus monitoring in Western Lake Erie, and other activities.
- David Ullrich (Great Lakes St. Lawrence Cities Initiative) conveyed: support for the new drinking water advisories and the 40% phosphorus reduction targets; concern regarding oil transport by rail, pipeline, and ship; and continued concern regarding the proposed Deep Geological Repository for low and intermediate radioactive waste at Bruce Power near Kincardine, ON.
- Tinka Hyde (U.S. Environmental Protection Agency) noted that EPA worked with Health Canada to develop health advisories for algal toxins which were released in early May; the recommended health advisory values for microcystin in drinking water are 0.3 micrograms per liter for children younger than school age and 1.6 micrograms per liter for all other ages.
- Michael Goffin (Environment Canada) indicated that the 2016 Great Lakes Public Forum will take place from October 3 to 6, 2016 in Toronto, Ontario and that a planning committee will be convened over the coming weeks. In addition, M. Goffin highlighted that Canada's House of Commons voted unanimously to take measures to add microbeads to the List of Toxic Substances in Schedule 1 of the *Canadian Environmental Protection Act, 1999* and that Environment Canada has initiated a scientific review of microbeads under the Chemicals Management Plan.
- Robert Fleming (Ontario Ministry of the Environment and Climate Change) highlighted the "Western Basin of Lake Erie Collaborative Agreement" signed by the Premier of Ontario and the Governors of Michigan and Ohio on June 13, 2015, as well as the "Interim Joint Action Plan for Lake Erie" developed through the Great Lakes Commission's Lake Erie Nutrient Targets Working Group; provided an update on Ontario's proposed Great Lakes Protection Act, which passed second reading in the provincial legislature; and provided an update on source water protection planning in Ontario, highlighting that 16 plans have been completed to date.
- George McCaw (Ontario Ministry of Agriculture, Food and Rural Affairs) highlighted the Great Lakes Agricultural Stewardship Initiative, targeting the Lake Erie basin and the southeast shores of Lake Huron. The Initiative is a collaborative effort between Ontario and Canada (and part of Growing Forward 2, a federal-provincial-territorial framework).
- Andrew McAllister (Canadian Nuclear Safety Commission) provided an update on the proposed Deep Geologic Repository Project for the long-term management of low and intermediate level radioactive waste at the Bruce nuclear site, in Kincardine, Ontario. In May, 2015, the Joint Review Panel established to review the project delivered an Environmental Assessment Report to Canada's Minister of the Environment, which included recommended mitigation measures. In June, 2015, the Canadian Environmental Assessment Agency initiated a public comment period for the last phase of the environmental assessment process for the proposed project. The decision by Canada's Minister of the Environment is expected in December, 2015.
- Colin Henein (Transport Canada) provided an update on the entry into force of the International Maritime Organizations Ballast Water Management Convention and Canada's considerations in establishing regulations once the Convention comes into force through a feasible, fair and global approach. C. Henein also explained the importance of regionally compatible regulations for ballast

water, as well as the technical challenges and concerns expressed by stakeholders with the feasibility and efficacy of ballast water treatment systems for use on the Great Lakes.

## COMMENTS FROM COMMISSION REPRESENTATIVES

Comments were provided from the following Commission representatives:

- Bob Lambe (Great Lakes Fishery Commission) highlighted the Landscape Conservation Cooperative Initiative's focus on aquatic habitat connectivity and potential linkages and opportunities to coordinate with the work under the Habitat and Species and the Lakewide Management Annexes.
- Lana Pollock (International Joint Commission) highlighted an upcoming meeting, scheduled for February 2016, to listen to and seek input from the public to support the IJC's development of an assessment of progress report as called for under the GLWQA; a draft report on water use and consumption in the Great Lakes currently out for public comment; and, an upcoming report on atmospheric deposition of toxic substances to the Great Lakes; and, Plan 2014, a plan to regulate water levels and flows of Lake Ontario and the St. Lawrence River.
- Tim Eder (Great Lakes Commission) highlighted the "Interim Joint Action Plan for Lake Erie" developed through the Great Lakes Commission's Lake Erie Nutrient Targets Working Group, as well as the Governors and Premiers collaborative agreement; and encouraged participation in the Great Lakes Commission annual meeting scheduled for September 28-29, 2015 in Chicago.

## OBSERVER COMMENTS

Comments were provided from the following observers:

- John Jackson encouraged the use of the GLWQA's vision and principles to guide action, particularly in evaluating existing delisting criteria associated with Areas of Concern.
- Todd Ambs voiced support for the U.S. Great Lakes Restoration Initiative appropriations bill and gave notice of the 11<sup>th</sup> annual Healing Our Waters Conference to be held in September 2015.
- Lyman Welch praised the "Western Basin of Lake Erie Collaborative Agreement" signed by the Premier of Ontario and the Governors of Michigan and Ohio; encouraged governments to consult on proposed binational phosphorus reduction targets for Lake Erie, highlighting that public input and support is vital; encouraged the prevention of chemicals entering the Great Lakes; opposed the Deep Geologic Repository project, and highlighted that alternative sites were not explored; and, highlighted the transport of heavy crude products as a future threat to the Great Lakes.
- Fe de Leon (Canadian Environmental Law Association) submitted written comments related to Chemicals of Mutual Concern, highlighting the recent CELA report, "Advancing Prevention of Toxic Chemicals in the Great Lakes Basin" and several of the report's recommendations, as well as a letter submitted by 24 ENGOs to the GLEC seeking changes in the current implementation efforts to reflect virtual elimination, zero discharge and the precautionary principle.

## ACTION ITEMS

It was decided that:

- The GLEC Secretariat will post the meeting presentations/materials on the EPA SharePoint and share the link with meeting participants.
- The GLEC Secretariat will post the phosphorus objectives consultation material on binational.net and EC and EPA websites.
- The GLEC Secretariat will send out a "Save the date" notice for the October 3 to 6, 2016 Great Lakes Public Forum.
- *Areas of Concern* Annex Co-Leads will provide the draft *AOC in Recovery Guidance Report* and draft *Situation Analysis Report on Areas of Concern* to GLEC members for review and comment.
- *Lakewide Management* Annex Co-Leads will present the draft Nearshore Framework at the December 2015 GLEC meeting.
- *Lakewide Management* Annex Co-Leads will initiate the Outreach and Engagement calls soon.
- *Aquatic Invasive Species* Annex Co-Leads will update binational.net with other materials related to the Early Detection and Rapid Initiative.
- *Groundwater* Annex Co-Leads will post the draft Groundwater Science Report on binational.net.
- *Climate Change Impacts* Annex Co-Leads to work with other Annex Co-Leads to discuss the *Analysis of Great Lakes Climate Change Science* report.
- *Science* Annex Co-Leads to look at approaches to data sharing.

## NEXT MEETING & ADJOURNMENT

Several dates for the next Great Lakes Executive Committee meeting in Toronto were suggested (December 1 to 2 or December 8 to 9 or December 9 to 10) and GLEC members were asked to notify the Secretariat of any conflicts. [December 8 to 9, 2015 was later chosen.]

Appendix A

June 24 to 25, 2015 GLEC MEETING PARTICIPANTS

Canadian Participants

1. John Adams, Aamjiwnaang First Nation
2. Sean Backus, Environment Canada – *remotely*
3. Lesley Baker, Public Works and Government Services Canada (Ontario Region) – *remotely*
4. Raj Bejankiwar, International Joint Commission
5. Jennifer Boehme, International Joint Commission
6. Benoit Bouchard, International Joint Commission
7. Mark Burrows, International Joint Commission
8. Nancy Cherny, Agriculture and Agri-Food Canada – *remotely*
9. Matthew Child, International Joint Commission
10. Gavin Christie, Fisheries and Oceans Canada
11. Fe de Leon, Canadian Environmental Law Association – *remotely*
12. Colleen Duke, Consulate General of Canada in Chicago
13. Robert Fleming, Ontario Ministry of the Environment and Climate Change
14. Bonnie Fox, Conservation Ontario – *remotely*
15. Vincenza Galatone, Environment Canada
16. Michael Goffin, Environment Canada
17. Barb Hodgins, Town of Ajax, Ontario, Canada – *remotely*
18. Susan Humphrey, Environment Canada
19. John Jackson, Binational Great Lakes Citizen Activist
20. Gail Krantzberg, McMaster University/GL Policy Research Network – *remotely*
21. Ash Kumar, Environment Canada – *remotely*
22. Hugh Langley, Environment Canada
23. Eric Marquis, Québec Government Representative in Chicago; and GLC
24. John Marsden, Environment Canada
25. Catherine Masson, Consultant – *remotely*
26. Andrew McAllister, Canadian Nuclear Safety Commission
27. George McCaw, Ontario Ministry of Agriculture Food & Rural Affairs
28. Jennifer McKay, Environment Canada
29. Felicia Minotti, Department of Foreign Affairs, Trade and Development
30. Rick Morgan, International Joint Commission
31. Mary Muter, Sierra Club Canada Foundation – *remotely*
32. David Nanang, Natural Resources Canada
33. Christine Pinkney, Invasive Species Centre – *remotely*
34. Dan Pujdak, Chiefs of Ontario
35. Michael Stephenson, Transport Canada
36. David Sweetnam, Georgian Bay Forever
37. Carla Torchia, Environment Canada
38. Marcus Tuohimaa, Métis Nation of Ontario – *remotely*
39. Darlene Upton, Parks Canada
40. Gordon Walker, International Joint Commission
41. Cindy Warwick, International Joint Commission



42. Li Wang, International Joint Commission
43. Chris Wiley, Transport Canada
44. Nigel Wood, Ontario Ministry of Agriculture Food & Rural Affairs
45. Jing Xu, Environment Canada
46. Ram Yerubandi, Environment Canada

## U.S. Participants

1. Jackie Adams, U.S. EPA - *remotely*
2. Jon Allan, Michigan Department of Environmental Quality
3. Todd Ambs, Healing Our Waters-Great Lakes Coalition
4. Madhu Anderson, Michigan Department of Environmental Quality
5. Seth Ausubel, U.S. EPA - *remotely*
6. Timothy Bruno, Pennsylvania Department of Environmental Protection
7. Kathryn Buckner, Council of Great Lakes Industries - *remotely*
8. Craig Butler, Ohio Environmental Protection Agency
9. Wendy Carney, U.S. EPA
10. Pete Cassell, U.S. EPA
11. Emily Clamp, Illinois EPA
12. Paris Collingsworth, IL/IN Sea Grant
13. Cameron Davis, U.S. EPA
14. Tina Davis, U.S. EPA - *remotely*
15. Jennifer Day, National Oceanic Atmospheric Administration - *remotely*
16. Eileen Deamer, U.S. EPA
17. Thomas Easterly, Indiana Department of Environmental Management
18. Tim Eder, Great Lakes Commission
19. Phyllis Ellin, National Park Service - *remotely*
20. Taylor Fiscus, U.S. EPA
21. Tony Friona, U.S. Army Corps of Engineers
22. Marc Gaden, Great Lakes Fishery Commission
23. Steve Galarneau, Wisconsin Dept. Natural Resources
24. Karl Gebhardt, Ohio EPA
25. Dereth Glance, International Joint Commission - *remotely*
26. James Goacher, Great Lakes and St. Lawrence Cities Initiative - *remotely*
27. Norman Grannemann, U.S. Geological Survey
28. Margaret Guerriero, U.S. EPA
29. John Haugland, U.S. EPA
30. Susan Hedman, U.S. EPA (Day 2)
31. Beth Hinchey-Malloy, U.S. EPA
32. Michael Hoff, U.S. Fish and Wildlife Service
33. Paul Horvatin, U.S. EPA
34. Tinka Hyde, U.S. EPA
35. Daugherty A. Johnson, Little Traverse Bay Band of Odawa Indians
36. Mark Johnson, ATSDR - *remotely*
37. Lin Kaatz Chary, Consultant - *remotely*
38. Roger Knight, Great Lakes Fishery Commission

39. Chris Korleski, U.S. EPA
40. Hala Kuss, Indiana Department of Environmental Management - *remotely*
41. Bob Lambe, Great Lakes Fishery Commission
42. Elizabeth LaPlante, U.S. EPA
43. Deborah Lee, NOAA Great Lakes Environmental Research Laboratory
44. Lynn Lewis, U.S. Fish and Wildlife Service
45. Fred Luckey, U.S. EPA - *remotely*
46. Joan Leary Matthews, U.S. EPA Region 2
47. Amy McGovern, U.S. Fish and Wildlife Service - *remotely*
48. Dan Mejia, U.S. Department of State
49. Trish Morris, International Joint Commission
50. Beth Murphy, U.S. EPA - *remotely*
51. Sonny Myers, 1854 Treaty Authority
52. Dawn Nelson, University of Michigan - *remotely*
53. Todd Nettesheim, U.S. EPA - *remotely*
54. John B. O'Brien, U.S. Department of State
55. Dale Phenicie, Council of Great Lakes Industries
56. Bruno Pigott, Indiana Department of Environmental Management
57. Lana Pollack, International Joint Commission
58. James Schardt, U.S. EPA
59. Jack Schinderle, Michigan Department of Environmental Quality
60. Victor Serveiss, International Joint Commission - *remotely*
61. Aisha Sexton-Sims, U.S. EPA - *remotely*
62. John Linc Stine, Minnesota Pollution Control Agency
63. Alice Tarbell, St. Regis Mohawk Tribe
64. Jessica Tarbell, St. Regis Mohawk Tribe
65. Todd Turner, U.S. Fish and Wildlife Service
66. Dave Ullrich, Great Lakes St. Lawrence Cities Initiative
67. Gabrielle VanBergen, Red Cliff Band - *remotely*
68. John Walker, United States Geological Survey
69. Lyman Welch, Alliance for the Great Lakes
70. Louise Wise, U.S. EPA (Day 2)
71. Dan Wyant, Michigan Department of Environmental Quality
72. Paul Youngstrum, Natural Resource Conservation Service - *remotely*
73. Don Zelazny, New York State Department of Conservation
74. Jim Zorn, Great Lakes Indian Fish and Wildlife Commission