Great Lakes Commission 2016 Annual Meeting
Oct. 6-7, 2016 • Toronto • Fairmont Royal York
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# FINAL AGENDA

Great Lakes Commission 2016 Annual Meeting  
October 6-7, 2016  
The Royal York Hotel • 100 Front Street West • Toronto, Ontario M5J 1E3

## Thursday, Oct. 6

All times are EASTERN

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
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<tr>
<td>11:00 – 2:00 p.m.</td>
<td>Registration</td>
<td>Foyer, Upper Canada Room, 18th Floor</td>
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<tr>
<td>2:00 p.m.</td>
<td>Call to Order, Opening Remarks</td>
<td>Jon Allan (MI), Chair</td>
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<td>2:05 p.m.</td>
<td>Roll Call</td>
<td>Tim Eder, Executive Director</td>
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<tr>
<td>2:10 p.m.</td>
<td>Welcome Address</td>
<td>Hon. Glen Murray, Ontario Minister of Environment and Climate Change</td>
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<td>2:25 p.m.</td>
<td>Commission Business</td>
<td>Jon Allan, Chair</td>
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<td></td>
<td>• Approval of Final Agenda</td>
<td>Nominating Committee</td>
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<td></td>
<td>• Approval of Minutes from 2016 Semiannual Meeting, July Special Meeting</td>
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<td>• Presentation of Action Items</td>
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<td>• Report of Nominating Committee</td>
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<tr>
<td>2:40 p.m.</td>
<td>Report of the Chair and Executive Director</td>
<td>Jon Allan, Chair</td>
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<td>Tim Eder, Executive Director</td>
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<tr>
<td>2:55 p.m.</td>
<td>Ontario’s Great Lakes Protection Act and Program</td>
<td>Rob Fleming, Ontario Ministry of Environment and Climate Change</td>
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<td>3:15 p.m.</td>
<td>Break</td>
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<td>3:45 p.m.</td>
<td>Governors’ and Premiers’ Maritime Strategy</td>
<td>Eric Marquis, Quebec</td>
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<td>• Next steps toward implementing the Strategy</td>
<td>Steve Fisher, American Great Lakes Ports Association</td>
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<td>• Discussion of GLC Role</td>
<td>David Naftzger, Conference of Great Lakes-St. Lawrence Governors and Premiers</td>
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<td>Matt Doss, Great Lakes Commission</td>
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<td>Time</td>
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<td>4:30 p.m.</td>
<td>Observer comments</td>
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<td>5:15 p.m.</td>
<td>Reception in Territories Room</td>
<td>(Main Mezzanine level)</td>
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<td>7:00 p.m.</td>
<td>Dinner – GLC Commissioners Only</td>
<td>(Algonquin Room, Main Mezzanine level)</td>
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**Friday, Oct. 7**

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<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
<th>Speaker/Panel</th>
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<tr>
<td>7:00 a.m.</td>
<td>Registration and Breakfast Buffet</td>
<td>Alberta and Quebec Rooms, Main Mezzanine level</td>
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<tr>
<td>8:15 a.m.</td>
<td>Call to Order, Recap and Agenda for the Day</td>
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<td>Jon Allan, Chair</td>
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<td>8:20 a.m.</td>
<td>A Changing Climate and Implications for Great Lakes-St. Lawrence Water Resources</td>
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<td><strong>Moderator:</strong> Kathleen O’Neill, Ontario Ministry of Environment and Climate Change</td>
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<td>Helen Noehammer, City of Mississauga, Ontario</td>
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<td>Don McCabe, Ontario Federation of Agriculture</td>
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<td>Skiles Boyd, DTE Energy</td>
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<td>9:20 a.m.</td>
<td>Keynote Address</td>
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<td>Hon. Kathryn McGarry, Ontario Minister of Natural Resources and Forestry</td>
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<td>9:40 a.m.</td>
<td>BREAK</td>
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<td>10:00 a.m.</td>
<td>Dimensions of the Great Lakes-St. Lawrence Economy</td>
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<td>Sal Guatieri, BMO Harris</td>
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<td>• Report of BMO Harris for the Governors and Premiers</td>
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<td>10:30 a.m.</td>
<td>Discussion - Advancing a Regional Economic Agenda &amp; the Governors'/Premiers’ Regional Economic Task Force</td>
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<td><strong>Moderator:</strong> Jon Allan</td>
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<td>David Naftzger, Conference of Great Lakes-St. Lawrence Governors and Premiers</td>
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<td>Kathy Buckner, Council of Great Lakes Industries</td>
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<td>Elise Maheu, 3M Corporation, Canada</td>
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<td>Robert Lambe, Great Lakes Fishery Commission</td>
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<td>11:45 a.m.</td>
<td>Business of the Great Lakes Commission</td>
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<td>John Linc Stine, Vice Chair</td>
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<td>• Elections</td>
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<td>• Resolutions</td>
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<td>o Sunsetting of 2006 resolutions</td>
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<td>o Maritime strategy</td>
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<td>o Wastewater and urban runoff infrastructure</td>
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<td>12:20 p.m.</td>
<td>Invitation to 2017 Semiannual Meeting in Washington, D.C.</td>
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<td>Tim Eder, Executive Director</td>
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<td>12:30 p.m.</td>
<td>Adjourn</td>
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Minutes

Attached for review and approval are minutes from the Commission’s 2016 Semiannual Meeting, held Feb. 23-25, 2016, in Washington, D.C.; and the special meeting of the Commission held by conference call on July 27, 2016.

Included for your information are minutes of the Board of Directors meetings held on Jan. 21, March 17, April 18, May 12, June 16, July 21, Aug. 18, Sept. 1, 2016.
Summary of Actions


2. Approved three resolutions:
   • Advancing outreach efforts to support prevention and control of Great Lakes aquatic invasions
   • Great Lakes restoration and economic revitalization: Great Lakes Commission federal priorities for 2016
   • Embracing Great Lakes priorities in 2016 presidential campaign platforms

3. Approved a process for reviewing resolutions of the Great Lakes Commission that are 10 years old (or older).

4. Tabled the resolution “Maintaining Safe and Sustainable Drinking Water and Infrastructure in the Great Lakes Basin” for action at a future meeting.


Minutes

The meeting was called to order at 1:05 p.m. EST by Jon Allan (MI), Chair. The following Commissioners, Associate Commissioners and alternates were present:

Daniel Injerd, Ben Brockschmidt - Illinois
Jody Peacock, Steve Fisher - Indiana
Jon Allan, Helen Taylor, Ian Davison, Emily Finnell - Michigan
John Linc Stine, Ann Rest, Paul Torkelson, Jennifer Schultz - Minnesota
Jim Tierney, Don Zelazny - New York
Jim Zehringer, Craig Butler, Karl Gebhardt, Jim Weakley - Ohio
Bill Carr, Rob Fleming - Ontario
Eric Marquis, Marc Gagnon - Québec
Pat Stevens, Steve Galarneau, Dean Haen - Wisconsin

Staff present: Tim Eder, Tom Crane, Steve Cole, Matt Doss, Victoria Pebbles, Sam Molnar, Nicole Zacharda, Gary Overmier, Erika Jensen, Melanie Adam, Pat Gable.

1) Call to order, opening remarks: Chairman Allan called the meeting to order and briefly reviewed the agenda for the meeting. He extended a welcome to all those in attendance. He recognized Pat Stevens (WI) and Emily Finnell (MI) as Commissioners/Alternates attending their first Commission meeting.

2) Roll Call: Executive Director Tim Eder called the roll. A quorum was present and all states were represented except Pennsylvania.
3) **Approval of meeting agenda:** Chairman Allan asked for a motion to accept the agenda for the meeting. A motion to accept the agenda was made by Michigan, seconded by Minnesota. The agenda for the meeting was accepted.

4) **Approval of minutes:** Chairman Allan called for a motion to approve the minutes of the 2015 Annual Meeting held September 28-29 in Chicago. Allan noted that the dates on the draft minutes were wrong and will be corrected. A motion to approve the minutes (as amended) was made by Ohio, seconded by IL. The minutes were approved unanimously.

5) **Keynote Address: U.S. EPA Administrator Gina McCarthy:** McCarthy thanked the Commission for the invitation and praised the organization for its leadership on Great Lakes issues, especially as an advocate for the Great Lakes Restoration Initiative (GLRI). McCarthy also recognized several people in the audience: Commissioner Dereth Glance from the IJC, David Ullrich, Executive Director of the Great Lakes and St. Lawrence Cities Initiative and State Senator Ann Rest (and Great Lakes Commissioner) from Minnesota. McCarthy talked about the importance of the GLRI and said that EPA wants to do everything it can to keep the partnership moving forward. McCarthy mentioned specifically the role that the GLRI is playing to restore habitat, protect drinking water, control HABs and protect Lake Erie from the impacts of phosphorus runoff. McCarthy affirmed the commitment to reduce phosphorus by 40% in Lake Erie and urged everyone to continue to work together to involve farmers in conservation treatment programs to reduce phosphorus. McCarthy concluded her comments with some remarks about the Flint water crisis and mentioned the need for the Great Lakes region to be a leader in water and wastewater infrastructure issues. She mentioned that collaboration is more important than ever for the region to solve these important problems.

6) **Report of the Chair:** Allan began his presentation with some brief remarks about the Flint water crisis. He commented about how the Flint situation was demanding much time and attention both at the state and federal levels. Allan also talked about the importance of the phosphorus runoff issue and harmful algal blooms (HABs) to the Great Lakes and especially western Lake Erie, and talked about the collaborative efforts going on in this area. Allan then focused his remarks on the Commission’s work to update its strategic plan. He mentioned that the Commission has been a recognized leader on regional issues and has been strategic and forward-looking with regard to addressing these important issues on behalf of its members. Allan talked about emerging issues in the region and how the Commission is positioning itself to address these. Allan highlighted Blue Accounting opportunities, infrastructure needs and challenges, the need to protect public health and social and economic issues as being front and center for the region. As we think about these issues, Allan challenged the audience to think about the future and nature of collaboration at the state/provincial, federal and global levels. He also asked: How do we think and act strategically in a way that helps us frame the conversation for tomorrow’s emerging issues?

7) **Report of the Executive Director:** Eder focused his comments on the process for updating the Commission’s strategic plan. Eder commented that the current strategic plan has served the organization well and is still sound. However, much has changed over the past five-plus years and it seems timely for the Commission to review and update the plan. Eder stated that issues like the Flint water crisis, HABs, Asian carp and oil transportation have emerged as important regional issues demanding the time and attention of the region’s leaders. Eder mentioned that it is important for the Commission to be strategic and nimble as it considers how best to serve its members and the region. He commented that the Commission will be planning and scheduling brainstorming sessions with each state and province over the next four to six months to receive input from the Commissioners on the draft strategic plan being prepared by the staff. Eder then introduced the Commission’s Policy Director Matt Doss to give an update on the Commission’s legislative priorities for the year. Doss reminded the Commissioners that the federal legislative priorities are established annually and represent the top priorities for the Commission and its regional partners. He pointed to a new approach in the document that includes key statistics and some facts and figures surrounding the demography and geography of the Great Lakes and St. Lawrence River region. He concluded by briefly summarizing the priorities and thanking the six other groups that added their names to the one-page summary document of priorities for Great Lakes Restoration and Economic Revitalization.
Panel: Nutrient Reduction Strategies for the Great Lakes: Karl Gebhardt, Commissioner (OH), introduced the panelists (and himself as the first presenter) for a session to discuss strategies for reducing nutrients entering the Great Lakes with a focus on Western Lake Erie. Gebhardt commented that nutrients continue to be one of the biggest water quality challenges in Western Lake Erie due principally to nonpoint source contributions. Gebhardt began by talking about the Western Lake Erie Basin (WLEB) Collaborative. He mentioned that on June 13, 2015 the governors of Ohio and Michigan, and the premier of Ontario committed to a goal of reducing phosphorus loadings to Lake Erie by 40 percent as specified by the Collaborative. The Collaborative is intended to advance efforts toward the proposed nutrient reduction targets put forth in the Great Lakes Water Quality Agreement (GLWQA). This will be done through the development of an Implementation Plan and a formal timeline for achieving results. Gebhardt said that while progress toward phosphorus reduction is occurring, it needs to happen at a more rapid pace.

Gebhardt then formally introduced the panelists. The panelists were asked to focus on strategies and initiatives designed to address the nutrient problem in the Great Lakes and provide their perspectives on how these different approaches may help solve the problem.

Tinka Hyde, U.S. EPA Region 5 Water Division and GLWQA Nutrients Annex 4 Co-Chair, discussed the need to collaborate on the nutrient reduction issues that affect all of us. She talked briefly about the Annex 4 process highlighting the importance of Lake Erie in that process. She commented on the hypoxia issue in the Central Basin of Lake Erie and the target load reduction of 6,000 metric tons of phosphorus by 2025. She mentioned key areas to be targeted for reduction in Western Lake Erie, including the River Raisin and the Maumee River on the U.S. side and the Thames River and Leemington tributaries on the Canadian side. Hyde mentioned that adaptive management will be the key to success to achieve the 40 percent phosphorus loading reduction target. This includes ongoing efforts in conservation treatment, monitoring, research and modeling. She concluded by mentioning the importance of the domestic action plans for Michigan, Ohio and Ontario under which key actions and ideas for nutrient reduction are identified.

Victoria Pebbles, Great Lakes Commission Program Director, discussed the Source Water Pilot under the GLC’s Blue Accounting Initiative. Pebbles said that the Blue Accounting Source Water Pilot will play a role in nutrient reduction by providing information to measure progress toward desired outcomes. If we consider the Great Lakes as a primary asset, how do we know how well our programs are doing to protect the asset? A feedback loop is needed and Blue Accounting provides this. Pebbles showed a series of schematics and walked the audience through how Blue Accounting will support desired outcomes through shared goals, common metrics, and providing and delivering data and information. She concluded by mentioning the partnership that includes the Commission and The Nature Conservancy with funding provided by several regional foundations.

Frank Lupi, Professor of Environmental and Natural Resource Economics at Michigan State University, talked about the economic impacts associate with harmful algal blooms and the economic benefits of reducing HABs in Lake Erie. Lupi highlighted a specific study that examined the effect of HABs on the region’s economic welfare. The study looked at a variety of scenarios using sensitivity analysis, examining things like “values at risk,” ecological services interruption and the economic effects to the environment and communities. The study used a scoring method and evaluated such things as property value impacts, tourism impacts, tourism activities at risk, recreational values and others. Lupi concluded by saying that the study was designed to be forward looking with findings for policymakers and managers to consider.

Keynote Address: Senator Tammy Baldwin, Wisconsin: Senator Baldwin thanked the GLC for the invitation to speak and commended the attendees for being the true champions of the Great Lakes. She mentioned the long history of conservation champions from Wisconsin – Aldo Leopold, John Muir and former Senator Gaylord Nelson, to name but a few. Baldwin commented that she takes her stewardship responsibilities seriously and has made Great Lakes protection and restoration a top priority. She touched on several important issues such as the Great Lakes and Mississippi River Interbasin Study (GLMRIS), the Great Lakes Ecological and Economic Protection Act (GLEEPA), (which Senator Baldwin introduced) and the Waterfront Community Revitalization and Resiliency Act, which will help support
economic development efforts in Great Lakes waterfront communities. She concluded by restating the importance of authorizing the Great Lakes Restoration Initiative (GLRI) and the importance of everyone working together to accomplish this goal.

Chairman Allan thanked the Senator for her leadership on the GLRI and encouraged the Senator to continue her excellent work to help protect and restore the Great Lakes.

10) **Review of Great Lakes Commission Business - Presentation of Resolutions:**

Chairman Allan provided information on the one action item and four resolutions to be acted on during the business session on February 24.

Allan commented that three of the four resolutions can be found in the Briefing Books. The fourth resolution concerning drinking water and infrastructure is included in the meeting folders since it was just developed by the staff and the Board after the Briefing Books were printed and mailed.

Prior to listing the resolutions, Allan first described the action item that was described in a memo that the Board and staff prepared that proposes a process for treating older resolutions that have been previously adopted by the Commission. The memo explains that all resolutions 10 years old (or older) are proposed to be rescinded, and that starting next month the chair will appoint a committee to work with staff to review the resolutions that were adopted 10 years ago (at the 2006 fall meeting) to consider whether any of them should be retained or amended. Tomorrow the Commission will act to rescind all resolutions adopted prior to October 2006.

Allan then listed the four resoluion with a brief explanation of each.

- Advancing outreach efforts to support prevention and control of Great Lakes aquatic invasions
- Great Lakes restoration and economic revitalization: Great Lakes Commission federal priorities for 2016
- Embracing Great Lakes priorities in 2016 presidential campaign platforms
- Maintaining safe and sustainable drinking water and infrastructure in the Great Lakes Basin

Allan concluded by reminding the Commissioners that editorial comments should be provided to staff after the adjournment of day one and that formal action will be taken on these items during the business session tomorrow.

11) **Observer Comments**

Chairman Allan moderated a session for the GLC’s Observers to provide comments to the Commissioners. Each Observer was instructed to keep comments to three minutes or less.

**RADM June Ryan, U.S. Coast Guard – Ninth District:** Ryan announced the 2015 ballast water working group report and commented that there was 100 percent compliance, meaning that 100 percent of the vessels bound for the Great Lakes from outside the exclusive economic zone were examined. Ryan commented that no known new species have been transferred to the Great Lakes via ballast water since 2006. She said that the Coast Guard has issued 56 interim treatment systems meeting IMO ballast water discharge standards, but that the first four proposals using ultraviolet systems were not approved. She concluded by giving a brief description of the salvage and recovery operation of the Tank Barge Argo located in western Lake Erie.

**Marc Gaden, Great Lakes Fishery Commission:** Gaden talked briefly about GLFC programs in the area of sea lamprey control and cooperative fishery management. He mentioned that sea lamprey levels are trending downward in all lakes, but that progress is threatened if funding for the control program is
cut. He mentioned that the President’s budget proposes a cut in the program funding. He mentioned an important selective fish passage study that involves a partnership with the USACE, the GLFC, the State Department and the Landscape Conservation Cooperative (LCC).

**Norm Grannemann, U.S. Geological Survey:** Grannemann referenced a Memorandum of Understanding (MOU) that has been in effect between the GLC and USGS/GLSC since 2012. This MOU has guided cooperative work between the two agencies with a new cooperative effort on Harmful Algal Blooms (HABs). Grannemann talked about the importance of nutrient monitoring and described work that the USGS is doing pertaining to edge-of-field monitoring. He commended the GLC for its collaborative efforts in areas related to AIS, specifically mentioning the mussel and phragmites collaboratives.

**Joel Brammeier, Alliance for the Great Lakes:** Brammeier thanked the GLC for its continuing efforts to build consensus surrounding issues in the Chicago Area Waterway System. He mentioned the critical role of the committee in tracking and advocating for implementation of the recommendations in the committee’s consensus letters as a way of communicating broad support for solving the Asian Carp problem. Brammeier also mentioned the importance of the Commission’s work in the area of nutrient management, phosphorus reduction and HABs. He concluded by stressing the importance of learning from the Flint water crisis and the importance of funding local, state and federal public health and water quality agencies to ensure that the situation does not happen elsewhere.

**Lisa Duriancik, USDA Natural Resources Conservation Service (NRCS):** Duriancik mentioned that NRCS is assisting producers in the region to reduce nutrient loadings to the Great Lakes. This is a primary focus of USDA-NRCS and the GLRI has brought additional opportunity for focused conservation treatment efforts in priority watersheds. She commented that NRCS soon will finalize its Western Lake Erie Initiative Strategy. She concluded by saying that the Regional Conservation Partnership Program (RCP), now in its second year, is helping to address water quality, phosphorus reduction and habitat issues in the Great Lakes.

**Alan LaPointe, Shedd Aquarium:** LaPointe commended the Commission for preparing to update its strategic plan. He mentioned how the Shedd’s priorities are clearly aligned with the Commission’s. The Shedd’s Great Lakes Program is very active in building partnerships and collaborating with other Great Lakes federal, state and local partners. He said that a potential benefit of the strategic planning exercise is to see how things are tied together and then to prioritize them based on the greatest needs of the region. He reminded the commissioners that the Shedd has a lot of resources and expertise that can be helpful to the Commission moving forward.

**Felicia Minotti, Global Affairs Canada:** Minotti was pleased to hear that Canada has been recognized for its efforts to reduce P loadings by agricultural sources. The new Canada-Ontario Agreement (COA) creates a new commitment to protect the Great Lakes. In addition to P reduction priorities, she mentioned a renewed commitment to protect the Great Lakes from climate change impacts, aquatic invasive species and toxic contaminants. She mentioned the importance of science to inform the decision making process.

**Mike Shriberg, National Wildlife Federation (NWF):** Shriberg talked about the importance of reducing phosphorus and controlling nutrients in order to address the issue of HABs. He complemented the Commission on its partnership with USGS to form a HABs collaboratory. He said it is important to help transition from high-level policy discussions to data-driven solutions. He concluded by talking about NWF’s ongoing interest in the Commission’s work on oil transportation and in helping to solve the problems associated with the Flint water crisis.

**Dereth Glance, International Joint Commission:** Glance provided an update on IJC activities focusing on phosphorus reduction, adaptive management, climate change and water resources management. She congratulated the two governments (and the states and provinces) on their work toward a 40 percent reduction of phosphorus in Lake Erie. She talked about the importance of the Great Lakes water resources compact and agreement to ensure that the waters of the Great Lakes and St.
Lawrence River are well-managed and protected from the impacts of increased withdrawals, diversion and consumptive uses. She commented on the new Great Lakes Adaptive Management (GLAM) board that is examining and evaluating water levels and regulations of lakes Superior and Ontario-St. Lawrence. She invited the commissioners to come to Toronto in October of 2016 to participate with the IJC in its events related to the Water Quality Agreement.

Deborah Lee, NOAA/GLERL: Lee talked about NOAA partnerships in a variety of areas, including AIS prevention and control. She talked about the Great Lakes Aquatic Nonindigenous Species Information System (GLANSIS) database, which consists of three lists: a core list of species nonindigenous to the Great Lakes basin (not native to any part of the basin); a list of range expansion species (native only to a portion of the basin); and a watchlist (not currently found in the Great Lakes but assessed in the peer-reviewed scientific literature as likely to invade via current pathways). She mentioned that GLERL is involved with and hosted the first meeting of the new mussel collaborative. GLERL has also been involved with the new HABs collaboratory and is working on more real-time monitoring of harmful algal blooms and their movement in Lake Erie. She thanked the GLC for leading the important three-year habitat restoration initiative, with work occurring in the Muskegon Lake, Buffalo River and St. Marys River AOCs.

Katrina Phillips, Sierra Club Great Lakes Program: Phillips thanked the Commission for convening the Chicago Area Waterways System (CAWS) Advisory Committee. She mentioned the Sierra Club’s interest in the P reduction/HABs issue. She also mentioned Sierra’s Club’s interest in the Flint water crisis. She said that deteriorating infrastructure is a huge issue for the region and she thanked the Commission for its involvement in this issue.

The meeting was adjourned at 5:20 p.m. Attendees were invited to a reception in the Vista Terrace sponsored by Tetra Tech, Environmental Quality Management, Inc., and EA Engineering, Science, and Technology, Inc.

Day Two

12) Call to order: Chairman Allan welcomed everyone back to the meeting and thanked the sponsors who hosted the previous evening’s reception. Allan then introduced Associate Commissioner Eric Marquis to provide an update on the Commission’s work in the area of oil transportation.

13) Update on oil transportation: Marquis began by providing a report on the work of the Oil Transportation Advisory Committee, which was formed in 2015 to provide guidance and advice to the Commission on its work related to oil transportation. The committee has met monthly via conference call since the last update provided to the Commission at its 2015 Annual Meeting in Chicago. In December the Committee finalized a set of 10 guiding principles accompanied by a preamble representing ideas around which all members were able to find common ground for agreement. These principles reflect the ideals that the committee is working toward. They will provide the foundation and inform the process for developing consensus recommendations moving forward. Since its December conference call, the committee has begun to examine several issues on a more in-depth basis. These include the concept of risk and how it relates to oil transportation; the importance of communication (especially between different levels of government and the two countries); the definition of and difference between worst-case discharge and worst-case scenario; and technology-based standards and how these standards inform the discussion on risk, especially regarding comparative risk between different modes of transportation. One topic that has generated particular interest is information from both the U.S. and Canada on environmentally sensitive areas along the Great Lakes and St. Lawrence River coasts. Of special note is the Committee’s interest in making sure that the environmental sensitivity index (ESI) maps produced by NOAA for the coastal areas of the United States are kept current and that the information in both countries is uniform and consistent so that it can be applied effectively to planning and response efforts in the event of a spill incident. The committee may soon be working with the Commission’s Board of Directors to communicate to NOAA the need to revise the ESI maps for the Great Lakes, which were last updated in the early 1990s. Marquis ended his presentation by saying that the Commission is planning to enlist a
series of research papers on priority topics as a way to further the dialogue on oil transportation. These papers will be funded by a grant from the Mott Foundation.

14) Recognition of Kelly Burch: Allan took a moment to recognize Kelvin (Kelly) Burch, long-time commissioner and past Commission chairman from Pennsylvania, who retired from state service in mid-2015. Allan thanked Burch for his many contributions and achievements over the years serving the Commission and the Commonwealth or Pennsylvania.

15) Report on AIS Prevention and Control Activities: Dan Injerd, Commissioner (IL), introduced the panelists for a session designed to provide updates on different aspects of the AIS issue. Injerd talked about Illinois’ efforts to combat Asian carp in the Chicago Area Waterway System (CAWS). Injerd offered three main points in his introductory remarks: 1) efforts to remove fish by commercial fishermen in areas downstream from the electronic barrier are working; 2) the leading edge of the Asian carp population in the Illinois River has not moved much in the past 10 years; and 3) the commercial fishermen are becoming more efficient in catching carp.

Allegra Cangelosi, Northeast-Midwest Institute, talked about ballast water treatment technology and regulations. She talked about her work with the Great Ships Initiative and the International Maritime Organization (IMO) Ballast Water Convention. The IMO Convention adopted in 2004 aims to prevent the spread of harmful aquatic organisms from one region to another by establishing standards and procedures for the management and control of ships’ ballast water and sediments. The Convention also establishes ballast water standards to be phased in over a period of time. These standards include both a ballast water exchange standard and a ballast water performance standard. The exchange standard is required only until a performance standard goes into effect. The Convention will enter into force 12 months after it is ratified by 30 member states (countries) representing at least 35 percent of the world’s merchant shipping tonnage. Cangelosi mentioned that we are less than one percentage point away from the tonnage requirement. The U.S. has not ratified the Convention; Canada ratified the Convention in 2010.

Bob Lambe, Great Lakes Fishery Commission, talked about Asian carp response planning. He began by commending the Great Lakes Commission for its work on the Restoring the Natural Divide study (2012) and subsequent efforts facilitating the CAWS Advisory Committee. Lambe mentioned three important points in the Asian Carp response planning effort: challenges in hydrologic separation of the CAWS; the need for an ongoing forum to discuss issues surrounding shorter-term options; and the need to aggressively pursue near-term options that might still be years away from implementation. He provided some facts and figures regarding fish removal and other control efforts and concluded by talking about the importance of prevention and monitoring.

Yvonne Prettyman-Beck, U.S. Army Corps of Engineers, gave an update on Asian carp priorities of the Corps and talked about the importance of collaboration. She mentioned that we’ve come a long way in terms of collaboration over the past five years. She mentioned a four-pronged strategy to address the Asian carp problem: 1) the Great Lakes and Mississippi River Interbasin Study provides a framework for identifying solutions and control options; 2) the Brandon Road Lock and Dam Study provides additional rigor in evaluating the effectiveness of another electric barrier, acoustic controls, water guns, etc.; 3) the current electric barriers in the Chicago Sanitary and Ship Canal; and 4) the importance of ongoing monitoring. Prettyman-Beck concluded by saying that we need to develop more tools for the tool box and that interim reports and efficacy studies can help identify the best solutions to address the problem.

16) Governors and Premiers Great Lakes-St. Lawrence Maritime Strategy: David Naftzger, Executive Director of the Conference of Great Lakes and St. Lawrence Governors and Premiers, spoke about the Governors and Premiers Great Lakes-St. Lawrence Maritime Strategy. He noted that when the governors and premiers speak with a collective voice, they are effective in tackling difficult issues. At the governors’ summit in 2013 the Maritime Initiative was launched, which created a process for the development of the strategy. The strategy, due to be released in mid-2016, has primary objectives to double maritime trade, shrink the environmental impact of the region’s transportation network and support the region’s industrial core. Toward this end, specific actions are being organized around the following themes:
increasing efficiency and reducing costs of maritime transportation; building new markets; growing economic activity around the maritime system; and establishing interim milestones while managing for the future. Naftzger outlined some of the main elements of the strategy, including the need to improve locks, channels and harbors; the need for consistent dredging; exploring opportunities to expand the cruise industry; examining governance models; and addressing aging infrastructure.

17) A Vision for Safe Drinking Water and Aging Infrastructure: George Hawkins from DC Water gave a presentation on Washington DC’s vision for safe drinking water and aging infrastructure. Hawkins painted a picture of the current state of infrastructure, stating that the median age of water mains in the DC area is 79 years. Some sewer lines are even older, going back before Civil War times. Hawkins mentioned that the state of infrastructure provided an opportunity to tell a broader story about the need for clean drinking water and to begin planning for thoughtful, progressive action. Hawkins outlined the plan that was implemented by DC Water, which included the following steps: 1) educate the consumer to increase customer knowledge; 2) develop an action plan for responsibility and performance; 3) emphasize public health; 4) pursue technical innovation; 5) create jobs within the community; 6) redefine the mission and vision of the utility; and 7) focus on finances, especially looking for creative solutions to help fund the utility and its programs.

18) Business of the Great Lakes Commission: Chairman Allan then introduced the business portion of the meeting and provided background on the process for introducing and approving the action item and the four proposed resolutions that were discussed the previous day.

- **Action Item: Sunset Policy for Old Resolutions of the Great Lakes Commission:** The commissioners reviewed a memorandum outlining a plan for sunsetting resolutions of the Great Lakes Commission that are 10 years old or older. This plan will be implemented using a two-phased approach. Starting next month, the chair will appoint a committee to work with staff to review the resolutions that were adopted 10 years ago (at the 2006 fall meeting) to consider whether any of them should be retained or amended. Decisions regarding these resolutions will be made at the 2016 annual meeting. Resolutions passed prior to October 2006 will be automatically sunsetted upon approval of the action item.

  A motion to approve the action item was made by Ohio and seconded by Illinois. The action item was passed unanimously.

- **Resolution – Great Lakes Restoration and Economic Revitalization:** The resolution endorses a suite of federal priorities for 2016 and calls on Congress and the Administration to continue to sustain progress and strengthen collaboration with the eight Great Lakes states in the implementation of the GLRI.

  A motion to approve was made by Minnesota and seconded by Indiana. The resolution was passed unanimously.

- **Resolution – Advancing outreach efforts to support prevention and control of Great Lakes aquatic invasions:** This resolution updates and, if approved, replaces a resolution adopted at the Commission’s May 2006 Semiannual Meeting. It recognizes outreach and education as essential to preventing the introduction and spread of aquatic invasive species (AIS) and commits the Commission to collaborating with the Great Lakes Water Quality Agreement Annex 6 Subcommittee, national Aquatic Nuisance Species Task Force, the Great Lakes Panel on Aquatic Nuisance Species, and other partners to advance AIS prevention and control campaigns, and encourages its members, observers and other partners collaborate on AIS outreach, prevention and control efforts.

  A motion to approve was made by Ohio and seconded by Michigan. The resolution was passed unanimously.

- **Resolution – Embracing Great Lakes priorities in 2016 presidential campaign platforms:** This resolution calls on the 2016 presidential candidates to recognize the Great Lakes as a national treasure and a vital asset for the eight-state Great Lakes region and to sustain the Great Lakes Restoration
Initiative and associated efforts. It highlights a suite of Great Lakes priorities and urges the 2016 presidential candidates to address them in their platforms and – if elected – advance them as policy and funding priorities of their administration. It calls on the next president to collaborate with the Great Lakes states and governors to advance common goals for the Great Lakes and St. Lawrence River.

A motion to approve was made by New York and seconded by Michigan. The resolution was passed with Ohio abstaining due to its governor running as a presidential candidate.

- **Resolution – Maintaining Safe and Sustainable Drinking Water and Infrastructure in the Great Lakes Basin:** This resolution was developed by the staff and Board in part in response to the drinking water crisis in Flint, Michigan. While the situation in Flint has garnered national and international attention, there are some important lessons regarding infrastructure and public health and safety that can be learned from this tragedy. For one thing, the national standard for protecting people from exposure to lead should be updated. Second, our nation faces an infrastructure crisis that demands attention and this resolution would establish a work group to explore that issue and potential solutions.

Building on discussion from the previous day (where several language changes were offered to the original resolution) a motion to bring forth an amended resolution was made by New York and seconded by Ohio.

Discussion the previous day centered on the need to make the resolution more proactive and comprehensive regarding safe drinking water and infrastructure needs. Several of the Commissioners felt the resolution seemed reactive to the Flint water crisis.

Chairman Allan entertained discussion on the amended resolution. Commissioner Taylor (MI) commented that previous discussions had suggested that the resolution was going to look more broadly at infrastructure needs across the region. She mentioned that a broader conversation on infrastructure needs to occur.

A comment was made by Commissioner Injerd (IL) that the resolution seems opportunistic in response to the Flint crisis and is not focused enough on broader infrastructure needs. Commissioner Injerd (IL) also commented that Illinois has not had the chance to review and discuss this resolution and he feels that it is important for that discussion to occur.

Injerd additionally commented that the resolution seems to suggest that public water suppliers are not doing enough to implement lead reduction programs. He said many water suppliers are being proactive to address this issue but we should investigate the extent to which this issue is being addressed by municipalities. While Illinois cannot support the draft resolution, he acknowledged the importance of the issue and encouraged the Commission to continue working on this issue. He said let’s not rush this but be thorough and thoughtful in our approach.

Both Injerd and Commissioner Peacock (IN) said that while they cannot support the resolution in its current form, they acknowledged the importance of the safe drinking water and infrastructure issue and encouraged the Commission to continue working on it.

A motion was made by Minnesota to table the resolution to allow it come before the Commission again at some future point. The motion was seconded by Illinois. The motion to table the resolution passed unanimously.

Commissioner Stine (MN) expressed his interest in revising and acting on this resolution prior to the next full Commission meeting scheduled for early October in Toronto.

19) Staff members Matt Doss and Erika Jensen provided a brief update on Great Lakes Day activities scheduled for that afternoon and the next day. They described materials included in the Great Lakes Day folders, including a fact sheet on the GLRI project website, maintained by the GLC. Doss reminded the
Commissioners that the Great Lakes Congressional Breakfast is scheduled for 8:00 a.m. tomorrow in Room 902 of the Senate Hart Building.

20) Invitation to 2016 Annual Meeting: Associate Commissioner Carr (ON) invited the Commissioners to the GLC’s Annual Meeting, October 6-7, 2016 at the Fairmont Royal York Hotel in Toronto.

A motion to adjourn the meeting was made by Ohio, seconded by New York. The meeting was adjourned at 12:00 Noon.

Respectfully submitted,

Tim A. Eder
Executive Director

/TC
Great Lakes Commission
Special Meeting
By Conference Call
July 27, 2016
Draft Meeting Minutes

Summary of Actions

- Adopted a revised drinking water resolution.
- Adopted a resolution expressing support for reauthorization of the Great Lakes Fish and Wildlife Restoration Act.
- Reviewed the status and schedule for reviewing and adopting the new GLC strategic plan.

Minutes

The meeting was called to order at 3:00 p.m. EDT by Chairman Jon Allan (MI). The following Commissioners, Associate Commissioners and alternates were present.

Stephanie Comer, Illinois
Jody Peacock, Carol Comer, Kay Nelson, Indiana
Jon Allan, Helen Taylor, Ian Davison, Michigan
Don Zelazny, New York
Karl Gebhardt, Tom Rayburn, Ohio
Bill Carr, Debra Sikora, Jason Travers, Robert Fleming, Ling Mark, Ontario
Tim Bruno, Pat Lupo, Robert Light, Pennsylvania
Eric Marquis, Kerith Iverson, Québec
Pat Stevens, Steve Galanneau, Wisconsin

Staff present: Tim Eder, Victoria Pebbles, Steve Cole, and Matt Doss.

1) Call to Order, Meeting Purpose, and Agenda: Chairman Allan called the meeting to order and reviewed the agenda. There are two resolutions to review: the water infrastructure resolution that was considered at the semiannual meeting; and a resolution on reauthorization of the Great Lakes Fish and Wildlife Restoration Act.

2) Roll Call: Executive Director Tim Eder called the roll. A quorum was present and all states and provinces were represented.

3) Consideration of Revised Drinking Water Resolution: Chairman Allan noted that additional work had been done on the resolution by a workgroup of commissioners. Eder reviewed that the parliamentary procedure will include two motions: one to remove the resolution from the table and a second motion to approve the resolution as amended and submitted. Chairman Allan called for a motion to remove the resolution from the table: The motion was offered by Ontario and seconded by Minnesota. All were in favor. Thus, the resolution was brought forward for consideration. Allen called for a motion to adopt the resolution as offered: Minnesota moved to approve the resolution as amended; it was seconded by Illinois. Discussion followed. Commissioner Stine reviewed the workgroup’s discussion: there was additional dialogue and consultation with staff responsible for drinking water; references were verified and corrected, where needed; and the need was identified for a separate resolution on wastewater infrastructure. A new resolution will be put forward at the annual meeting on this topic, looking at long-term needs and benefits to the region from effective treatment of wastewater. He noted that he and Commissioner Injerd are in agreement on this topic. Chairman Allan asked for comments from
others who worked on the resolution. He noted that there were substantive conversations about the issue of lead in water and it was agreed to focus on drinking water infrastructure more broadly. Eder added a staff perspective that the focus of the GLC’s work will be on infrastructure moving forward. Commissioner Schultz asked if the resolution will focus on other issues beyond lead and copper. Eder responded that the resolution doesn’t authorize action on other contaminants in drinking water. Commissioner Shultz suggested a resolution related to flame retardants in drinking water. Commissioner Stine framed this as a focus on unregulated contaminants. Chairman Allan called for any other comments or language changes. He called the vote on the resolution as submitted: all jurisdictions were in favor except Ohio, which opposed the resolution. Commissioner Gebhardt explained that the Ohio EPA director had concerns about including lead in the resolution and believes it should be focused primarily on drinking water infrastructure.

4) **Reauthorization of the Great Lakes Fish and Wildlife Restoration Act:** Chairman Allan noted that a revised resolution was sent out recently. This responded to comments from New York that were relatively minor. He called for a motion to adopt this resolution: the motion was offered by NY and seconded by IL. Discussion followed. Commissioner Peacock asked for citations for figures in the resolution. Doss responded that the information on the program is from the U.S. Fish and Wildlife Service. Staff will provide the sources for the information. Commissioner Peacock asked if the resolution supports specific legislation. Eder responded no, that it calls generally for legislation that accomplishes the reauthorization of the program. Our standard approach is not to support a specific bill in case it is amended during the legislative process. Chairman Allan noted that his fisheries staff reviewed and supported the bill. He agreed that the Commission should be careful in formally endorsing a specific bill, which may change. But, there needs to be some efficiency in not having to reconvene the Commission to review revised legislation at every stage in the process. Commissioner Rest stated that if the current reauthorization legislation is substantially similar to its last reauthorization, she felt it was acceptable to move forward. Commissioner Peacock said that their main concern is if there were substantive changes to the act; otherwise they support reauthorizing the act. There was no further discussion. Chairman Allan called for a vote: all were in favor.

5) **Status Report on Update to the GLC Strategic Plan:** Chairman Allan noted that staff have met with each of the states and provinces to discuss the update to the strategic plan. Eder noted that these meetings were tremendously helpful in reinforcing what’s important to the jurisdictions, both with regard to specific priority issues as well as the overall role of the Commission. We have used this input to revise the strategic plan and complete the remaining sections. The full draft strategic plan has been provided to the Board with a somewhat tight timeframe for reviewing and finalizing the plan. Staff plan to incorporate additional input and share the draft plan with the Commission’s official observers. The plan will be adopted and presented as a final document at the annual meeting. The next deadline for input from the Board is Aug. 2, with final comments by Sept. 2. Commissioner Stine noted that the Board agreed that Commissioners should submit comments however is convenient for them, whether through their delegation chair or directly to Commission staff. Comments from Observers will be reviewed with the Board. Chairman Allan suggested that comments from Commissioners be shared with their delegation chairs. Chairman Allan concluded by encouraging commissioners to attend the annual meeting in Toronto in October and to work through their delegation chair to propose resolutions for consideration at the meeting.

A motion to adjourn the meeting was made by Commissioner Rest and seconded by Commissioners Comer. The meeting adjourned at 3:55 p.m. EDT.
The meeting was called to order at 3:00 p.m. EDT by Jon Allan, Chair. The following members were present:

- Dan Injerd       - Illinois
- Jody Peacock       - Indiana
- Jon Allan       - Michigan
- John Linc Stine       - Minnesota
- Jim Tierney, Don Zelazny       - New York
- Jim Zehringer, Karl Gephardt       - Ohio
- Tim Bruno       - Pennsylvania
- Eric Marquis, Kerith Iverson       - Quebec
- Steve Galarneau       - Wisconsin

Staff present: Tim Eder, Tom Crane, Steve Cole, Victoria Pebbles and Matt Doss.

1) **Introductions and Call Objectives**: Chairman Allan welcomed everyone to the call and reviewed the agenda. Commissioner Zelazny asked to provide an update on state engagement with the Great Lakes Restoration Initiative (GLRI). With this addition, the meeting agenda was approved.

2) **Minutes**: Chairman Allan invited a motion to approve the minutes from the December 16, 2015, Board call. The minutes were approved by unanimous consent as submitted.

3) **Semiannual Meeting, Great Lakes Day and Strategic Plan**: Tim Eder, executive director, reviewed the draft agenda for the semiannual meeting. The nutrients discussion may be moved to the first day; Victoria Pebbles is coordinating this panel. There are two issues that still need to be addressed in some way: the Paris climate talks and the business implications of moving toward a low-carbon economy; and drinking water and aging infrastructure, including the recent drinking water crisis in Flint, Mich. We should consider the challenge of providing clean water to residents when we are surrounded by the Great Lakes, and what the infrastructure implications are for this challenge. Eder mentioned George Hawkins from DC Water as a potential speaker. Chairman Allan invited input on the infrastructure/drinking water issue.

   Commissioner Stine noted that this is a topic of discussion in Minnesota, with the governor having recently proposed a bond proposal and policy changes to address water infrastructure. Several commissioners expressed interest in the topic. A question was posed if there is adequate time to have a truly deep discussion. Eder suggested we consider the federal role as well as how that can complement what the states and local communities need to do to address the problem. Chairman Allan said this is not a topic we can shy away from; we need to hit it head on. He noted that the Michigan Governor devoted more than half of his recent state of the state speech to this issue and the situation in Flint, Mich. It will be good to set the stage for this issue, with direction to the staff for next steps and further discussion by the Board. Commissioner Injerd emphasized considering how we can really add value to the people who are grappling with this issue. Chairman Allan suggested that we could appoint some commissioners to work on the issue and come back to the full Commission with recommendations. It was noted that U.S. EPA recently released its assessment of state infrastructure needs, with several Great Lakes states at the top of the list. A speaker on this from U.S. EPA was suggested. Chairman Allan suggested that the Commission could consider innovative approaches to address funding/financing needs for infrastructure to “buy down” the cumulative cost estimate. Eder suggested that Chairman Allan and Vice Chair Stine could lead a group of Commissioners to consider how to best structure this session at the meeting.

   Eder reviewed that staff is working on engagement from the Administration. There is also the joint lunch with the HOW coalition and the Canadian embassy reception, and Capitol Hill office visits. Commissioner Marquis asked if there would be a Canadian speaker. Eder responded that we have dropped this speaker.
for now, as we likely won’t have a new Canadian ambassador in place by the time of the meeting. The annual meeting in Ontario may be a better opportunity for this discussion. Chairman Allan urged commissioners to schedule office visits, with help from Commission staff, if so desired.

4) **Strengthening State Engagement in the GLRI**: Commissioner Zelazny reviewed suggestions submitted by the GLC last year on how to improve state engagement in the GLRI, including better information exchange and long-term monitoring. These recommendations have been well received with U.S. EPA’s Great Lakes office and the Interagency Task Force. He was contacted by USGS staff to learn from the states on how to frame a long-term monitoring program for the GLRI. USGS is very interested and may be reaching out to state staff to scope out what a long-term, adaptive monitoring program might look like. The AOCs could be a particular focus to ensure we don’t backslide on the cleanup work that has been completed under the GLRI. U.S. EPA’s GLNPO staff plans to meet with the states individually to assess needs and opportunities under the GLRI, similar to what has been done annually for AOC planning. They will start reaching out this spring to work out the logistics. He urged the states to consider who from their agencies can be involved in these discussions. Chairman Allan thanked Commissioners Zelazny and Galarneau for leading discussions with U.S. EPA on this topic; he appreciates the effort being devoted to working with them in this area.

5) **2016 Federal Policy Priorities**: Eder noted that draft priorities were discussed in draft on the last call, with some amendments made and considerable discussion on language related to Asian carp. Further negotiation is needed to balance the good work that’s been done on Asian carp monitoring and control with the need for urgency in light of the continued movement of carp in the Illinois River. Additional discussions will follow on this. The text needs to be finalized by the first week of February. Chairman Allan asked for input on anything that may be missing or edits to the draft text presented.

6) **2016 Resolutions**: Eder noted that the proposed resolutions need to be finalized by the second week of February in time to include in briefing books. Two new resolutions are proposed as well as action on a policy for managing previously adopted resolutions. A policy on this was provided for a process to review and consider sun setting or amending, on a rolling basis, resolutions that are ten years old. Staff have reviewed three resolutions that were adopted at the Commission meeting in Sheboygan, WI in May 2006. We are proposing that two of the three resolutions be sunned and the third be updated. After this, moving forward the new resolution review process will be put in place with input from an ad-hoc commissioner committee. Commissioner Injerd asked what we would do with the resolution on Great Lakes priorities and the presidential campaign platforms. Eder responded that, after being adopted, the resolution would be provided to the presidential candidates. Commissioner Tierney suggested that our federal priorities could be re-formed to present to the presidential candidates. Commissioner Galarneau noted that we likely will want to review this resolution with our governor’s offices. Eder urged Commissioners to let him know by Feb. 9 if they approve the draft resolutions for inclusion in the meeting briefing book.

7) **2016 Presidential Platforms**: Eder recommended that any GLC engagement with a broader, regional effort to present Great Lakes priorities to the presidential campaigns be based on a broad-based group that reflects a diversity of interests, including business and the economy. Commissioner Galarneau suggested the Council of Great Lakes Governors be considered as part of this effort. Commissioner Zehringer noted that calls for funding would have to be carefully reviewed with their governor. Eder noted that, while we coordinate with the Council of Great Lakes Governors, they typically like to have their own initiatives and communications because of their role as governors.

8) **Updates on GLRI Legislation and the CAWS Letter**: Chairman Allan said that it was his understanding that all but one entity has approved the CAWS letter, and that entity is expected to approve the letter in the end. Eder confirmed this; we are in good shape, with final approval expected tomorrow. Eder reviewed recent progress on GLRI authorization legislation, which was approved by the Senate Environment and Public Works Committee yesterday, with House committee consideration to follow next week. The Commission and the HOW Coalition were the two main Great Lakes groups consulted on this legislation, so we are very pleased with our engagement and the interest from Congress in our views.
9) **Upcoming Meetings:** Chairman Allan mentioned a meeting in March with all the regional Great Lakes commissions to discuss how to better coordinate our work and collective efforts. Eder will be participating in that meeting. The next Board call is scheduled for Feb. 11, 2016 at 3:00 p.m.; this is a placeholder for now and Eder asked Board members to advise on their availability on that day. The 2016 Semiannual Meeting will be Feb. 23-24 in Washington followed by Great Lakes Day on Feb. 25.

The meeting adjourned at 3:55 p.m.

Respectfully submitted,

Tim A. Eder  
Executive Director

/md
The meeting was called to order at 4:00 p.m. EDT by John Stine, Vice Chair. The following members were present:

Dan Injerd - Illinois
Kay Nelson - Indiana
Jon Allan - Michigan
John Linc Stine - Minnesota
Jim Tierney, Don Zelazny - New York
Mike Bailey - Ohio
Bill Carr - Ontario
Tim Bruno - Pennsylvania
Pat Stevens, Steve Galarneau - Wisconsin

Staff present: Tim Eder, Tom Crane, Steve Cole, Victoria Pebbles, and Matt Doss.

1) **Introductions and Call Objectives:** Vice Chair Stine welcomed everyone to the call and reviewed the agenda. There were no comments or additions and the meeting agenda was approved.

2) **Minutes:** Vice Chair Stine invited a motion to approve the minutes from the January 21, 2016, Board call. The motion was made by Wisconsin and seconded by New York, and the minutes were approved by unanimous consent as submitted.

3) **Lead and Infrastructure Resolution:** Executive Director Tim Eder reviewed the situation with the lead and infrastructure resolution. It was tabled at the semiannual meeting with proposed amendments, which were not formally adopted. It was suggested that a special meeting of the full Commission be convened to consider approving the amended resolution. GLC bylaws provide for this, although with little guidance. There is no requirement for public notice, although a regular meeting requires a 60-day notice. Eder suggested that a small workgroup of Board members and/or commissioners be formed to work on the resolution, which would then be brought back to the Board, which can then propose it for consideration by the full commission, with a meeting to follow after a 60-day notice. Eder noted the upcoming meeting to discuss the three regional commissions and the likelihood that water infrastructure will be discussed. Eder suggested that further consideration is needed on the charge to the workgroup that will define the GLC’s role in addressing infrastructure. He thought some reasonable boundaries to the GLC’s role would be appropriate. Vice Chair Stine liked the idea of taking time to work on the resolution, but not waiting until the annual meeting next fall. He inquired about thoughts on the scope of the charge to the workgroup. Commissioner Injerd noted that there is significant coordination underway between U.S. EPA and his state on efforts related to the lead and copper rule, education, monitoring and surveillance, and related work. There is significant effort being invested in this work. He asked if we are addressing water infrastructure or lead service lines and violations of the lead and copper rule, and emphasized that we have to be clear on what we are talking about – broad conversation about water infrastructure, or lead in water supply lines, bacteria, etc. The issue can become very big, very quickly and there are a lot of entities involved. Thus, what is the value and role of the GLC if we decide to speak on this issue? Commissioner Tierney said that lead is a giant issue, but one that can also exemplify a lot of things, such as the need for clean water infrastructure. The U.S. EPA Administrator has indicated that there will be a water task force, and he noted that federal funding is down to 4% of total water infrastructure funding, that federal standard setting has become ossified, and that new studies and information are needed. Thus, he suggested that the workgroup charge take into account the situation in Flint and other places, but as an example of larger needs for water infrastructure and a reinvigorated focus on standards. Chairman Allan noted that Michigan is clearly focused on lead, as it should be. This has highlighted problems related to lead service
lines and the general condition of water infrastructure. Regarding the resolution, he asked whether it should be bifurcated to focus on issues related to lead on one hand, including the lead and copper rule (a more narrow point), with a broader focus on the GLC’s role on water infrastructure on the other hand (which may take a little longer to work through). Vice Chair Stine noted his public health agency’s work on lead issues, but suggested that the GLC has a unique opportunity to illustrate water infrastructure needs in the Great Lakes region to Congress. Don’t focus too narrowly and lose sight of larger challenges related to water infrastructure and water quality in the Great Lakes. Chairman Allan highlighted the GLC’s value in articulating a unified, collective voice on this issue to complement what the states are doing individually. Commissioner Nelson supported dividing the issue, but suggested that the larger issue of water infrastructure be tackled first to understand the broader issues before addressing issues associated with lead. It should be a priority to address how the federal government can best engage with the states on water infrastructure issues, including lead. Vice Chair Stine supported moving forward with a workgroup. Volunteers for the workgroup included Commissioners Stine, Nelson, Injerd (focused on broader infrastructure issues), Tierney, Allan, and Galarneau.

4) **Review of Semiannual Meeting and Great Lakes Day in Washington:** Chairman Allan invited input on the semiannual meeting, including what worked and what didn’t. He noted that the meeting structure, with discussions in front of audience, doesn’t always lend itself to deep and open conversations. He asked if there are other meeting formats that we could consider to be responsive to the members’ interests while maintaining a commitment to transparency. Commissioner Nelson suggested that commissioners are looking for ways to have more discussion with speakers. She suggested that a conference call briefing be held in advance of the meeting with commissioners to discuss issues to be addressed. Eder noted that the GLC has regularly used task forces and committees in the past. He recognized the interest in having more engagement from commissioners, both at meetings and in between meetings. We need to maintain transparency, but look at structures that will facilitate better engagement from commissioners. Chairman Allan noted that many have commented on how valuable GLC meetings are. Chairman Allan and Eder agreed to continue exploring ideas for improving the GLC meetings.

5) **Legislation Authorizing the USGS-Great Lakes Science Center:** Chairman Allan supported the GLC endorsing legislation authorizing the USGS-Great Lakes Science Center, noting its broad, bipartisan support. A motion was made to authorize the GLC to endorse the legislation by Indiana and seconded by Ohio. Commissioner Stevens asked about the justification for the increased authorized funding level, and if there is any sense of urgency. Eder noted support from the Council of Lake Committees, which includes the DNRs from the states and Ontario. With this information, the motion was approved.

6) **Update FY 2017 Budget:** Eder noted that staff are preparing the GLC’s FY 2017 budget, and he has recommended members for a finance committee, which Chairman Allan has approved and he has invited those members to serve. This will involve a conference call to review the budget and assistance on a policy for managing the GLC’s reserve funds. The budget must be approved 45 days prior to the start of the fiscal year, so a draft budget will be presented on the April Board call with a final budget approved in the May call.

7) **Updates on GLRI Legislation:** Eder noted that Commissioners should have received the joint letter from the GLC and other regional groups to congressional leadership urging consideration of legislation authorizing the GLRI. Commissioner Injerd asked how decisions are made on who signs on to joint letters with the GLC. Eder will follow up and then discuss on the next Board call.

8) **Next Call:** It was noted that the next, normally-scheduled Board call conflicts with the meeting of the Compact Council. Eder said this call will be re-scheduled.

The meeting adjourned at 5:00 p.m.

Respectfully submitted,

Tim A. Eder
Executive Director
The meeting was called to order at 4:00 p.m. EDT by Jon Allan, Chairman. The following members were present:

- Dan Injerd       - Illinois
- Jody Peacock     - Indiana
- Jon Allan        - Michigan
- John Linck Stine - Minnesota
- Jim Tierney, Don Zelazny - New York
- Karl Gebhardt, Jim Zehringer, Andy Ware - Ohio
- Bill Carr        - Ontario
- Tim Bruno        - Pennsylvania
- Eric Marquis     - Quebec
- Pat Stevens, Steve Galarneau - Wisconsin

Staff present: Tim Eder, Tom Crane, Steve Cole, Joe Bertram, and Matt Doss.

1) **Introductions and Call Objectives:** Chairman Allan welcomed everyone to the call and reviewed the agenda. There were no comments or additions and the meeting agenda was approved.

2) **Minutes:** Chairman Allan invited a motion to approve the minutes from the March 17, 2016, Board call. The motion was made by Wisconsin and seconded by New York, and the minutes were approved by unanimous consent as submitted.

3) **FY 2017 Budget:** Executive Director Tim Eder reviewed that a call with the finance committee was held recently. The Commission’s bylaws require that a budget be approved 45 days prior to the start of the fiscal year, which is July 1. Thus, the next Board call will be May 12 to approve the budget and comply with the bylaws. Eder noted that in the past a conference call has been held for commissioners interested in the budget. There has not been great interest in this in recent years, so he recommended that this not be done. The finance committee asked about the grants/contracts line in the Commission’s budget, including its size, why it fluctuates, etc. Additional information on this will be provided to the finance committee prior to its next call on April 26. More broadly, Eder sees a need to better inform the Board about the large programs that the Commission manages. Time will be added to upcoming Board calls to provide information on these programs. Deputy Director Tom Crane reviewed the proposed budget and the materials provided in advance to the Board. In the review of previous years’ budgets, he noted that the budget variance has been small, which our auditors have complimented us on. In fiscal years 2013 and 2014 this variance was larger, corresponding to the start of the large habitat restoration program supported by NOAA with funds provided through the GLRI. The size of these awards has made it difficult to predict revenues and expenses. Crane mentioned that we are getting better at predicting budget figures in this area. Two important areas for the new budget are the personnel line, reflecting new hires, and grants and contracts, which is substantial and reflects habitat restoration funding, the majority of which is passed through to contractors. Other line items have been increased or decreased slightly based on the review of the current budget and organizational need. Joe Bertram, financial officer, reiterated that most of the change in the budget is in the grants and contracts line. Crane reviewed that the large funding programs require that we predict how much funding will be passed through to partners. The deficit in past years is a result of overestimating the amount of pass-through funding that will be spent within the fiscal year. Funds are received on a reimbursable basis based on expenses incurred on the restoration projects. Thus, variances in this area don’t affect other elements of the Commission’s budget, such as personnel. With more experience with these programs, we are improving the accuracy of predictions on expenses and revenue in these areas. Predicting expenditures can be challenging as on-the-ground projects are affected by weather, contracts, capacity of local partners, and other factors. Finance Committee member Jody
Peacock asked whether the Commission has ever spent up to $12 million and whether the pass-through funding is affecting other areas of the Commission's budget. He also asked about the performance of the Commission's reserve funds. Crane responded that reserve fund performance has declined a little, but has been relatively constant. Chairman Allan noted that some reserve funds were used to hire the new chief information officer, which has helped leverage significant new funding for the Blue Accounting initiative. Commissioner Injerd supported receiving additional details about the grants and contracts budget line. There was also a question about the decline in cash reserves in FY '14 and '15. Crane noted that this was due to withdrawals to support hiring the new chief information officer that were pre-approved by the Board. The proposed FY '17 budget will be balanced with no draw down on reserves. Chairman Allan suggested that the finance committee look at possibly returning funds to the reserve funds. Commissioner Stevens noted that the finance committee will be discussing the appropriate level of funds to keep in the reserve funds. Eder said this will be discussed, but it's hard to get a definitive opinion on this from financial advisers. Commissioner Stine asked for written notes from the finance committee's discussion and recommendations. This should reflect the budget to be approved by the Board and the intended outcomes. Eder committed to providing this information on the May 12 Board call.

4) Lead and Infrastructure Resolution: Chairman Allan reported that a subgroup met to focus on this and it was agreed to maintain a single resolution and focus on the broader issue of infrastructure. There continues to be discussion on this among some of the states. Vice Chair Stine noted that focusing on the lead and copper rule could be problematical for some states based on the financial commitments that this could infer. Recognizing the Great Lakes as a vital economic resource, he suggested focusing on the quality of the region’s infrastructure and the investments needed at the federal level. This could re-direct the tone of the resolution. A new draft of the resolution will be forthcoming.

5) New Approach to Washington, DC Meeting and Great Lakes Day: Eder reported that he is seeking the Board's approval to use a somewhat different itinerary for the semiannual meeting and Great Lakes Day in Washington in 2017. This relates to Commissioners’ interest in having more time in private session and also avoiding their Capitol Hill visits conflicting with those from the Healing Our Waters coalition. The plan would be for Hill visits to be conducted Tuesday with a private session for commissioners that evening, followed by the full public meeting session on Wednesday. Commissioner Peacock asked if the Commission considered partnering with other groups. Eder reported that the Commission collaborated with the HOW Coalition at the start of the GLRI to emphasize broad support for that program. This was valuable, but he has come to appreciate the value of the Commission having an independent voice and “brand.” Commissioner Peacock suggested collaborating with other groups. There was general support for this as well as the change in schedule to maintain a more independent profile for the Commission.

6) Presentation of Draft Strategic Plan: Eder reviewed that we have a solid draft strategic plan developed by a staff subgroup and is ready to share it with the states and provinces. The next step is to arrange jurisdiction-specific conference calls. Addition detail on objectives and actions will be added, but now is the time to secure input to inform the development of that next level of detail. Eder recommended that Board members invite the other commissioners from their jurisdiction to review the draft plan and contribute to the discussion. Eder welcomed comments on the draft plan, but otherwise would follow up with Board members to schedule these calls. He urged the Board members to share the draft with the members of their delegation, but he will also send it commissioners.

7) Protocol and Practices on Joint Sign-on Letters: Eder reviewed that on the last Board call it was asked how we decide when to sign on to joint communications. We only take positions on legislation when it is supported by an existing resolution. There are exceptions, such as last month when the Board was asked to support a joint letter with the Great Lakes Fishery Commission supporting legislation on the USGS Great Lakes Science Center, which is important to the Fishery Commission’s fishery management role. He noted that the Commission develops its own federal priorities statement, which is refined and translated into a one-page statement of common regional priorities with six other regional groups. On occasion we do joint letters with these groups on priorities support by a strong consensus, such as funding for the GLRI. There is no firm policy on this and Eder did not support setting a “hard and fast” policy, versus consulting with the Board on an ongoing basis. Joint statements are useful, but he recognizes the importance of the Commission maintaining an independent voice. Also, Congress wants to see the region working together on Great Lakes priorities, so it is balancing act. There was general support for this
approach. Commissioner Zelazny cautioned that the governors’ Washington DC offices focus on legislation, and the Commission should focus on larger principles that we want to see in legislation affecting the Great Lakes. Commissioner Injerd cautioned against diluting our message by joining with other groups, some of which may take positions that are inconsistent with the Commission or its member states.

8) Next Call: The next Board call is scheduled for Thursday, May 12 at 3:00 p.m. Eastern.

The meeting adjourned at 5:00 p.m.

Respectfully submitted,

Tim A. Eder
Executive Director

/md
The meeting was called to order at 3:00 p.m. EDT by Jon Allan, Chairman. The following members were present:

- Dan Injerd, Illinois
- Jon Allan, Michigan
- John Linc Stine, Minnesota
- Don Zelazny, New York
- Mike Bailey, Ohio
- Tim Bruno, Pennsylvania
- Eric Marquis, Quebec
- Pat Stevens, Steve Galarneau, Wisconsin

Staff present: Tim Eder, Tom Crane, Steve Cole, Joe Bertram, Heather Braun, Victoria Pebbles, and Matt Doss.

1) **Introductions and Call Objectives:** Chairman Allan welcomed everyone to the call and reviewed the agenda. There were no comments or additions and the meeting agenda was approved.

2) **Minutes:** Chairman Allan invited a motion to approve the minutes from the April 18, 2016, Board call. The motion was made by Minnesota and seconded by Illinois, and the minutes were approved by unanimous consent as submitted.

3) **FY 2017 Budget:** Chairman Allan noted the need to approve the Commission’s budget 45 days in advance, and that several meetings of the finance committee have been held. He asked if the finance committee members or staff wished to add anything before calling the question. Executive Director Eder noted the materials on the budget that were provided in advance of the call. He also noted that there would be a presentation later in the call on a project with a very large contracts line, and that summaries would be provided for every revenue stream in the Commission’s budget. Chairman Allan asked if the finance committee wished to see a summary for each revenue stream, or just those above a certain amount. Commissioners supported having summaries for all revenue streams. The geographic source of grants and contracts was noted to be of interest. Chairman Allan called for a motion to approve the budget. New York offered this motion, which was seconded by Minnesota. There was no discussion. The motion was approved unanimously by voice vote. Chairman Allan thanked the finance committee for their hard work.

Executive Director Eder noted that the process for managing the Commission’s reserved funds remained to be discussed. He said that a solid process is in place and suggested this could wait until after the new strategic plan is approved.

4) **Infrastructure Resolution:** Chairman Allan noted that the revised infrastructure resolution has been circulated for review and asked the Board members if there were any comments or feedback from their jurisdictions. Commissioner Stine noted the need to revise the first “be it further resolved” clause to change “incorporating” to “addressing” the recommendations of the National Drinking Water Advisory Council. Executive Director Eder noted this oversight and said this change will be made. Commissioner Stine thanked staff for clarifying that the resolution is about the overall value of drinking water infrastructure in the region. He expressed interest in a future resolution on wastewater infrastructure. Executive Director Eder called for input on convening a special meeting of the Commission, possibly in July with 60 days notice. Commissioner Injerd suggested that this just be put on the agenda for the annual meeting in October. Chairman Allan noted that the Commissioners were told at the last meeting that we would hold a special meeting to finalize the resolution. Commissioner Zelazny noted that we also intended to respond to U.S. EPA Administrator McCarthy’s remarks at our meeting about leading a special effort on this topic within her agency. Commissioner Bruno asked about the timeframe for the workgroup.
Executive Director Eder responded that we would move as quickly as possible to convene the workgroup. He confirmed that there was no opposition to convening a special meeting of the Commission in July and said he would move forward to schedule it. He suggested that we could provide until the June Board meeting to review the draft resolution, after which it would go out to the full Commission. Commissioner Zelazny conveyed input he received to make the focus of the workgroup more specific.

5) Legislative Update: Executive Director Eder noted that a Water Resources Development Act (WRDA) is moving in the U.S. Senate. There are navigation provisions but no provisions related to Asian carp or the Chicago Area Waterway System (CAWS). Executive Director Eder noted that the CAWS Advisory Committee made recommendations for continued studies on a long-term solution. While the Army Corps of Engineers does not need any new authorities to do this, it may still be valuable to have language in the bill or report language conveying Congressional interest in this issue. Executive Director Eder will consult with Commissioners on this before taking any action. The Commission already has ample policy on the navigation and Soo lock issues so can weigh in on these issues. The other major legislative issue relates to reauthorization of the Great Lakes Fish and Wildlife Restoration Act. We have supported this in the past via our annual federal priorities statement, but not in a stand-alone resolution. Thus, Executive Director Eder suggested we could propose a resolution on this at the upcoming special meeting of the full Commission. Chairman Allan asked for input from the Board on supporting legislation reauthorizing the act. It was noted that the Great Lakes Fishery Commission, Ducks Unlimited, and other groups are supporting this. Chairman Allan raised the possibility of doing a joint endorsement with the Great Lakes Fishery Commission. There was support for this. He asked staff to prepare a recommendation to the Board, which members could review with their natural resources agencies.

6) Program Update – GLC’s Partnership with NOAA to Restore Habitat in AOCs: Executive Director Eder introduced Heather Braun, who was hired in 2009 after the Commission received a large NOAA grant under the American Recovery and Reinvestment Act to support habitat restoration in the Muskegon Lake AOC. It is a unique program, and also a very large element of the Commission’s budget. It is run with an efficient staff effort since so much of the funding is passed through to local implementation partners. It is important that the Board understand the Commission’s capacity to implement large programs in an efficient manner that is closely linked with the needs of the states. Factsheets and a brief powerpoint presentation were provided by Braun. She emphasized that this work grows out of a long history of support for AOC restoration efforts, which involve addressing fish and wildlife impairments. However, this also advances a broader aim to support economic revitalization in the AOCs. The current NOAA partnership began in 2013 and involves work in three AOCs on a variety of projects with multiple partners. The agreement has a $30 million cap, which we have nearly achieved. The majority of the implementation work is being done this year. Our job is to serve and provide capacity to the states and NOAA on projects identified by the states, NOAA and U.S. EPA. We manage awards with local partners, manage communications, and handle administrative and reporting responsibilities. She reviewed the work underway in the three AOCs: St. Marys River, Buffalo River, and Muskegon Lake (see slides and handouts for this information). She noted that we are establishing a new regional partnership with NOAA with funding beginning this year and likely to go for several years. This likely will include continued work in the Muskegon Lake AOC and possibly in AOCs in New York and Ohio, with the possibility to support AOC-related habitat restoration work anywhere it is needed. Commissioners Allan and Zelazny emphasized the value and success of the Commission’s support for habitat restoration projects in their states’ AOCs, stating that they could not do the work without the Commission’s support.

7) Next Call: The next Board call is scheduled for Thursday, June 16 at 3:00 p.m. Eastern.

The meeting adjourned at 4:00 p.m.

Respectfully submitted,

Tim A. Eder
Executive Director

/md
The meeting was called to order at 3:00 p.m. EDT by Jon Allan, Chairman. The following members were present:

- Dan Injerd, Illinois
- Kay Nelson, Indiana
- Jon Allan, Michigan
- John Linc Stine, Minnesota
- Don Zelazny, Jim Tierney, New York
- Mike Bailey, Ohio
- Tim Bruno, Pennsylvania
- Eric Marquis, Quebec
- Pat Stevens, Steve Galarneau, Wisconsin

Staff present: Tim Eder, Tom Crane, Victoria Pebbles, and Matt Doss.

1) **Introductions and Call Objectives**: Chairman Allan welcomed everyone to the call and reviewed the agenda. There were no comments or additions and the meeting agenda was approved.

2) **Minutes**: Chairman Allan invited a motion to approve the minutes from the May 12, 2016, Board call. The motion was made by Minnesota and seconded by Indiana, and the minutes were approved by unanimous consent as submitted.

3) **Infrastructure Resolution and July 27 Special Meeting**: Commission Executive Director Eder reviewed that a working group was formed to work on a water infrastructure resolution, including drinking water, that was tabled at the semiannual meeting in Washington in February. A revised draft resolution was distributed to the Board that focuses more on water infrastructure, with less emphasis on lead in drinking water. The draft resolution is in good shape and he would like to send it out next week, 30 days in advance of the special Commission meeting on July 27. The resolution outlines what the working group will take on first, but there is a need to further refine the charge to the group in advance of the July 27 meeting. Chairman Allan asked if any Board members have any major issues with the current draft resolution. Commissioner Stine said his concerns were resolved, but he thought Commissioner Butler had some concerns about the amount of material in the resolution related to lead and the situation in Flint, Michigan. Chairman Allan wasn’t sure if these concerns had been addressed. Eder said they were not, since the resolution went out before Commissioner Butler’s comments were received. Commissioner Bailey committed to following up with Commissioner Butler to see if he has any specific language changes to suggest. It was noted that the resolution doesn’t call for specific actions related to lead in drinking water, but calls for further consideration of broader actions to address water-related infrastructure.

Commissioner Injerd noted that Commissioner Butler’s comments parallel his comments, and he still agrees that much of the resolution still deals with lead vs. broader infrastructure issues. He felt it is better off focusing on infrastructure vs. lead. Chairman Allan emphasized the need to get the draft resolution out within 30 days of the special meeting. Eder restated the intention of staff to focus work in the future on infrastructure and not on lead, and welcomed final input on how to best structure the resolution. Eder asked for any additional comments as soon as possible.

Eder turned to the resolution related to reauthorization of the Great Lakes Fish and Wildlife Restoration Act. Eder noted that we have supported funding and reauthorization of this Act in the past, but don’t have a formal resolution on the books. He suggested it would be good to adopt a resolution supporting this so staff are able to take action and communicate with Congress, noting that a bill has been introduced in the Senate. It may not be essential to act on this in July, but it would be good to do so to give staff direction. Chairman Allan noted that he hasn’t been able to review the resolution, but Michigan certainly
supports this in concept. He invited input from the Board members. Commissioner Tierney expressed support for the resolution. Commissioner Nelson doesn't have concerns for supporting it in principle, but she has not heard back from agency staff. A similar response was conveyed by commissioners from Illinois, Ohio, Wisconsin, and Minnesota. Eder noted that generally the Commission doesn’t formally endorse a specific bill, in case it is changed in the course of the legislative process, but conveys support for what is desired in legislation. Eder asked for comments by next Friday, June 24, after which any changes can be made and the resolution sent out.

4) **Annual Meeting, October in Toronto:** Eder reported that there are a number of options still open for the annual meeting agenda, including speaker options that are under discussion with the Ontario delegation, with whom we are meeting next week. He also noted the release this week from the Conference of Great Lakes and St. Lawrence Governors and Premiers of the maritime strategy and regional economic report. These, together with climate change issues and Great Lakes programs of the Province of Ontario, will be a major focus of the meeting. These themes and an agenda outline were presented in the memo sent to the Board. We are open to suggestions. Chairman Allan noted that a strong focus on economic and maritime issues is appropriate given the materials coming out this week. He liked crafting the Commission’s place within this context. Commissioner Marquis noted that Quebec and Indiana will chair the new maritime entity, so one of them could present on this. He suggested that the review of the Great Lakes and St. Lawrence River economy should not focus solely on a single trade corridor (U.S.-Ontario) and should include U.S-Quebec trade. He noted the BMO report released this week takes a broader perspective on trade patterns. He urged the Commission to maintain a regional perspective on trade and the economy. Chairman Allan welcomed perspectives on economic trends related to water, water innovation, and related issues. Eder invited input on other topics, such as climate change, resiliency to impacts on cities, agriculture, and best practices in this area. Chairman Allan noted they will be investing considerable resources in helping coastal communities increase resiliency to impacts from climate change and associated issues. There’s a real local planning component that needs to be addressed in a resiliency framework. Chairman Allan invited continued input on the agenda for the annual meeting. Eder said that he hopes to get agenda plans locked in relatively soon, including reaching out to potential speakers. He also welcomed requests for resolution topics.

5) **Previous Resolutions Report:** Eder noted the work of the workgroup that was formed to review resolutions adopted ten years ago in Duluth. Tom Crane reviewed the action item adopted in February to review resolutions that are ten years old and consider rescinding or updating them. The workgroup met and reviewed the four resolutions and the unanimous consensus was to recommend rescinding all of them. The rationale was conveyed in the memo sent to the Board. It is believed that in all cases the resolved clauses have been achieved or that they are superseded by more recent resolutions. Commissioners Galarneau and Stevens were on the call and were invited to add additional comments; they had none. There was consensus among the subgroup that everything called for in the resolutions had been accomplished or superseded by subsequent resolutions. Commissioner Nelson asked if we should celebrate accomplishing the aims of the resolutions. Chairman Allan and Eder agreed that we should acknowledge our successes and we can do this when this decision is taken at the meeting. Chairman Allan urged that this be noted as part of the report out from the annual meeting.

6) **Update on Strategic Planning:** Eder reported that we are in the midst of conducting meetings and calls with all ten of the jurisdictions, with seven completed and three remaining. They have gone very well so far and we have received good input. We’ve had good discussions, with no real surprises. We are taking careful notes and summarizing key points, and will report back to the Board. In the recent call with the Minnesota delegation it was noted that our work on oil transportation was not represented. This will be added in. Emerging issues will be removed as a separate program area, but we will recognize the strategic plan as a living document that will be reviewed annually to look for new issues that need to be addressed. We will add a new program area for information management and Blue Accounting, which is where oil transportation will be slotted in, recognizing that this isn’t a perfect fit. We will be coming back to the Board in July and August, and we hope to have the plan approved by the Board in advance of the Ontario meeting. Eder said that he preferred not refine and wordsmith this at the Toronto meeting, although he does want the Board to have the opportunity to review the final document with their delegations. Chairman Allan supported this approach. He thanked Eder for taking the time to listen to commissioners and reflect on the priorities of each of the states and provinces. He asked that, eventually, it have a strong
“look and feel,” to convey what the Commission is about and reflect the weight of its work. Commissioner Marquis thanked the Commission staff for taking the time to speak with each delegation. Eder said it has been worth the time and helped emphasize what’s important for the states and provinces. Chairman Allan said the document will help craft similar documents in agencies and departments whose work overlaps with the Commission.

7) **Action Items:** Eder reviewed action items:
   - Submit comments and suggestions on the water infrastructure resolution to Eder as soon as possible;
   - Submit comments to Eder on the Great Lakes Fish and Wildlife Restoration Act resolution by next Friday, June 24;
   - Work with Eder to link Commission staff with appropriate state agency staff who can contribute to the infrastructure working group.

8) **Next Call:** The next Board call is scheduled for Thursday, July 21 at 3:00 p.m. Eastern.

The meeting adjourned at 4:00 p.m.

Respectfully submitted,

Tim A. Eder
Executive Director

/md
The meeting was called to order at 3:00 p.m. EDT by Jon Allan, Chairman. The following members were present:

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<td>Dan Injerd</td>
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<td>Jody Peacock</td>
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<td>Jon Allan</td>
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Staff present: Tim Eder, Victoria Pebbles, and Matt Doss.

1) **Introductions and Call Objectives**: Chairman Allan welcomed everyone to the call and reviewed the agenda. There were no comments or additions and the meeting agenda was accepted.

2) **Minutes**: Chairman Allan invited a motion to approve the minutes from the June 16, 2016, Board call. The motion was made and seconded and the minutes were approved by unanimous consent as submitted.

3) **Strategic Plan**: Eder reviewed the series of meetings held with each of the GLC’s jurisdictions. These were extremely valuable and staff appreciated the time commissioners took for these discussions. The input was valuable for both the strategic plan and the broader role and activities of the Commission. The input was summarized in a memo to the Board. Since then we have completed a full draft strategic plan with seven program areas, each with a problem and opportunity statement, objective, and draft strategic actions. He noted the schedule that was outlined, which works backwards from the Sept. 15 Board call when the plan will be adopted. We are asking for the next round of comments by Aug. 2, with the second full draft back to the Board by Aug. 12. We feel good about the draft plan, but look forward to reactions from the Board. Sept. 2 is the final deadline for comments on the final draft of the strategic plan. Chairman Allan asked that a reminder be sent to the Board around Aug. 5. Eder noted that we have not built in much time for comments from the GLC’s observers. He asked if the Board would approve sending the current draft plan to observers so they have adequate time to review it. Commissioner Zelazny asked if there is anything in the draft plan that might be controversial. Eder responded that he didn’t think anything is controversial. Commissioner Peacock asked for time for his delegation to review and comment on the draft plan before circulating it to outside parties. Further action will wait pending additional review and input from the Board and their delegations, although Eder will decide if there is sufficient acceptance and minimal comments from the Board and commissioners to send the revised draft plan to observers.

4) **Special Meeting, July 27, and Annual Meeting, October in Toronto**: Eder reviewed plans for the annual meeting in Toronto. The first draft agenda was sent to the Board on Monday, which includes a major focus on the regional economy, the report from BMO Harris, the new Maritime Strategy, reports on Ontario’s Great Lakes Protection Act, and climate change. Speakers have been invited and we are awaiting confirmations. Chairman Allan asked for input from the Board members; there were no comments. He also invited suggestions for resolutions that staff can develop. Eder noted the only current resolution option relates to microbeads, which was raised by Ontario. We could also have a resolution on the new maritime strategy. Chairman Allan noted that there has already been microbead legislation passed at the federal level in the U.S. side and in some states, so he was unclear what this resolution would look like. This will be taken under consideration.
5) **St. Marys River Dredging Letter to the Corps:** Chairman Allan reviewed that the St. Marys River was identified by the Governors/Premiers Maritime Task Force as a critical choke point for commercial navigation, and there was support in it for studying additional dredging to deepen the channel in this area. The GLC submitted a non-binding letter to the Corps supporting a study of this, and offering that the GLC would consider as nonfederal sponsor. Commissioner Injerd expressed concern about this letter being sent without discussion with the Board. He noted that Illinois has not signed any similar letters to the Corps due to their budget situation as well as concerns about the Corps’ business model. He asked whether the GLC has been a nonfederal sponsor to a Corps project and what the criteria is for signing such letters. Eder noted that the Corps contacted Chairman Allan and was under duress and needed the letter quickly, so we made the decision to move forward with the letter. It is a nonbinding letter. The project is important to the region and the shipping industry, which continually emphasizes the challenge of maintaining adequate depth in navigation channels. Thus, we may approach the industry to help generate the cost share for the study. The Corps has indicated that this is possible. Previously, the Corps said they needed to work with a government entity rather than an industry group. Chair Allan emphasized that it was his decision to sign the letter, since he felt it was important and time sensitive. Commissioner Stine stated that he doesn’t think signing a non-binding letter stating the GLC’s willingness to consider being a project sponsor is a problem. He asked if it is possible for another entity to be the project sponsor. Chairman Allan said that it was his understanding the Corps needs a unit of government to be the sponsor and cannot accept a private industry as the sponsor. It was asked if Michigan could have been the sponsor. Chairman Allan responded that the feeling is that the project would support the maritime system as a whole, emphasizing the interdependence of the system region-wide. Commissioner Peacock asked about the process for agreeing to such letters such and suggested that this be addressed as part of the strategic plan process. Indiana often feels out of the loop. Commissioner Bruno noted that sometimes the Corps will present a mandate with a quick response, but he felt that something of this nature warrants discussion with the Board. Chairman Allan noted the will of the group for further discussion and suggested that a separate call be arranged to discuss this further with the Board. Eder committed to work with Chairman Allan and Commissioner Injerd to explore dates for a call on this. Commissioner Injerd emphasized that there are a lot of issues associated with being a nonfederal sponsor, so this could be a long discussion. Eder noted that there can be further conversations with the Corps if the project is included in the president’s budget, with a decision later on whether to proceed to be the nonfederal sponsor.

6) **National Coastal Geo Mapping:** Commissioner Bruno noted that he had forwarded to Chairman Allan a report from Interagency Working Group on Ocean and Coastal Mapping, under the National Ocean Council, on setting a national strategy on coastal mapping. He noted that Pennsylvania has devoted nearly $1 M to acquire geospatial data for their coastline. He suggested we examine what the states are doing in this area, document this in a white paper, identify strengths and weaknesses, and assess ways to strengthen the process and potentially save funding through a common strategy. Commissioner Stine liked the idea of an assessment of the current state of affairs among the states related to acquiring geospatial data; this is the right first step. This can inform a decision on the GLC engaging in additional work in this area. Commissioner Bruno said this should also involve the federal agencies and their work in this area. Eder asked for next steps on this task. Commissioner Ware supported clarifying issues in this area. Commissioner Bruno suggested an initial conference call followed by a workshop to generate a spreadsheet summarizing geospatial data being collected among the states. Eder suggested that the Board members identify the appropriate technical staff to participate and asked Commissioner Bruno to help him frame the issue. Commissioner Injerd expressed interest. Commissioner Bruno outlined the purpose and process: get down on paper what people are doing; identify gaps and opportunities; and develop a coordinated plan for moving forward to collect data. It was suggested that this is consistent with the aims of the Blue Accounting initiative and the nearshore framework being developed under the Great Lakes Water Quality Agreement. Bruno noted that many entities are doing different things in this area for different purposes; we need to assess what is done for the purposes of the states and what more might be needed.

7) **Legislative Update:** Eder briefly summarized that Congress is now on recess, but has appropriations in various stages, with the GLRI likely to be funded at $300 million. Legislation to strengthen policies related to the importation of non-native species has been introduced.
8) **Next Call:** The next Board call is scheduled for Thursday, August 18 at 3:00 p.m. Eastern.

The meeting adjourned at 4:05 p.m.

Respectfully submitted,

Tim A. Eder
Executive Director

/md
The meeting was called to order at 3:00 p.m. EDT by Jon Allan, Chairman. The following members were present:

Dan Injerd, Ben Brockschmidt - Illinois
Jody Peacock, Dan Schmidt, Kay Nelson - Indiana
Jon Allan, Emily Finnel - Michigan
John Linc Stine - Minnesota
Don Zelazny - New York
Andy Ware, Karl Gebhardt - Ohio
Bill Carr, Ranissah Samah - Ontario
Tim Bruno - Pennsylvania
Eric Marquis - Quebec
Pat Stevens, Steve Galarneau - Wisconsin

Staff present: Tim Eder, Tom Crane, Victoria Pebbles, Steve Cole, Matt Doss, Beth Wanamaker

1) **Introductions and Call Objectives:** Chairman Allan reviewed the agenda, which was approved.

2) **Minutes:** Minutes from the July 21, 2016 Board call were approved by unanimous consent. Eder and commissioners agreed that future minutes should be shortened as long as necessary context is not lost.

3) **Strategic Plan:** Allan noted that Indiana submitted extensive comments on the draft Strategic Plan immediately prior to the call. Eder noted many jurisdictions have also submitted comments, which were incorporated into the most recent version. He also noted that the current schedule called for sending the Strategic Plan for review to Observers the next day, with a goal of operationalizing the Plan by the Annual Meeting.

Schmidt spoke about Indiana’s written comments, which included questions on the value proposition and mission for the Great Lakes Commission. Schmidt said he was not sure if all of Indiana’s comments could be addressed by the Annual Meeting. He noted he would like to see comments made by other jurisdictions.

Injerd noted that Indiana’s comments will necessarily extend the conversation over the Strategic Plan. He said he was not concerned about reaching approval of the Strategic Plan by the Annual Meeting. Injerd said that the Commission would benefit from having a thoughtful conversation about where it wants to be and how to get there.

Stine noted that a conversation on such issues was important to have, but he does not want to keep it open-ended in terms of time. He also noted that with a new administration taking over, the Commission needs to be able to speak clearly about its mission.

Galarneau suggested the Board might proceed with current Plan, and separately flush out conversation about the mission and value proposition of the Commission.

Eder noted that it is not possible for the Commission to address all of Indiana’s comments by the fall. He emphasized that reaching consensus on the Strategic Plan is critical.

Schmidt suggested taking two weeks to review Indiana and other jurisdictions’ comments and holding an additional call to review them before the next Board meeting.
Allan agreed with holding an interim call on Thursday, September 1. Eder said he would hold off on sending the current plan to Observers and put comments and other feedback received from jurisdictions on a password-protected website for Board members to review.

4) Annual Meeting, October in Toronto:

Eder moved to resolutions in the interest of time. He reminded the Board that they will now review all 10-year-old resolutions, with a goal of sunsetting redundant or out-of-date resolutions.

Eder noted there are two resolutions currently under consideration: one promoting integrated water infrastructure and another endorsing the governors' and premiers' recently released maritime strategy and previewing how the Commission can support its implementation. Eder noted that the governors and premiers have tasked the Commission with developing an online maritime jobs portal and updating the maritime asset inventory, in coordination with the Commission’s Blue Accounting initiative.

A potential third resolution concerned microbeads in the Great Lakes. Eder recommended that the Commission review where it can be helpful and add value in that space before drafting a resolution. Allan suggested looking at how U.S. and Canadian laws compare and how they can be harmonized.

The Board approved moving forward with sunsetting the 2006 resolutions, as well as drafting the integrated water management and maritime strategy resolutions.

5) Letter to EPA – GLRI Capacity Grants:

Allan noted that many commissioners have been involved in drafting a letter to U.S. EPA on state capacity grants for supporting the GLRI and other Great Lakes programs. Eder noted that a draft was circulated to the Board and a conference call was held, and Cam Davis suggested that the letter be addressed to the U.S. EPA Administrator Gina McCarthy (copied to Cam Davis, Tinka Hyde, Chris Korleski, and Stan Meiburg) because of staff changes at the U.S. EPA office in Chicago.

Nelson asked who from Indiana had participated in the conversation – Tim noted that Bruno Pigott had been invited but did not participate. Nelson asked if everyone has reviewed the document; Eder responded that the document has been sent to the Board twice.

Allan noted that U.S. EPA is waiting for the letter, and that certain states are stressed waiting for the funds. Eder noted that the letter calls for an increase of only $2.2 million across the states.

Conceptual approval was received.

6) Legislative Update:

Eder noted that the Water Resources Development Act (WRDA) continues to move in Congress, as well as the Great Lakes Restoration Initiative (GLRI) and the Great Lakes Fish & Wildlife Restoration Act.

Eder further noted that the U.S. House is moving a slimmed down WRDA and the Senate is moving a more comprehensive version. He said that due to the short legislative session, it is unclear whether it will pass. Eder noted that the GLRI has passed the full House and the Senate Environment and Public Works Committee, with the Senate version also inserted into its WRDA bill. He noted that two years ago the GLRI passed the House during lame duck but was not approved by the Senate. Eder said the Great Lakes Fish & Wildlife Restoration Act may also be inserted into WRDA, but is unlikely to warrant independent Congressional action.

Eder also noted that the Commission will be watching appropriations – both the House and Senate have approved $50 million above the President's request for the GLRI – as well as the Clean Water Revolving Fund.
Eder noted that GLC Policy Director Matt Doss was traveling, but offered to send a more detailed legislative update to anyone interested.

7) **Next Call:** The next Board calls are scheduled for Thursday, Sept 1 and Sept. 15 at 3:00 p.m. Eastern.

The meeting adjourned at 4:03 p.m.

Respectfully submitted,

Tim A. Eder
Executive Director

/bw
Great Lakes Commission  
Board of Directors  
Conference Call Minutes  
September 1, 2016

The meeting was called to order at 11:00 a.m. EDT by Jon Allan, Chairman. The following members were present:

- Dan Injerd, Ben Brockschmidt - Illinois
- Kay Nelson - Indiana
- Jon Allan, Emily Finnell - Michigan
- John Linc Stine - Minnesota
- Jim Tierney - New York
- Andy Ware, Karl Gebhardt - Ohio
- Bill Carr - Ontario
- Eric Marquis - Quebec
- Tim Bruno - Pennsylvania
- Pat Stevens, Steve Galarneau - Wisconsin

Staff present: Tim Eder, Tom Crane, Victoria Pebbles, Steve Cole, Matt Doss, Beth Wanamaker

1) **Introductions and Call Objectives:** Eder noted that the agenda included reviewing the process for the Strategic Plan and the proposed letter to Congress on end-of-term priorities.

2) **Strategic Plan process and updates:** After conversation, there was consensus among the Board for moving forward with a bifurcated process and a flexible, dynamic Strategic Plan. Allan called for having a strategic planning session (retreat) with the Board in December and dedicating part of the March meeting with Commissioners to a closed session and further discussions of plan implementation. There were also calls for more interaction with the full Commission, rather than just the Board, on the Strategic Plan and other issues.

   Eder proposed presenting a timetable for completing the Strategic Plan, a framework for discussion on process questions for the Commission, and guidelines for better inclusion of the full Commission at the October 6 dinner meeting in Toronto.

   Allan reiterated that staff and the Board very carefully considered Indiana’s comments and thanked the delegation for their work.

3) **Letter to Congress on Priorities:** Allan opened conversation on the letter by noting that there are no issues included in it on which the Commission has not already taken a position. Eder agreed that all items have a history of recent Commission action, with the exception of the numbers articulated for funding of Great Lakes programs. He noted GLC staff included those based on funding in the President’s budget or either House or Senate numbers. He noted that Matt Doss, GLC Policy Director, has put together documentation for each of the items listed if Board members or Commissioners are interested. He also noted that there are a limited number of days left in the term this year so getting an omnibus letter of Great Lakes priorities in front of Congress as soon as possible is advisable.

The meeting adjourned at 12:00 p.m.

Respectfully submitted,

Tim A. Eder, Executive Director

/bw
Action Items

• **Action Item – Act to rescind the four resolutions passed at the October 2006 Annual Meeting in Duluth, Minnesota based upon the recommendation of the resolutions review committee:** At its 2016 Semiannual meeting in February, 2016 the Great Lakes Commission passed an action item that established a process for reviewing resolutions of the Great Lakes Commission upon the ten-year anniversary and deciding whether those resolutions should be retained (stand as originally passed), updated, or rescinded. In March, Chairman Allan appointed a committee of five commissioners to work with the Commission staff to review the resolutions passed at the 2006 Annual Meeting and to recommend to the Board a suggested action for each resolution. The resolutions review committee met via conference call on May 6. A memorandum that describes the resolution review process, copies of the four resolutions that were reviewed and the rationale for the recommendation to rescind the four resolutions is included in this section of the briefing book.

• **Resolution – Endorsing and supporting implementation of the Governors’ and Premiers’ Maritime Strategy:** The resolution endorses and pledges the Commission’s support for the regional maritime strategy developed by the Conference of Great Lakes and St. Lawrence Governors and Premiers, and in the short term commits the Commission to establish a maritime careers portal, maintain the maritime asset inventory, and as appropriate, manage data and information to track progress in implementing the strategy in alignment with the Blue Accounting initiative. It calls on its member states and provinces, the U.S. and Canadian federal governments, and partners in the maritime industry to support implementation of the strategy, where appropriate.

• **Resolution – Providing and maintaining clean water infrastructure and services in the Great Lakes Basin**

    **Note to Commissioners:** This resolution is still under active discussion with staff and the Board so what follows is very much a draft. It is likely that you will be presented with a substitute version in Toronto that is much more streamlined. You are encouraged to review this and consult with your delegation chair with comments and input.

    The draft resolution calls on the U.S. and Canadian federal governments to increase water infrastructure funding to states and provinces; modify laws and policies, as needed, to ensure that funding and investments are prioritized based on regional risks and needs; and provide flexibility and authority to states, provinces and cities to implement creative solutions with multisector partners. It states that investments should be focused on existing infrastructure as well as green infrastructure and other approaches to address current and projected stressors on water infrastructure systems. It calls on the GLC to expand the scope of the working group (previously called for by the Commission) to consider all clean water infrastructure (i.e., wastewater, stormwater and drinking water infrastructure) and to provide advice to guide staff in preparing a report on the state of water infrastructure in the Great Lakes-St. Lawrence River basin.
To: Great Lakes Commission Board of Directors
Fr: Tom Crane, Deputy Director
Re: Report of the Resolutions Review Committee and recommended actions for the resolutions passed at the 2006 Annual Meeting of the GLC
Da: June 7, 2016

At its 2016 Semiannual meeting in February the Great Lakes Commission passed an action item that established a process for reviewing resolutions of the Great Lakes Commission upon the 10 year anniversary and deciding whether those resolutions should be retained (stand as originally passed), updated or rescinded. The memo describing the resolution review process is attached.

In March, Chairman Allan appointed a committee of five commissioners to work with the Commission staff to review the resolutions passed at the 2006 Annual Meeting and recommend to the Board a suggested action for each resolution.

The resolutions review committee met via conference call on May 6. The following is a brief summary of that call and the recommended actions for each resolution reviewed.

The Commissioners present on the call were: Ian Davison (MI), Jennifer Schultz (MN), Steve Galarneau (WI) and Patrick Stevens (WI). Commissioners Injerd (IL) and Carr (ONT) were unable to attend the call.

Tom Crane, Deputy Director convened the call and explained the resolution review process and the charge to the committee.

There were four resolutions passed at the 2006 Annual Meeting held October 6-7 in Duluth, MN. The resolutions are:

- Great Lakes Commission Support for Reauthorization of the Farm Security and Rural Investment Act of 2002 (Farm Bill)
- Great Lakes Commission Support for Lacey Act Listing of the Silver, Largescale Silver, Bighead and Black Carp as Injurious Species
- Great Lakes Commission Support for the Great Lakes-St. Lawrence River Sustainable Water Resources Agreement and Great Lakes-St. Lawrence River Basin Water Resources Compact
- Great Lakes Commission Support for the Great Ships Initiative
The Resolutions Review Committee briefly discussed each resolution and asked a few questions regarding the genesis of the resolutions, whether the purpose of the resolution had been accomplished and the staff perspective on each of them.

The following describes the recommendations of the Resolutions Review Committee and the rationale for the recommendation:

**Great Lakes Commission Support for Reauthorization of the Farm Security and Rural Investment Act of 2002 (Farm Bill)**

**Recommendation:** Rescind resolution

**Rationale:** The reauthorization of the Farm Bill was accomplished in 2008. The Great Lakes Basin Program for Soil Erosion and Sediment Control was reauthorized in the 2008 Farm Bill. Additional Commission resolutions addressing the importance of conservation programs for water quality improvement, nutrient reduction and harmful algal blooms (HABs) were passed in 2007, 2011, 2013, 2014 and 2015.

**Great Lakes Commission Support for Lacey Act Listing of the Silver, Largescale Silver, Bighead and Black Carp as Injurious Species**

**Recommendation:** Rescind resolution

**Rationale:** The listing of the Asian Carp as injurious species has been accomplished. The Bighead Carp was listed through legislation passed in 2010 (Federal Register published in March 2011) and the U.S. FWS listed Black Carp and Silver and Largescale Silver Carp through two separate rule makings in 2007. These carp species are also prohibited in all of the Great Lakes states and provinces. The Commission also passed a more current Lacey Act related resolution at the last 2015 Annual Meeting.

**Great Lakes Commission Support for the Great Lakes-St. Lawrence River Sustainable Water Resources Agreement and Great Lakes-St. Lawrence River Basin Water Resources Compact**

**Recommendation:** Rescind resolution

**Rationale:** This resolution was passed prior to the ratification of the Compact which occurred in 2008. A second very similar resolution was passed at the 2008 Annual Meeting. Also, the Commission signed a Memorandum of Understanding (MOU) with the Council of Great Lakes Governors in 2009 which formally establishes the Commission’s role regarding the management of the Great Lakes-St. Lawrence River Regional Water Use Database.

**Great Lakes Commission Support for the Great Ships Initiative**

**Recommendation:** Rescind resolution

**Rationale:** All of the “resolved clauses” have been completed. Also, a follow-up resolution on the Great Ships Initiative was passed in 2011 which reiterates the Commission’s support for this effort.

Please let me know if you have questions about these recommendations from the Resolution Review Committee.
Resolution

Great Lakes Commission Support for Reauthorization of the Farm Security and Rural Investment Act of 2002 (Farm Bill)

Whereas, the 110th Congress is expected to reauthorize the Farm Bill, or Farm Security and Rural Investment Act of 2002 (P.L. 107-171); and

Whereas, authorities under the Conservation Title of the current Farm Bill are very important to help improve Great Lakes water quality by protecting wetlands, and reducing soil erosion and nonpoint source pollution; and

Whereas, the Farm Bill authorizes a specific Great Lakes regional conservation program, the Great Lakes Basin Program for Soil Erosion and Sediment Control, which has been a successful federal-state partnership improving Great Lakes water quality for more than a decade; and

Whereas, conservation programs under the Farm Bill provide technical assistance and financial incentives to land owners to help them mitigate the damages caused by erosion and nonpoint source pollution, which, if not mitigated, can reduce water quality, cause off-site impacts, degrade the environment and negatively impact the economy; and

Whereas, reducing sedimentation and erosion through Farm Bill programs can be an effective tool to help reduce the need for dredging to maintain navigation depths in Great Lakes tributaries; and

Whereas, the Great Lakes Regional Collaboration cited the Farm Bill as an important conservation management tool for improving habitat, protecting wetlands, reducing nonpoint source pollution and controlling soil erosion from agricultural lands; and

Whereas, Farm Bill conservation programs are important to accomplish the goals of the Great Lakes Water Quality Agreement, which is currently being reviewed by the governments of the United States and Canada.

Therefore, Be it Resolved, that the Great Lakes Commission acknowledges the progress that has been made to conserve and protect the soil, land and water resources of the Great Lakes-St. Lawrence River region through the current and past Farm Bill conservation programs and applauds the leadership of the U.S. Congress that is committed to continuing this progress by reauthorizing the Farm Bill; and

Be it Further Resolved, that the Great Lakes Commission supports strengthening the Conservation Title of the Farm Bill in order to further protect and improve Great Lakes water quality; and

Be it Further Resolved, that the Great Lakes Commission supports the need for Farm Bill programs that further the restoration goals of the Great Lakes Regional Collaboration and the Great Lakes Governors; and
Be it Further Resolved, that the Great Lakes Commission supports the reauthorization of the Wetland Reserve Program (WRP), the Environmental Quality Incentives Program (EQIP), the Conservation Reserve Program (CRP), the Conservation Reserve Enhancement Program (CREP), the Forestry Incentives Program (FIP), Wildlife Habitat Incentives Program (WHIP) and the Farmland Protection Program (FRP) as examples of programs that are valuable to the protection of land, soil and water resources in the Great Lakes-St. Lawrence basin; and

Be it Further Resolved, that the Great Lakes Commission urges Congress to reauthorize the Great Lakes Basin Program for Soil Erosion and Sediment Control as a specific Great Lakes program to improve water quality through the reduction of erosion and sedimentation; and

Be it Further Resolved, that the Great Lakes Commission urges Congress to provide adequate funding for the U.S. Department of Agriculture Natural Resource Conservation Service to provide technical and financial assistance to carry out environmental, natural resources and water quality protection programs under the Act; and

Be it Finally Resolved, that the Commission commits to working with its member states, the Council of Great Lakes Governors, the environmental and conservation community and other partners under the Great Lakes Regional Collaboration to ensure that the interests of the Great Lakes are adequately served and supported under the reauthorized Farm Bill.

Adopted by the Great Lakes Commission at its Annual Meeting, October 4, 2006, in Duluth, Minn.
Resolution Proposed for Sunsetting

Great Lakes Commission Support for Lacey Act Listing of the Silver, Largescale Silver, Bighead and Black Carp As Injurious Species

Whereas, species of Asian carp have been widely introduced from their native ranges of China and other Asian countries to the United States, for beneficial uses such as water quality improvement, removal of aquatic plants and animals or to improve fishery production; and

Whereas, species of priority concern including the silver, black and bighead carp, initially confined in the United States to aquaculture facilities in the lower Mississippi River, have escaped in the early 1990’s during periods of high precipitation and flooding; and

Whereas, the escape of these invasive fish species from confinement have allowed for self-sustaining reproducing populations to migrate through the Upper Mississippi and Illinois River systems with the potential to invade the Great Lakes given their close proximity to the Great Lakes with 22 rivers flowing into the lakes with suitable spawning habitat; and

Whereas, Asian carp threaten native fish and wildlife, including rare and endangered species, because of their rapid reproduction and growth patterns; opportunistic feeding habits in consuming primarily phytoplankton, as well as zooplankton, bacteria and detritus; and ability to degrade habitat through increased sediment suspension; and

Whereas, silver carp inhabiting the Mississippi and Illinois River systems cause substantial impacts to the health and welfare of human beings using these infested waterways primarily by their jumping habits in the vicinity of moving watercraft, causing injuries that include cuts from fins, black eyes, broken bones, back injuries and concussions; and

Whereas, populations of the silver and largescale silver carp, if introduced, are nearly impossible to control and ultimately eradicate, both technically and financially; and

Whereas, the U.S. Fish & Wildlife Service proposed a rule in September 2006 to list all forms of live silver carp (Hypophthalmichthys molitrix) and all forms of live largescale silver carp (Hypophthalmichthys harmandi) as injurious wildlife species under the Lacey Act (18 U.S.C. 32); and

Whereas, this proposed ruling is expected to have a minimal economic impact given the low commercial value of silver carp species which are not favored by commercial fishers due to their jumping behavior and are generally considered undesirable by consumers and sport fishers due to their unpalatability; and

Whereas, the best available information indicates that this ruling is necessary to protect public health and safety, water quality, fish and wildlife and associated habitat from the purposeful or accidental introduction and subsequent establishment of silver carp and largescale silver carp populations in ecosystems of the United States; and
Whereas, listing the silver carp and largescale silver carp as injurious under the Lacey Act would prohibit their importation and interstate transport unless permitted in certain exceptions or if the species is not living; and

Whereas, no final action has been taken on a proposal by the Fish and Wildlife Service in 2002 to list the black, bighead and silver carp as injurious species under the Lacey Act;

Therefore, Be It Resolved, that the Great Lakes Commission supports the U.S. Fish and Wildlife Service proposal, or action by Congress, to list the silver carp and largescale silver carp as injurious species under the Lacey Act; and

Be It Further Resolved, that the Great Lakes Commission encourages its member states to support the proposed Lacey Act listing of the silver carp and largescale silver carp in addition to supporting regulation of these species on a state specific basis; and

Be It Finally Resolved, that the Great Lakes Commission urges the U.S. Fish and Wildlife Service to finalize the 2002 proposal to add the bighead carp (Hypophthalmichthys nobilis) and black carp (Hypophthalmichthys piceus) to the list of injurious wildlife under the Lacey Act and advises its member states to also support the expanded listing.

Adopted by the Great Lakes Commission at its Annual Meeting, October 4, 2006, in Duluth, Minn.
Resolution

Great Lakes Commission Support for the Great Lakes-St. Lawrence River Sustainable Water Resources Agreement and Great Lakes-St. Lawrence River Basin Water Resources Compact

Whereas, on December 13, 2005 the Great Lakes Governors and Premiers signed the Great Lakes-St. Lawrence River Sustainable Water Resources Agreement (the "Agreement") and the Great Lakes-St. Lawrence River Basin Water Resources Compact (the "Compact") to help protect the region’s ecosystem by ensuring the sustainable use and management of the waters of the Great Lakes-St. Lawrence River; and

Whereas, the Agreement and the Compact reaffirm the commitment to the water management principles set forth in the Great Lakes Charter of 1985 and the Charter Annex of 2001, while recognizing that future diversions, withdrawals and consumptive uses have the potential to significantly impact the environment, the economy and the welfare of the region; and

Whereas, the Agreement and the Compact enable the States and Provinces to act together to protect, conserve, restore, improve and effectively manage the waters and water dependent resources of the region in a way that is durable, efficient and retains and respects state and provincial water management authority within the Great Lakes-St. Lawrence River region; and

Whereas, the Great Lakes Charter of 1985, Annex 2001, the Agreement and the Compact exemplify the strong regional commitment to protect, conserve, restore and improve the waters and water-dependent natural resources of the Great Lakes-St. Lawrence River Basin; and

Whereas, the Council of Great Lakes Governors is facilitating the implementation of the Agreement by assisting and supporting the states and provinces, including their efforts to adopt enabling legislation to meet the requirements of the accords; and

Whereas, the Agreement recognizes the importance of water management data and information and the value of developing a compatible base of water use information and commits the states and provinces to gather and annually share accurate and comparable information to better meet the water management needs of the region; and

Whereas, the Agreement and Compact outline procedures and potential benefits for water management data and information collection to assist in future decisionmaking regarding water withdrawals and uses; and

Whereas, the Great Lakes Commission was directed by the Great Lakes states and provinces in 1987 to create and manage the Great Lakes Regional Water Use Database providing for a uniform, consistent base of water use data to support implementation of the Great Lakes Charter; and
Whereas, the Great Lakes Regional Water Use Database, operational since 1988, is a valuable tool and an important resource to assist the states and provinces in water resources planning and decisionmaking under the Charter; and

Whereas, the Council of Great Lakes Governors, in its capacity as secretariat to the Great Lakes Regional Water Management Body created under the Agreement, and the Great Lakes Commission are working together to review the existing water use database and information support system to consider improvements that might be necessary to support regional water resources management requirements under the Agreement and Compact; and

Whereas, the Great Lakes Commission has organizational resources and staff expertise that may be called upon to serve the states and provinces as various provisions of the Agreement and Compact are implemented, including provisions calling for development of a stronger scientific basis for sound water management decision-making.

Therefore, Be it Resolved, that the Great Lakes Commission endorses the Great Lakes-St. Lawrence River Sustainable Water Resources Agreement and its companion Great Lakes-St. Lawrence River Basin Water Resources Compact and calls on legislative bodies in the Great Lakes states and provinces, as well as the United States Congress, to take prompt action to implement these accords into law; and

Be it Further Resolved, that the Great Lakes Commission encourages and supports the work of the states and provinces through the Regional Water Management Body to implement the Agreement and encourages efforts to develop the programmatic, information, scientific and legislative tools necessary to help protect the Great Lakes-St. Lawrence River Basin ecosystem; and

Be it Further Resolved, that the Great Lakes Commission supports initiatives to develop a compatible base of water use information to implement the Agreement and offers its assistance, expertise, resources and cooperation in building upon the current Great Lakes Regional Water Use Database; and

Be it Finally Resolved, that the Great Lakes Commission commits to managing and maintaining the Great Lakes Regional Water Use Database in the interim, and offers its expertise and resources to serve the states and provinces to meet the evolving needs of the region in the area of water use, science, conservation and sustainable management.

Adopted by the Great Lakes Commission at its Annual Meeting, October 4, 2006, in Duluth, Minn.
Resolution

Great Lakes Commission Support for the Great Ships Initiative

Whereas, ballast water discharge from ocean going vessels has been identified as a significant source for the introduction and spread of aquatic invasive species (AIS) in the Great Lakes; and

Whereas, there is an urgent need for research and development of shipboard ballast treatment technologies that can provide maximum effectiveness in eliminating harmful species in the ballast tanks of commercial vessels, while allowing safe and economically practical ballasting operations aboard commercial vessels in the Great Lakes; and

Whereas, efforts to develop new ballast treatment technologies complement other significant efforts to prevent AIS from entering and spreading throughout the Great Lakes, including use of best management practices, state regulations, and development of uniform federal ballast water discharge standards; and

Whereas, a collaborative effort involving some 15 U.S. and Canadian Great Lakes ports, federal agencies, and academic partners has produced the Great Ships Initiative, a $3.5 million program aimed at the development and implementation of shipboard ballast treatment technology; and

Whereas, the Great Ships Initiative will be co-managed by the Northeast Midwest Institute and the National Fish and Wildlife Foundation, with research based at the University of Wisconsin-Superior’s Lake Superior Research Institute; and

Whereas, the Great Lakes Commission has consistently supported and facilitated the application of sound science and research in efforts to prevent the introduction and spread of aquatic invasive species in the Great Lakes, and

Whereas, the Great Lakes Commission has consistently supported collaborative efforts to combat ANS, such as the Great Lakes Panel on Aquatic Nuisance Species, and

Therefore, Be It Resolved, that the Great Lakes Commission lends its enthusiastic endorsement of the Great Ships Initiative and offers its full support to efforts to secure adequate funding for its ongoing operations; and

Be It Finally Resolved, that the research and development of shipboard ballast treatment technologies conducted through the Great Ships Initiative be closely coordinated with other efforts to prevent the introduction and spread of AIS in the Great Lakes.

Adopted by the Great Lakes Commission at its Annual Meeting, October 4, 2006, in Duluth, Minn.
RESOLUTION – DRAFT

Endorsing and supporting implementation of the Governors’ and Premiers’ Maritime Strategy

Whereas, the Great Lakes-St. Lawrence River maritime transportation system has been and continues to be vital to the regional economy of the United States and Canada by facilitating domestic and international trade through the movement of goods and commodities and historically supporting industries such as manufacturing, steel production, agribusiness and power generation; and

Whereas, the Great Lakes-St. Lawrence maritime transportation system is the largest deep-draft inland navigation system in the world, encompassing the five Great Lakes, their connecting channels and the St. Lawrence River, extending 2,300 miles into the North American heartland, and serving more than 100 ports in the eight Great Lakes states, Ontario, and Québec; and

Whereas, the maritime transportation system includes vessel operators and ports and a range of other activities, such as ship building and repair, warehousing, piloting and stevedoring, that collectively contribute more than $33 billion1 to the U.S. and Canadian economies and generate more than 226,000 jobs,2 with the potential for future growth consistent with global and regional trends, and the maritime mode saves an estimated $3.6 billion annually in transportation costs compared to the next cheapest option;3 and

Whereas, the maritime transportation system has under-utilized capacity and faces numerous challenges, including seasonal constraints, limited multi-modal connections in a number of locations and an exclusive reliance on a small number of bulk commodities in some sections of the system; inadequate investment in dredging and infrastructure; and shortcomings in governance and overall system optimization and competitiveness; and

Whereas, the Conference of Great Lakes and St. Lawrence Governors and Premiers recently completed a comprehensive strategy for the maritime system that aims to double maritime trade, improve environmental performance and support the region’s industrial core; and

Whereas, the strategy establishes a Regional Maritime Entity to coordinate actions directed at four objectives:

- Increasing efficiency and reducing costs;
- Building new markets;
- Growing economic activity around the maritime system;
- Delivering results while managing for the future; and

Whereas, with its mandate to support the balanced use of Great Lakes water resources and its longstanding role as an advocate for Great Lakes-St. Lawrence River maritime transportation, the Great Lakes Commission is uniquely qualified to support implementation of the new maritime strategy in collaboration with the Great Lakes states and provinces, federal governments, maritime industry partners, and others.

Therefore, Be It Resolved, that the Great Lakes Commission endorses and pledges to support implementation of the maritime strategy wherever possible in collaboration with its member jurisdictions, the Conference of Great Lakes and St. Lawrence Governors and Premiers, the federal governments, maritime industry, and other appropriate partners; and

Be It Further Resolved, that in the short term the Commission will support implementation of specific recommendations from the strategy related to establishing a maritime careers portal, maintaining the maritime asset inventory, managing data and information to track progress in implementing the strategy, and aligning data collection and reporting with the Blue Accounting initiative, as appropriate; and

Be it Finally Resolved, that the Commission calls on its member states and provinces, the U.S. and Canadian federal governments, and partners in the maritime industry to support implementation of the strategy, where appropriate, by participating on the Regional Maritime Entity and its advisory committee, providing data and information to maintain the maritime asset inventory and track progress toward achieving the strategy’s goals, and advancing policies and devoting resources to better leverage and grow the maritime transportation system to support a strong economy and healthy environment in the Great Lakes-St. Lawrence River region.

1 The Economic Impacts of the Great Lakes-St. Lawrence Seaway System, Martin Associates, October 2011
2 IBID
RESOLUTION – DRAFT  
September 15, 2016

Providing and maintaining clean water infrastructure and services in the Great Lakes Basin

Note to Commissioners: This resolution is still under active discussion with staff and Board so what follows is very much a draft. It is likely that you will be presented with a substitute version in Toronto that is much more streamlined. I encourage you to review this and consult with your delegation chair with your comments and input. – Tim Eder

Whereas, aging municipal drinking water, wastewater, and stormwater infrastructure across the Great Lakes and St. Lawrence River region can compromise the region’s ability to deliver clean water services; the provision of safe and sustainable drinking water as well as management of wastewater and stormwater in ways that support thriving economies and animal and plant communities that depend on this freshwater treasure; and

Whereas, the American Society of Civil Engineers estimates that the $91 billion capital investment required to maintain and upgrade drinking water and wastewater infrastructure in the U.S. in 2010 will increase to $195 billion if action is deferred to 2040,¹ and that the inclusion of capital investment costs required for stormwater infrastructure raises the estimate to over $1.3 trillion² over the same time frame; and

Whereas, the historic approach where federal and state governments had lead responsibility and authority for funding and maintaining water infrastructure has been replaced by a decreased federal role, increasing local responsibilities, increasing mandates, disjointed authorities, and unpredictable funding;³ and

Whereas, the majority of the nation’s water systems are between 50 and 150 years old and many municipalities are unable to meet rising costs;³ and

Whereas, tens of billions of gallons⁴ of combined or untreated sewage and stormwater is currently released into the Great Lakes each year from outdated and aging infrastructure that remains prevalent in several of the Great Lakes region’s largest cities as well as in many smaller municipalities; and

Whereas, the largest U.S. federal water infrastructure funding programs -- the Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) -- allocate resources based on the assessed needs of


each state as individual entities, and further divide resources between efforts geared towards complying with the Clean Water Act and the Safe Drinking Water Act, respectively, but a single drop of water may be classified as drinking water, wastewater, or stormwater and pass through both rural and urban environments across municipal, state, and international boundaries as it moves through the natural hydrologic cycle, and thus will fall under the purview of several or all of these fractured policy frameworks over time; and

Whereas, the most recent U.S. EPA Drinking Water Infrastructure Needs Survey and Assessment\(^5\) notes that eligibility to receive DWSRF funding is limited to projects that address specific, tangible capital infrastructure needs, resulting in legitimate and significant water system needs that are not eligible for DWSRF funding, including monitoring, operational and maintenance costs, conducting studies, water rights or fee payments, administrative costs, and projects needed primarily to serve future population growth; and

Whereas, current water infrastructure that was designed to function under historical conditions is becoming increasingly compromised by additional stressors such as growing populations, continuing development, the effects of changing climate,\(^6\) and emerging contaminants including pharmaceuticals, polybrominated diphenylethers (PBDEs), the antibacterial chemicals triclosan and triclocarban, phthalates, and bisphenol A (BPA);\(^7\) and

Whereas, green infrastructure\(^8\) has been demonstrated to reduce the anticipated costs of maintaining and upgrading water infrastructure by over 40%\(^9\) while simultaneously alleviating some of the burden on existing grey infrastructure and augmenting economic, environmental, and societal outcomes; and

Whereas, the Great Lakes Commission resolution “Healing the fractured urban water cycle through integrated water management,” adopted September 2015,\(^10\) acknowledges broad agreement among municipal, provincial, and state experts in the Great Lakes region on the need to integrate drinking water, wastewater, and stormwater infrastructure on a watershed basis; and

Whereas, the Great Lakes Commission resolution “Maintaining a safe and sustainable drinking water and infrastructure in the Great Lakes Basin,” adopted July 2016,\(^11\) identifies additional challenges and opportunities specifically with respect to drinking water infrastructure.

Therefore, Be It Resolved, that the Great Lakes Commission calls on the U.S. Congress and the Canadian Parliament to increase federal water infrastructure funding to states and provinces to adequately meet the needs of providing all clean water services (e.g., drinking water, wastewater, and stormwater); and

Be It Further Resolved, that the Great Lakes Commission calls on the U.S. Congress and the U.S. EPA to modify laws and policies as may be necessary to ensure that federal water infrastructure funding and investments are: a) strategically prioritized based on regional risks and needs identified by states and regional institutions that represent them (in addition to individual state needs); and b) provide adequate flexibility and authority to states, provinces and


\(^8\) Green Infrastructure is a broad term that includes interconnected natural systems and ecological processes to maintain or mimic the natural water cycle across a wide range of land developments. Green infrastructure can provide clean water, clean air, and wildlife habitat. It includes natural areas such as grasslands, forests, wetlands and riparian areas. It also includes manmade features such as rain gardens, green roofs, porous pavement, constructed wetlands and berms, riparian buffers, and parks.


\(^10\) Adopted by unanimous vote.

\(^11\) All jurisdictions voted in favor except Ohio, which opposed the resolution because of a desire to focus more on infrastructure and less on lead issues.
cities so that they are able to implement creative solutions with multisector partners and raise additional revenue needed to provide safe and sustainable clean water services; and

**Be It Further Resolved,** that investments in clean water infrastructure should be focused not only on repairing and replacing existing infrastructure to redeem the former status quo, but also on enhancing green infrastructure as a core component of clean water infrastructure, as well as other approaches that can help tackle current and projected stressors on these systems, such as emerging contaminants and increased water volumes due to changing climate; and

**Be It Finally Resolved,** that the Great Lakes Commission expand the scope of the working group called for in the July 2016 resolution, *Maintaining safe and sustainable drinking water and infrastructure in the Great Lakes Basin,* to consider all clean water infrastructure (i.e., wastewater, stormwater and drinking water infrastructure); and to provide advice to guide staff in the preparation of a report on the state of water infrastructure in the Great Lakes and St. Lawrence River basin that addresses topics identified in the July 2016 resolution as well as similar topics for other types of clean water infrastructure. The working group should:

- Explore options to provide information services, perhaps in conjunction with the Blue Accounting Initiative, to Great Lakes Commission member jurisdictions and other audiences on the status of all clean water infrastructure (drinking, storm and wastewater), progress toward improving it, risks and consequences to businesses and people, and such other information services as may be beneficial to its members; and
- Explore and assess opportunities to raise awareness of the fundamental value of water and the infrastructure that supports all clean water services, including: drinking, waste and stormwater management; and the scope and depth of the financial challenge facing the region’s governments to meet all its infrastructure needs; and
- Explore a more modern and sustainable approach to clean water infrastructure that recognizes and enhances federal, state, provincial and local capacities and authorities and in order to provide a more integrated, sustainable and predictable approach to clean water infrastructure design, construction, operation, and maintenance; and
- Make recommendations for further action at future meetings of the Great Lakes Commission based on findings of the working group.
CONNECTING ACROSS BORDERS: A Special Report on the Great Lakes and St. Lawrence Regional Economy

Strategy for the Great Lakes-St. Lawrence River Maritime Transportation System (excerpts)
Conference of Great Lakes and St. Lawrence Governor and Premiers. June 2016.

Ontario’s Great Lakes Strategy – First Progress Report 2016 (excerpts)
Ontario Ministry of the Environment and Climate Change
CONNECTING ACROSS BORDERS

A Special Report on the Great Lakes and St. Lawrence Regional Economy

By Robert Kavcic, Senior Economist - BMO Capital Markets
In 2015, I joined with my colleagues to create the Conference of Great Lakes and St. Lawrence Governors and Premiers. This action formalized our long-standing partnership to protect our world-class environment and grow our $5 trillion regional economy. It also reflects the deeply integrated nature of our region’s infrastructure, industries and trade patterns.

In an increasingly globalized economy, connections within our region and with the world are keys to future prosperity. By working together toward shared goals, we can more effectively grow our State and Provincial economies while enhancing our region’s competitiveness. It is therefore critical that we understand our regional economy as a whole so that we can leverage our strengths and seize new opportunities for growth. Ongoing, strategic collaboration will benefit the people, businesses and institutions in each of our ten States and Provinces.

This report is the first of its kind for the Great Lakes-St. Lawrence region which includes the eight U.S. States of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin and the two Canadian Provinces of Ontario and Québec. This report looks at the region holistically and will enable us to begin planning and working as the integrated region that, in many ways, we already are.

We are delighted to partner with BMO Capital Markets on this report. In coming years, we plan to expand it to look more deeply at regional economic performance and the factors effecting competitiveness. By regularly producing reports, we will track progress over time using consistent data and methods. These reports will help inform our regional work to facilitate trade flows, support productivity growth and compete more effectively in the global economy.

We look forward to our continued work together.

Rick Snyder
Governor of Michigan
Chair, Conference of Great Lakes and St. Lawrence Governors and Premiers
Economic Challenges and Opportunities

The Great Lakes-St. Lawrence region is a vital driver of North American economic output, employment and trade, accounting for nearly a third of combined Canadian and U.S. output, jobs and exports. The region's expansion is expected to continue in 2016 as manufacturing and exports in Ontario and Québec get a boost from a weaker currency and firm U.S. demand, while U.S. states in the region see an ongoing housing and consumer expansion tempered somewhat by the strong U.S. dollar. Additionally, a lower-for-longer oil price environment should reduce costs through the manufacturing supply chain. Still, some longer-term issues remain for the region's economy. Labor costs are in focus as the factory sector seeks to remain competitive, while productivity growth has slowed; demographic headwinds are blowing; and policymakers are working to keep finances in order, as well as facilitating cross-border trade flows.

WEIGHT OF A NATION

The Great Lakes-St. Lawrence region boasts a massive geographic footprint, and is a major driver of the North American economy. With economic output estimated at US$5.8 trillion in 2015, the region accounts for 30% of combined Canadian and U.S. economic activity and 31% of employment. The region's output ranks ahead of Germany, France, Brazil and the U.K., and it would rank as the third largest economy in the world if it were a country, behind only the U.S. and China—notably, the region overtook Japan in 2013. Quite simply, the economic importance of the region can’t be overstated.

Robert Kavcic, Senior Economist

Robert Kavcic is Vice President and Senior Economist with BMO Capital Markets. He plays a key role in analyzing regional economic and fiscal trends in Canada and the United States, and is the author of the Provincial Monitor and creator/author of State Monitor. Robert regularly contributes to AM Notes, Focus and econoFacts, and monitors equity markets from a macroeconomic perspective through the Global Equity Weekly publication. Robert is a regular commentator on economic and financial trends to the media. Before joining BMO, Robert worked in the research department at the Bank of Canada.

Chart 1

Facts and Figures

- GDP of US$5.8 trillion (2015 est)
- 30% of Canadian/U.S. economic activity
- 51 million jobs
- 31% of Canadian/U.S. workforce
- More than half of Canada/U.S. cross-border trade

ECONOMIC UPDATE — STURDY GROWTH AHEAD

The Great Lakes-St. Lawrence economy has recovered from the Great Recession, a period that hit the region relatively hard. Real GDP now tops 2007 levels in almost all of the region’s states and provinces. Real GDP in the region expanded at an expected 2.1% pace in 2015, marking a second straight year of accelerating growth, though still trailing the U.S. average slightly.

The U.S. economy is expected to continue its expansion in the year ahead, growing at a 1.8% clip in 2016, down from a 2.4% pace last year. While Canada is expected to lag slightly with 1.6% growth, after reporting the widest growth gap in twenty years last year, the weakness north of the border is almost entirely concentrated in energy-producing provinces outside the Great Lakes-St. Lawrence region. Against that backdrop, the economic
outlook on Canada’s side of the Great Lakes-St. Lawrence region has improved, even as growth nationally has downshifted. Ontario is seeing sturdy 2%-to-2.5% growth, topping the national average for the first time in more than a decade.

North American car and truck production held near 15-year highs in 2015, and record sales should support activity through the supply chain. However, unlike on the Canadian side of the border, the strong U.S. dollar is a headwind on U.S. export activity, and kept GDP growth in the Great Lakes states running below the national average in 2015. Some firms in the factory sector have also been clipped by capital spending retrenchments in energy and agriculture.

The housing market continues to recover across the U.S. Midwest. Still-attractive affordability, healthy job growth and some easing in credit conditions should support continued gains in this sector. Importantly, U.S. housing affordability remains attractive enough that home prices will continue to rise even as the Federal Reserve raises interest rates. Meantime, Toronto’s market continues to set record price levels and conditions in Southwestern Ontario have firmed, supporting healthy new construction activity.

For consumers across the region, the steep decline in oil prices is a clear positive, while jobless rates are below year-ago levels in most jurisdictions in the Great Lakes-St. Lawrence region. Indeed, hiring continues across the region, led by sturdy gains in the service sector, while some states are seeing cyclical rebounds in construction and manufacturing—sectors that are still well below peak levels.

Adding it all up, the Great Lakes-St. Lawrence region continues to churn out sturdy economic growth. While some headwinds have kept the pace of growth in check south of the border, most signs point to a continued expansion in 2016.

**NORTH AMERICA’S EMPLOYMENT ENGINE**

The region plays an extremely important role in the North American labor market, supporting more than 50 million jobs in 2015. That is more than 30% of the combined Canadian and U.S. workforce. Employment growth was a solid 1.2% last year, pulling the average jobless rate down to 5.4%, down 2 ppts from two years prior.
The region’s highly diverse economy also drives employment across a wide range of manufacturing and service industries. While traditionally considered the manufacturing heartland, factory-sector employment now makes up just over 10% of the region’s workforce, down from about 15% a decade ago. Still, on a relative basis, manufacturing does carry a disproportionately high weight in the region versus North America as a whole, where factory jobs account for less than 9% of the total. Part of the decreased reliance on manufacturing reflects capacity lost during the Great Recession, but also the gradual long-term diversification of the region’s economy. While manufacturing employment is down 17% from a decade ago, education & healthcare (+21%) and professional services (+17%) have helped make up the shortfall. In fact, education & healthcare alone have added 1.6 million jobs over the last 10 years, more than offsetting the 1.1 million manufacturing job losses.

Elsewhere, retail & wholesale trade, government and professional services also now carry double-digit employment shares within the region. Indeed, while manufacturing still boasts a comparatively high employment share, education & health and finance & real estate also outweigh the North American average. Construction employment is still recovering after a deep U.S. recession.

Labor costs remain one challenge for the region, with an increasing share of new production, particularly in the auto sector, directed toward the Southeastern United States and Mexico. Indeed, while Mexican auto production has nearly doubled over the past decade, U.S. output is little changed (despite swings through cycle), while Canadian output is down more than 20%. Recently-enacted right-to-work laws in Indiana, Michigan and Wisconsin suggest that the push to control labor costs is moving north, but the broader challenge is to ensure that productivity growth remains in line with labor costs.
PRODUCTIVITY GROWTH MIXED

Labor productivity across the region has slowed over the past two decades, especially among the Great Lakes states. Over the past five years, output-per-job has expanded at a muted 0.7% annualized clip among the states, tracking U.S. productivity growth lower. This is a stark turnaround from the 1990s and 2000s, when productivity growth was running at a 1.5%-to-2% clip. Meantime, productivity growth in Ontario and Québec slowed through the mid-2000s, but has picked up since the Great Recession—exports and factory output have experienced a cyclical rebound, but much of the pickup has simply filled existing capacity, and has not led to net new hiring or major capital investment in the sector. As the region’s economic base gradually transitions away from traditional manufacturing and more into the service sector, we could continue to see downward pull on productivity simply due to share effects (i.e., higher-productivity industries now carry less weight than in the past).

DEMOGRAPHIC CHALLENGES PERSIST

Population growth continues to slow across the region for a number of reasons, including cyclical factors, relative economic performance and aging demographics. Overall population growth in the region is now running at a 0.3% y/y pace, roughly half the North American average. Michigan, for example, was hard-hit by the recession in the auto sector, and saw net declines during the 2008-2011 period—that trend has since reversed. Meantime, broad-based aging continues to slow population and labor force growth in the region, with the 2015 growth rate the weakest since 1986, dragging down potential economic growth with it. Notably, Ontario and Québec have outperformed their Great Lakes state counterparts in recent years, spurred by strong international immigration trends. That said, all jurisdictions have been grappling with net outward migration to other states/provinces. Illinois lost a net 105,000 people to other states in 2015, which contributed to a second-straight decline in that state’s population—that hasn’t happened since the mid-1980s. The broader region continues to see outflows to the South and West with stronger economic growth and employment prospects. Ontario and Québec are poised to see outflows subside this year as the oil price shock reverses the flow of migrants to oil-producing provinces.
INTEGRATED TRADING HUB
The Great Lakes-St. Lawrence region is a critically important North American trading hub. The region's states were the origin of roughly a quarter of total U.S. merchandise exports in 2015, while Ontario and Québec accounted for more than 60% of Canadian shipments. Transportation equipment and machinery are the major drivers, but agricultural and food products, metals and chemicals are also important exports. The region's cross-border trade linkages are also immensely important. For example, the Great Lakes-St. Lawrence states are Ontario and Québec’s largest trading partner, accounting for $235 billion of total trade in 2015. That represents almost a third of total international trade among the two provinces.

The North American Free Trade Agreement has certainly helped to grease the trade relationship in the region, but more can still be done to enable the efficient movement of goods, especially given how integrated the supply chain has become. Improved border infrastructure is one priority area. For example, construction of an additional bridge between Windsor and Detroit continues to move closer to reality, with Canada now agreeing to fund construction of a customs plaza on the U.S. side—a long-time hurdle for the project. The Ambassador Bridge is among North America’s busiest border crossings, carrying more than 25% of merchandise trade between Canada and the U.S.

Finally, the Great Lakes-St. Lawrence Seaway is a critical avenue for North American trade. According to the Chamber of Marine Commerce, shipping in the region supports 227,000 jobs, produces $35 billion of business revenue, and adds nearly $5 billion per year to federal, state and provincial revenues. Infrastructure spending in the region’s shipping network continues to move ahead, with $1.1 billion committed by 2018 through a combination of public- and private-sector investments.

The Bottom Line: The Great Lakes-St. Lawrence region remains a key contributor to North American economic output, employment and trade, and the current outlook remains positive for the region. Measures by policymakers to facilitate trade flows, support productivity growth and contain business costs are key for the long-term health of the region and broader North American economy.
## REGIONAL ECONOMIC INDICATORS

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| Employment (% chg) |        |      |                    |         |        |          |         |       |       |      |      |       |       |
| 2013           | 1.4    | 1.0  | 1.0                | 1.8     | 1.2    | -0.3     | 1.6     | 1.8   | 1.3   | 1.3  | 0.4  | 0.3   | 0.9   |
| 2014           | 0.6    | 1.6  | 1.2                | 0.8     | -0.1  | 1.4      | 2.9     | 2.1   | 1.2   | 1.0  | 1.4  | 0.8   | 1.4   |
| 2015           | 0.9    | 1.7  | 1.2                | 0.7     | 1.0    | 1.1      | 2.2     | 1.7   | 1.2   | 1.7  | 0.7  | 1.1   | 1.0   |

| Unemployment Rate (%)¹ |        |      |                    |         |        |          |         |       |       |      |      |       |       |
| 2013           | 7.1    | 7.4  | 7.4                | 7.6     | 7.6    | 8.9      | 7.5     | 8.5   | 4.8   | 7.5  | 7.3  | 7.1   | 6.6   |
| 2014           | 6.9    | 6.2  | 6.2                | 7.2     | 7.8    | 7.0      | 5.9     | 7.1   | 4.1   | 6.3  | 5.7  | 5.8   | 5.4   |
| 2015           | 6.9    | 5.3  | 5.4                | 6.8     | 7.7    | 5.9      | 4.8     | 5.4   | 3.6   | 5.3  | 4.8  | 5.0   | 4.6   |

| Population (% chg) |        |      |                    |         |        |          |         |       |       |      |      |       |       |
| 2013           | 1.2    | 0.7  | 0.4                | 1.1     | 0.9    | 0.1      | 0.5     | 0.1   | 0.7   | 0.4  | 0.2  | 0.1   | 0.3   |
| 2014           | 1.1    | 0.8  | 0.4                | 1.0     | 0.8    | -0.1     | 0.4     | 0.2   | 0.7   | 0.3  | 0.2  | 0.1   | 0.3   |
| 2015           | 0.9    | 0.8  | 0.3                | 0.9     | 0.6    | -0.2     | 0.3     | 0.1   | 0.6   | 0.2  | 0.1  | 0.1   | 0.2   |

| Exports (% chg, US$) |        |      |                    |         |        |          |         |       |       |      |      |       |       |
| 2013           | 4.1    | 1.9  | 3.2                | 0.9     | 3.6    | -3.2     | -0.7    | 2.7   | 0.8   | 6.1  | 4.1  | 5.3   | 0.1   |
| 2014           | 10.1   | 2.5  | 7.6                | 8.0     | 14.6   | 3.5      | 3.8     | -4.6  | 3.1   | 2.4  | 3.1  | -1.7  | 1.5   |
| 2015           | -0.9   | -7.3 | 8.3                | 11.1    | 7.8    | -7.0     | -5.1    | -4.6  | -6.5  | -6.9 | -2.8 | -2.0  | -4.2  |

¹ Great Lakes-St. Lawrence = 10-region average  e = BMO Capital Markets estimate

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As this report illustrates, the economy of the Great Lakes-St. Lawrence region continues to grow and evolve. In coming years, the Conference of Great Lakes and St. Lawrence Governors and Premiers plans to release more reports that can help the region better understand this dynamism, and inform regional policy. This work will necessarily include many partners and support will be needed from organizations that can help develop regional data, information and trends for:

- Quality of life
- Capacity utilization
- Infrastructure
- Capital markets and access to capital
- Innovation and entrepreneurism
- Trade flows among the States and Provinces, and intra-regional barriers
- Clusters

CONFERENCE OF GREAT LAKES AND ST. LAWRENCE GOVERNORS AND PREMIERS

The Conference of Great Lakes and St. Lawrence Governors and Premiers unites the chief executives from Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Ontario, Pennsylvania, Québec and Wisconsin. Through the Conference, the Governors and Premiers work as equal partners to grow the region’s $5 trillion economy and protect the world’s largest system of surface fresh water. The Conference builds upon over 30 years of work by the Council of Great Lakes Governors to encourage and facilitate environmentally responsible economic development.

For more information visit http://www.cglslgp.org/

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STRATEGY FOR THE GREAT LAKES-ST. LAWRENCE RIVER MARITIME TRANSPORTATION SYSTEM

In 2013, I convened my fellow Governors and Premiers on Mackinac Island to reinvigorate our work to grow our region’s economy and protect our environment. Toward that end, we launched an initiative to better leverage and grow our maritime transportation system. Building on several years of work together, our region has developed this maritime strategy to reflect our consensus on the policies, programs and projects needed to boost maritime trade, create jobs and enhance our global competitiveness.

This strategy builds on a series of important actions that we have taken in recent years. For the first time, we identified our collective maritime assets like ports, locks and shipping channels across the region. We developed shared priorities to enhance the competitiveness of the system and direct needed investment. And we launched a regional maritime entity to coordinate our ongoing work.

This strategy represents another important achievement but, of course, our work is not yet complete. We must follow through on this strategy and realize the promise of transforming our maritime system to meet our 21st century needs. I look forward to working with my colleagues and other partners across the entire region to bring this vision to reality.

Governor Rick Snyder, Michigan
Chair, Conference of Great Lakes and St. Lawrence Governors and Premiers
CONFERECE OF GREAT LAKES AND ST. LAWRENCE GOVERNORS AND PREMIERS

Premier Phillippe Couillard  
Québec  
Governor Andrew Cuomo  
New York  
Governor Mark Dayton  
Minnesota  
Governor John Kasich  
Ohio  
Governor Mike Pence  
Indiana  
Governor Bruce Rauner  
Illinois  
Governor Rick Snyder  
Michigan, Chair  
Governor Scott Walker  
Wisconsin  
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Ontario

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Excerpts: The full report is online at

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EXECUTIVE SUMMARY

The Conference of Great Lakes and St. Lawrence Governors and Premiers launched the “Great Lakes-St. Lawrence Maritime Initiative” in 2013 to improve the efficiency and competitiveness of our maritime transportation system, to grow our regional economy, to increase the internal movement of goods across the region, to expand the movement of goods to and from foreign markets, and to create jobs. The initiative has cemented the importance of managing the Lakes and River as one single, integrated maritime transportation system (MTS) and not as a series of loosely related or connected parts.

Since its launch, the initiative created the first-ever inventory of regional MTS assets, maritime priorities and a Regional Maritime Entity to coordinate ongoing work. The Governors and Premiers have each designated a representative to serve on this Regional Maritime Entity and charged it with coordinating State-Provincial actions and spearheading system-wide improvement.

Globally, maritime transportation is growing rapidly shaped by continuously expanding international trade and increased efficiency in global shipping. Drivers include the continuous innovations seen in the expansion of the Panama and Suez Canals, increases in the size and efficiency of container transport, expanded coastal ports and major investment in ports and maritime infrastructure in the Baltic Sea region, across Europe and throughout Asia and other parts of the world. The MTS must keep pace with this trend and become more efficient and effective in order to better attract traffic and stay globally competitive.

Primary Objectives: The MTS Strategy’s primary objectives are to double maritime trade, shrink the environmental impact of the region’s transportation network and support the region’s industrial core. Toward this end, specific actions are organized around the following themes including a blend of policies, programs and projects.

• Increasing Efficiency and Reducing Costs;
• Building New Markets;
• Growing Economic Activity around the Maritime System; and,
• Delivering Results while Managing for the Future.

This Strategy was developed under the leadership of the Great Lakes and St. Lawrence Governors and Premiers. Their Regional Maritime Entity led the drafting process in partnership with its advisory committee including carriers, shippers, federal agencies, non-governmental organizations and other stakeholders.

This finalized Strategy reflects the region’s consensus on steps to improve the MTS. Some steps are near term and more easily achieved while others are aspirational and will require additional time and effort. The shared vision, however, is to ensure that the region exploits the full range and depth of its maritime cluster and attracts inward investment in ports and other maritime business, contributing to our national and regional economies. Successful follow-through will help transform the MTS to meet 21st century needs and capitalize on 21st century opportunities.
SECTION 1 | INTRODUCTION AND PURPOSE

The Great Lakes-St. Lawrence River maritime transportation system (MTS) has been and continues to be a backbone of our regional economy. This regional economy generates more than US$5 trillion annually and would be the third largest in the world if it were its own country. However, the MTS is an aging system with infrastructure rooted in the late 19th and early 20th centuries. The MTS requires recommitment by governments, users and stakeholders to face the challenges of the 21st century and to become a more strategic asset within broader regional efforts to enhance global competitiveness. Forward-thinking policies and investments are needed to achieve this future.

The MTS is the longest deep-draft inland navigation system in the world. It includes the five Great Lakes, their connecting channels and the St. Lawrence River. The MTS extends 2,300 miles (3,680 km) into the North American heartland and serves more than 100 ports in the eight Great Lakes States, Ontario and Québec. Lock infrastructure enables vessels to navigate the roughly 600-foot (180-meter) elevation change between the St. Lawrence River and Lake Superior. The section of the MTS between Montréal and the Gulf of St. Lawrence is open year-round to shipping, while the other portions of the system are seasonal. A fleet of more than 100 US and Canadian lake vessels have been specially built to serve the system and its customers. Ocean-going vessels trade between MTS ports and overseas markets.

The MTS includes vessel operators and ports as well as a wide range of other activities such as ship building and repair, warehousing, piloting and stevedoring. All these businesses need to be considered together as a mutually reinforcing cluster of maritime activities that support the region’s strong manufacturing and agricultural economy, and serve a market of more than 100 million consumers.

The regional maritime sector including marine industries directly contributes more than US$30 billion to the US and Canadian economies and accounts for more than 220,000 jobs. This is a similar magnitude to other important and high-value industries.

Maritime transportation is essential to regional and international trade as it facilitates the shipment of large volumes of raw and finished goods at comparatively low transport costs and with strong environmental performance. Maritime transport is critical to key industries and to overall regional competitiveness and sustainability.

When transportation options are efficient and competitive, shippers benefit from lower transport costs, faster and better service, and increased reliability, which in turn contribute to their own competitiveness and growth. And the more options shippers have to move their goods competitively, the better. This exerts downward pricing pressure on transportation costs generally, whether or not a particular mode is used. In order to continue to play its important role, the maritime sector must be willing to adapt, improve and change to successfully exploit new opportunities.

The maritime sector is global in nature and accounts for about 90% of global trade. Seaborne trade is predicted to double by 2030 in line with the forecast growth in international trade. While the growth potential for MTS trade may be somewhat more limited, it is important to recognize regional trends within this global context.
This MTS Strategy aims to leverage related initiatives taking place within the region and more broadly in the US and Canada. For example, the Québec Maritime Strategy of 2015 underscores the importance of maritime trade to the Provincial and regional economies, and provides a blueprint for strong State/Provincial engagement in the maritime sector. This MTS Strategy is intended to align with federal initiatives including the US TIGER program and America’s Marine Highway Program, the Building Canada Fund and related infrastructure initiatives. Better coordination among all levels of government is critical.

The Strategy and related work is guided by the Governors’ and Premiers’ MTS priorities:

• Ensure the region’s prosperity by growing the economy and creating jobs through the efficient use of the Great Lakes - St. Lawrence River maritime system.
• Maintain and continuously improve a world-class regional transportation network with an integrated maritime system.
• Establish a regional framework for achieving shared objectives, launching collaborative initiatives and leveraging funding opportunities for the maritime transportation system.
• Improve the efficiency, competitiveness and resiliency of maritime transportation and the region’s multimodal transportation system by improving dynamic connections with other forms of transportation such as waterways, highways and railways.
• Facilitate regional collaboration in sectors related to maritime transportation including commerce, tourism, ports, natural resources, environment, energy, agriculture and other issues.
• Leverage the maritime transportation system as a sustainable, socially responsible and cost-effective enterprise to stimulate regional and international trade.
• Protect the ecosystems of the Great Lakes-St. Lawrence River region through the socially responsible development and utilization of the maritime transportation system.
• Encourage the development of a modern and efficient Great Lakes shipping fleet.
• Maintain and improve the maritime system so as to help mitigate surface transportation congestion and negative environmental and social impacts.
• Expand maritime tourism and cruising opportunities on the Great Lakes-St. Lawrence system.

This Strategy lays out the new, collaborative approaches needed among government agencies, industry and other partners to re-establish and solidify the MTS as a safe, efficient, cost competitive and environmentally sound transportation option. A more competitive maritime system will better connect ports and harbors with one another, and with surface transportation modes. An enhanced multi-modal transportation system will strengthen overall regional competitiveness and fuel job creation.
1.1. Strengths and Weaknesses of the Maritime Transportation System

The MTS has strengths on several fronts. The Great Lakes-St. Lawrence River Basin comprises the world’s largest system of surface freshwater with nearly 20% of the world’s total supply. A significant portion of the manufacturing capacity in the US and Canada is centered in the region. The region is also home to globally significant deposits of ores including iron, zinc, silver, coal, copper, lead and limestone. The mining of these resources is commercially feasible in large part due to the proximity and cost-effectiveness of water-borne transportation that enables efficient supply chains and timely access to markets in the region and around the world. In many cases, the MTS is the only way to move materials from mine to market – there are no substitute paths for many materials that are largely moving from north to south across the region.

The MTS provides access to a market of more than 100 million consumers across eight US States and two Canadian Provinces, which together account for 30% of US and Canadian economic activity amounting to about US $5.8 trillion in 2014. Political stability and a firm rule of law have supported commercial trade, goods transportation and environmental stewardship. Moreover, the MTS has the capacity to greatly expand cargo flows. The St. Lawrence Seaway system, for example, is estimated to use only about 50% of its full capacity, while many Great Lakes ports have similarly significant capacity available.

Despite its utility, the Great Lakes portion of the MTS has historically been a seasonal system that has not allowed for year-round navigability due to ice cover. Hence, shippers have been required to use alternative modes of transportation for brief periods of the year or to stockpile inventories during the winter. The Great Lakes section of the MTS has therefore focused on a narrow set of bulk commodities, which inhibits the development of multi-modal logistics operations and economic clusters in the Great Lakes. By contrast, the sections of the MTS which are open year-round have developed a diverse and relatively stable cargo base across multimodal corridors.

Other challenges include physical features that limit vessel size; costs and inefficiencies that have resulted in declining competitiveness for some portions of the MTS; and a lack of needed investment in infrastructure. Unfortunately, while the Provinces have had some success, there has not been a viable mechanism for some States to take advantage of private capital (e.g. public-private partnerships) or more creative arrangements like “public-public” partnerships for MTS infrastructure. Beyond this, MTS governance has been disjointed, and regulatory and
operational harmonization has been lacking. Bureaucratic inertia and resistance to change are prevalent throughout the MTS.

All of these factors have contributed to broadly declining MTS use over time. For instance, despite being one of the world’s largest production environments for vehicles, for many years essentially no cars have been transported out of the region by water. Addressing system challenges and overcoming relative decline is critical to re-energizing the MTS as one of the region’s competitiveness cornerstones.

1.2. Opportunities and Threats in the Maritime Transportation System

There are many opportunities to grow MTS use and better leverage its potential. For example, the region’s population centers, industrial base, as well as rail and road networks are concentrated on the shores of the Great Lakes and St. Lawrence River. This density of population, industry and infrastructure offers an opportunity to integrate logistics chains across the freight transportation modes and cultivate industry clusters.

Maritime transportation can mitigate surface congestion and reduce the environmental footprint of regional and national freight movement. For some types of cargo (particularly large shipments of bulk cargo), marine transportation generates significantly lower air emissions per cargo unit than other modes. Additionally, major investments continue to be made to further improve ships’ environmental performance. More broadly, maritime transportation can be a major feature of sustainability efforts, and gives shippers another viable transport option in order to improve the overall resiliency of the regional transportation system.

Separately, new markets such as short sea shipping, cruising and container shipping are growth opportunities for the MTS. Better maintaining and improving channels, ports and other infrastructure can also boost the movement of the heavy bulk materials traditionally moved on the MTS.

Threats to the MTS reflect a complex range of issues. Variability of water levels and seasonality, along with increasing climate uncertainty, present challenges. Declining freight volumes and the small number of cargoes upon which the Great Lakes portion of the MTS has historically relied further threaten the system’s future. Regulatory and fiscal uncertainty creates further risk, all of which has stifled needed investment.
Figure 2 | Regional Road and Rail Capacity Constraints

Source: Figure 3-45, NCFRP Report No 17, Multimodal Freight Transportation within the Great Lakes-Saint Lawrence Basin, Transportation Research Board of the National Academies, 2012.

### Strengths

- Abundant freshwater system
- Natural resources (e.g. ores, limestone)
- Cost-effectiveness and safety
- No substitute path for many cargoes
- Political stability and firm rule of law
- Relatively stable regulatory framework
- High standard of living in region
- Environmental stewardship and sustainability
- Resiliency and security
- Inland and international access
- Strong support for end users and manufacturers

### Weaknesses

- Seasonality
- Costs and inefficiencies resulting in declining competitiveness
- Vessel size limited by physical features
- Lack of multi-modal logistics operations and economic clusters in Great Lakes
- Complex and fragmented governance
- Lack of sufficient and consistent infrastructure investment
- Lack of regulatory and operational harmonization
- Bureaucratic inertia and resistance to change
- No mechanisms in some States to take advantage of private capital (e.g. P3)

### Opportunities

- Concentrated population and industry
- Dense regional rail and road network
- Integrated logistics chains
- Mitigate surface congestion and reduce the environmental footprint of freight transportation
- Infrastructure investment
- Projected increase in cargo volumes
- New markets such as short sea shipping
- Abundant capacity
- No lack of private capital

### Threats

- Water level variability
- Climate uncertainty
- Long-term decline of cargo volumes in the Great Lakes
- Reliance on a small number of cargoes in the Great Lakes
- Aging infrastructure
- Regulatory and fiscal uncertainty
- Inter-regional and global competition
- Trade protectionism
- Risk
Message from the Minister

On behalf of all of Ontario’s Great Lakes ministers, I am pleased to present this first Great Lakes Strategy progress report.

The Great Lakes are vitally important to the people of Ontario for our drinking water, quality of life and prosperity.

The Great Lakes and St. Lawrence River watersheds hold nearly one-fifth of all the fresh surface water on the planet. For Ontario, this global ecosystem is both a tremendous gift, and a great responsibility.

We rely on this remarkable system of lakes for the water we drink, for the energy that powers our communities, for industry and for moving goods to market. With over 98 per cent of Ontarians now living in the watersheds of the Great Lakes and St. Lawrence River, these watersheds also give most of us our beaches, our waterfronts, our nature experiences, and the places we call home.

When we released Ontario’s Great Lakes Strategy in 2012, we set out priority actions that the Government of Ontario, working with partners, would take to help keep the Great Lakes drinkable, swimmable and fishable for generations to come. Ontario’s Great Lakes Strategy included a commitment to reporting on progress after three years.

This progress report outlines some of the key accomplishments and new scientific findings during the first three years of Ontario’s Great Lakes Strategy. It represents the efforts across 14 different ministries and numerous partners.

Together, with our many Great Lakes partners, we are working to protect water, restore nature and focus efforts on priority geographic areas such as wetlands. We have been able to learn from and work with First Nations in implementing Ontario’s Great Lakes Strategy. We are helping Ontarians connect with and benefit from these majestic lakes. But there is still more work to be done. We need to continue to invest in science and monitoring of our Great Lakes waters to better inform us of threats to the lakes. We will use this science to ensure we are making informed decisions to better protect and improve the quality of the lakes.

New scientific research over the past few years also underscores the vulnerability of our Great Lakes. For example, in the summer of 2015 Lake Erie experienced its biggest harmful algal bloom ever recorded. This report shares some recent science on the causes of Lake Erie’s water quality issues and on other pressing issues such as the impacts of climate change in the Great Lakes.
In October of 2015, the Ontario Legislature passed a new law, the Great Lakes Protection Act. This act recognizes the diverse issues facing the Great Lakes, from invasive species to pollution to climate change. It provides new tools to better tackle these challenges.

The act enshrines Ontario’s Great Lakes Strategy as a living document and ensures that Great Lakes progress reports will be released every three years.

Healthy Great Lakes are essential to the success of our province. We need to work with all of our partners to increase our efforts to protect and restore the Great Lakes. Only by working together can we ensure that our children will inherit a legacy of a healthy and resilient Great Lakes ecosystem.

I encourage all Ontarians to read this report and to get involved in protecting our Great Lakes.

*Glen Murray, Minister of the Environment and Climate Change*

Excerpts: The complete report is online at

Introduction

Lake Superior, Lake Huron, Lake Erie, Lake Ontario and the St. Lawrence River – nearly everyone who lives, works or travels in Ontario, knows at least one of these magnificent bodies of water, their watersheds and connecting rivers. In fact, whenever you catch a fish, bike along a trail, visit a provincial park, turn on the faucet to get a drink of water or enjoy a glass of wine from an Ontario vineyard, chances are you are enjoying the benefits of the Great Lakes. We have the world’s longest freshwater coastline – and more of the Great Lakes and St. Lawrence River’s water and coastline than all of the U.S. Great Lakes States combined.

The Province developed Ontario’s Great Lakes Strategy in response to new pressures that were putting the Great Lakes in jeopardy. Scientists who study the Great Lakes were warning us that the lakes were at “a tipping point” of irreversible decline. Our commitments in Ontario’s Great Lakes Strategy included a promise to report back to Ontarians in three years on our success in carrying out the Strategy as part of our shared responsibility to protect the Great Lakes.

In this report you will find highlights of Ontario’s Great Lakes achievements organized around the six goals of the Strategy:

**Goal 1:** Engaging and empowering communities

**Goal 2:** Protecting water for human and ecological health

**Goal 3:** Improving wetlands, beaches and coastal areas

**Goal 4:** Protecting habitats and species

**Goal 5:** Enhancing understanding and adaptation

**Goal 6:** Ensuring environmentally sustainable economic opportunities and innovation.

The report spotlights developments in Great Lakes science, as well as some measures we are using to track our progress. Throughout the report you will find links to comprehensive resources about the Great Lakes, including detailed Ontario and binational technical reports on the health of the Great Lakes, their water quality and biodiversity.

This first progress report represents actions and efforts across the 14 Great Lakes ministries led by the Ministries of: Environment and Climate Change; Natural Resources and Forestry; Agriculture, Food and Rural Affairs; Municipal Affairs and Housing; Economic Development; Employment and Infrastructure; Aboriginal Affairs; Tourism, Culture and Sport; Health and Long-Term Care; Transportation; and Intergovernmental Affairs. Input has been provided by the Ministries of Education, Energy, Research and Innovation, and Northern Development and Mines. The report also represents some key actions of First

Excerpts: The complete report is online at

Nations and Métis communities, municipalities, conservation authorities and watershed groups, environmental organizations, the scientific community and academia, the industrial, agricultural, recreational and tourism sectors and the general public.

We recognize that the Great Lakes are a shared system. Ontario’s partnerships with Canada and neighbouring jurisdictions are essential to achieving resilience for the Great Lakes. Ontario also recognizes that with so much of the Great Lakes system within our province, we have a responsibility to take action to protect these shared waters. Although this report describes many positive developments since the release of the 2012 Strategy, it also contains recent scientific findings that remind us of the stress these lakes are under. More needs to be done to restore and protect the Great Lakes ecosystem.

We thank all of the organizations and individuals who have contributed to the progress and successes that this report describes.

Ontario’s New Great Lakes Protection Act, 2015

On November 3, 2015, Ontario’s Great Lakes Protection Act, 2015, received Royal Assent. This new law reflects the goals and principles of Ontario’s Great Lakes Strategy and enshrines it in law, setting out detailed requirements for strategy contents, reporting and periodic review.

The act is designed to help address the significant environmental challenges facing the Great Lakes and St. Lawrence River Basin, including the changing climate. It identifies some initial priorities for immediate action, such as reducing harmful algal blooms. At the same time, this legislation enables public bodies to identify and target actions on priority issues and geographic areas. It provides new tools, including:

- Establishing a Great Lakes Guardians’ Council, a forum to help improve collaboration among Ontario’s Great Lakes partners
- The authority to set Great Lakes targets along with action plans
- Enabling communities and governments to focus actions on local or regional problems through plans known as “geographically-focused initiatives”
- Establishing or maintaining monitoring programs on key ecological conditions.

This document fulfills the commitment in Ontario’s Great Lakes Strategy to report back three years after the release of the Strategy. Our next progress report will deliver on Section 8 of the act’s detailed reporting requirements. In addition to reporting our progress we will provide details about a suite of environmental monitoring programs and include information on targets set. Under the act we have also committed to launching a review of Ontario’s Great Lakes Strategy by December 2018 and every six years thereafter.
To: Commissioners, Associate and Alternate Commissioners, and Observers

From: Tim Eder, Executive Director

Date: September 23, 2016

Re: Program Updates

On the following pages are updates prepared by staff on the Great Lakes Commission’s projects and activities since the semiannual meeting in February, organized according to the program areas identified in the strategic plan currently under development. Work on the new strategic plan will continue this fall and is expected to be finalized and approved by the Board of Directors in December. While some elements of the plan may change, we believe the following program areas provide a sound framework for presenting the Commission’s work:

- Water Quality
- Water Management and Infrastructure
- Commercial Navigation
- Great Lakes Waterfront Community Revitalization and Economic Development
- Coastal Conservation and Habitat Restoration
- Aquatic Invasive Species Prevention and Control
- Information Management and Blue Accounting

Each program area includes an objective to be achieved by carrying out a series of strategic actions, which reflect the specific projects and activities the Commission will undertake. The Commission’s work since the February semiannual meeting is summarized under each strategic action. An additional update is provided on the Commission’s policy and advocacy activities and recent developments in this area.
Water Quality Program

Objective: Identify, promote, and share innovative solutions to water quality challenges in both urban and rural settings, and advance approaches that encourage collective action to protect and improve water quality across diverse landscapes within watersheds.

Strategic Actions:

1. Protect and improve water quality by: leading and partnering on projects; facilitating dialogue and building consensus; and delivering information that improves the region’s ability to measure progress on water quality protection and improvement. Lead the ErieStat project to track progress toward the shared goal of reducing phosphorus into western Lake Erie by 40% by 2025 and begin a drinking water supply pilot as part of the Blue Accounting initiative.

**ErieStat**
ErieStat is the GLC’s first pilot project within the new Blue Accounting initiative (see Information Management and Blue Accounting program update). Launched in spring 2016, the project will run through November 2017. A workgroup was formed in August 2016. The project seeks to provide the states of Indiana, Michigan, and Ohio and the province of Ontario with a tool for tracking progress toward the 40% phosphorus reduction goal for the Western Lake Erie Basin (WLEB). For the remainder of 2016 and into 2017 the workgroup of state and federal agency representatives and leading academic institutions will identify initial metrics for tracking progress, including measurements of the impact of various investments intended to reduced phosphorus loading in the watershed. Close coordination between ErieStat and the work of the Annex 4 Subcommittee, which was established under the 2012 Great Lakes Water Quality Agreement to coordinate binational actions to manage phosphorus concentrations and loadings, is underway. Data supporting the selected metrics will be aggregated and presented through an easy-to-understand, web-based information delivery platform intended to provide reliable information to Great Lakes decision-makers and concerned citizens.

**Drinking Water Supply Pilot (Source Water Initiative)**
The GLC’s second Blue Accounting pilot project is the Drinking Water Supply Pilot, to be launched in fall 2016. Connecting geographically to ErieStat through one of two pilot locations, this “from the ground up” test of Blue Accounting will gather water professionals from across the Great Lakes Basin to discuss and identify shared goals for ensuring a safe and sustainable source of drinking water for 48 million citizens. As with ErieStat, metrics will be identified for shared goals and available data will be delivered through the Blue Accounting web-based information delivery platform to inform Great Lakes decision-makers and concerned citizens of progress toward the goals. A workgroup is being formed with potential to transition into a Great Lakes-focused regional effort associated with the ten-year-old national Source Water Collaborative.

**Michigan Clean Water Corps (MiCorps)**
The GLC administers the MiCorps program, which funds volunteer water quality monitoring programs; the collection and dissemination of volunteer monitoring data using standardized methodologies; small-scale stream cleanup events; and educational initiatives related to water quality in Michigan. In 2016 the GLC awarded 10 volunteer stream monitoring grants totaling nearly $64,000; supported volunteer water quality sampling at 241 inland lakes under the Cooperative Lakes Monitoring Program; and awarded 16 small grants totaling more than $32,000 to local units of government for river and stream cleanup events. On Nov. 2-3, 2016, staff will convene the 12th annual MiCorps conference at the Kettunen Center in Tustin, Michigan, which will feature presentations on monitoring and citizen science initiatives.

**Great Lakes Tributary Modeling Program**
The GLC continues to provide technical and administrative support to the U.S. Army Corps of Engineers (USACE) for the Great Lakes Tributary Modeling Program. GLC staff facilitates communication among the Corps’ Great Lakes districts through participation in quarterly program teleconferences and convenes an annual Great Lakes Sedimentation Workshop. The most recent workshop was held on June 22-23, 2016. Over 50 participants from federal and state agencies, NGOs, universities and private sector partners...
discussed priorities for Great Lakes soil conservation, sedimentation and nonpoint source pollution prevention, control and planning.

**Lake Michigan Monitoring Coordination Council**  
The Lake Michigan Monitoring Coordination Council continues to bring together agencies and organizations involved in environmental monitoring on Lake Michigan and the data they collect. During this period staff convened the spring 2016 council webinar meeting, which featured an update on the Lake Michigan Lakewide Action and Management Plan working groups, the Great Lakes/Lake Michigan National Coastal Condition Assessment, the Cooperative Science and Monitoring Initiative Lake Michigan benthos survey, Lake Michigan PCB sampling, and AIS surveillance. Staff completed a survey on the future of the Lake Michigan monitoring inventory and will be working closely with the USGS Science in the Great Lakes (SiGL) Mapper program. Staff is also planning the agenda for the fall council meeting being held Nov. 9-10 in Milwaukee, Wisconsin.

2. Protect and improve water quality in urban and urbanizing areas by leading and partnering on green infrastructure projects and related activities, such as the Green Infrastructure Technology Transfer Collaborative, that can create enabling conditions to restore the fractured water cycle.

**Greater Lakes**  
The GLC recently completed a project titled “Greater Lakes: Reconnecting the Great Lakes Water Cycle.” See the Water Management and Infrastructure program update for details.

**Green Infrastructure Tech Transfer**  
With funding from the Erb Family Foundation, the GLC is partnering with Lawrence Technological University to build an effective stormwater technology transfer collaborative in the Great Lakes basin. Stormwater professionals in the basin will be surveyed to identify their technology needs and a technology transfer collaborative will be formed. An advisory team will guide initial development of the collaborative, which will be rolled out in a session at the 2017 Great Lakes and St. Lawrence Green Infrastructure Conference in Detroit. The one-year project began in late summer 2016. The goal is to develop a self-sustaining collaborative, run independently of the GLC and Lawrence Technological University.

**Great Lakes Green Infrastructure Champions Pilot Program**  
The GLC is planning for a green infrastructure champions project to build green infrastructure capacity within mid-sized communities (populations between 100,000 and 499,000) in the Great Lakes basin. A proposal was submitted to the Erb Family Foundation to support this project as a complement to the Green Infrastructure Tech Transfer project. The proposal was funded and will begin in October 2017 and run for two years. The project plan calls for workshops, small grants to support green infrastructure plans or projects in mid-sized Great Lakes communities (U.S. and Canadian), and establishment of a mentoring program.

3. Protect and improve water quality in rural and agricultural areas by leading and partnering on projects and activities that reduce sediment and nutrient loads into Great Lakes basin waters through ongoing partnerships with the U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS), conservation districts, authorities and agricultural interests. Work will range from administering funds to reduce sediment and nutrient runoff to leading or supporting projects that advance traditional and innovative approaches to manage sediment and nutrient loading in Great Lakes Restoration Initiative (GLRI) priority watersheds and watershed-based solutions across the basin.

**Demonstration Farms Network (Lower Fox River)**  
Since its inception in 2014, the Lower Fox Demonstration Farms Network has succeeded in promoting the adoption of conservation practices that allow local farmers to play an increasing role in reducing nutrients and sediments from farm runoff that drains into tributaries to the Lower Fox River and Green Bay. The project is funded by the GLRI through Wisconsin NRCS. In partnership with both NRCS and the Brown County Land and Water Conservation Department, the initial suite of four participating farmers has been expanded in 2016 with invitations extended to two additional farms. Primarily focused on the promotion of cover crops, including interseeding technologies, in 2016 and beyond the project team is likely to
broaden its interests to include advanced manure-management techniques in this dairy-dominated watershed. The GLC facilitated an expanded Open House and Field Day event in June 2016 that provided agency officials, tribal representatives, and other stakeholders an opportunity to interact with producers and experience firsthand the difference that conservation practices can make for soil health.

**Great Lakes Sediment and Nutrient Reduction Program**

The GLC administers the Great Lakes Sediment and Nutrient Reduction Program, which provides grants to state and local governments and nonprofits to implement conservation practices in GLRI priority watersheds designed to reduce sediment and phosphorus runoff into the Great Lakes. Funding is provided by NRCS through the GLRI. Four separate agreements with NRCS have provided the funding for 60 grants. In the summer of 2016 the GLC awarded nearly $2 million to 14 projects. The program also submitted the final report for the 2010 and 2011 program years. These extensive documents provide results from all the years of effort installing practices, outlines the steps taken and the background documents needed to administer these agreements. Work conducted under the 2010 agreement included the installation of 763 individual conservation practices that prevented the erosion of 356,000 tons of soil and prevented the runoff of 362,000 pounds of particulate phosphorus. The 2011 agreement supported installation of 179 conservation practices that that prevented the erosion of 109,000 tons of soil and prevented runoff of 111,539 pounds of particulate phosphorus.

4. Explore opportunities to support the states and provinces in tackling complex aspects of water quality, including water quality trading and other market-based approaches; leveraging the region’s abundant clean freshwater assets to advance more sustainable methods of agricultural production; and linking urban/urbanizing landscapes with rural/agricultural landscapes to improve water quality across entire watersheds. Support the states and provinces in planning and adapting to water quality implications of climate change.

**Erie P Market**

The Erie P Market project was launched in early 2016 through a two-year Conservation Innovation Grant from NRCS. The project is developing a multijurisdictional framework for water quality trading among the three WLEB states of Indiana, Michigan, and Ohio, with Ontario also participating to lend binational weight to this effort focused on the potential for watershed-based trading similar to the existing Ohio River Basin project involving Indiana, Ohio, and Kentucky. Erie P Market seeks to provide another valuable tool in the suite of activities both the U.S. and Canada are pursuing to achieve a 40% reduction in phosphorus loads to the WLEB. Once a framework for trading is developed in 2016, the project will test the process through pilot trades between nonpoint and point sources in the WLEB.

**Fox P Trade**

The Fox P Trade project has continued to test the Wisconsin water quality trading guidance (adopted in 2013) as it applies in the Fox River Watershed, which is subject to a TMDL. This 3.5-year project is scheduled to end September 30, 2016. Templates for documents to support phosphorus credit trading have been developed and tested through hypothetical trades. Workshops and webinars were held throughout to share progress, teach stakeholders about water quality trading, and gain feedback on key elements of a trading program. Through these activities, the project built consensus around recommended ways to structure the trading market, and which entities are best suited to perform key roles, such as credit certification, practice verification, and brokering trades. Currently, Fox P Trade is moving forward with a pilot water quality trade of total phosphorus credits, which would be the first water quality trade in a TMDL watershed in Wisconsin. The pilot trade being negotiated is between a farm in the Apple Creek watershed of Outagamie County and NEW Water (the brand name of the Green Bay Metropolitan Sewerage District). While this initial trade is not necessary for NEW Water to be in compliance with its current Wisconsin Pollutant Discharge Elimination System permit, it lays the groundwork for trading as a future compliance option and demonstrates how the trading process works in a TMDL watershed. The project has been a valuable exercise in assisting stakeholders in the watershed and Wisconsin DNR to better understand issues that arise as the guidance is implemented in impaired watersheds. A trading handbook and interactive web-based trading portal tailored to this watershed are key final products. The GLC looks forward to seeing trading in the Lower Fox River Watershed live on under the guidance of the local Fox-Wolf Watershed Alliance.
The GLC is a subcontractor on two GLRI grants awarded in the FY 2014 funding cycle. Both are five-year projects that will run from 2015-2019.

Targeting Outcome-Based Sediment Reduction in the Lower Fox Watershed
The GLC is a subcontractor to the Fox-Wolf Watershed Alliance to assist with certain elements of this five-year GLRI-funded project. The goal of the project is to reduce agricultural sediment and nutrient loading to the Lower Fox River and Green Bay by installing conservation practices in key sections of Plum and Kankapot creeks. The project will test innovative practices and monitor the effects of those practices to guide implementation throughout the region. The GLC will assist the project by exploring how water quality trading might be implemented alongside or provide long-term funding for ongoing conservation practices in selected subwatersheds of Lower Fox River. The GLC is also assisting by organizing workshops and webinars to coordinate among GLRI grantees in the three GLRI priority watersheds, specifically to share progress and methods for measuring ecological outcomes. The first workshop was held at the end of March in Chicago. Representatives from GLRI 2014-funded projects in Green Bay, Saginaw Bay, and Maumee River/Bay came to together to share project objectives and progress with an emphasis on methods each project is using to measure progress and ecological outcomes.

Accelerating Outcome-Based Ag Conservation in Saginaw Bay
The GLC is a subcontractor to The Nature Conservancy (Michigan) to assist with certain elements of this five-year GLRI-funded project. The goal of the project is to accelerate the rate of a strategic agricultural conservation program that will fund a dedicated conservation technician to expedite federal contracts and provide technical assistance to Certified Crop Advisors (CCAs) working to implement conservation practices with almost $20 million in funding to be secured under the Saginaw Bay Regional Conservation Partnership Program (RCP). The GLC will work with the Delta Institute to explore market-based mechanisms to support conservation after federal funding is exhausted. The GLC’s engagement to date has been minimal, with most of the work effort to occur between 2017 and 2019.

5. Address critical water quality challenges, such as harmful algal blooms, by facilitating regional forums, including collaboratives, such as the Harmful Algal Blooms (HABs) Collaboratory, and participating in others, such as the Great Lakes Water Quality Agreement’s annexes, to build consensus around shared water quality goals and associated solutions to achieve those goals.

HABs Collaboratory
The GLC, working in partnership with the U.S. Geological Survey’s (USGS) Great Lakes Science Center, is leading the HABs Collaboratory, which is providing a framework for communication and coordination among scientists and between scientists and managers. Since its launch in late 2015, the HABs Collaboratory has established five different groups based on priority themes identified during its first workshop: nitrogen-cycling, toxicity, conceptual model, “mythbusters,” and knowledge exchange/communication. With its other regional partners, Ohio Sea Grant and LimnoTech, the HABs Collaboratory hosted a summer webinar series focused on presenting an overview of research projects and initiatives in the region grouped on different topics. A webpage was developed to share information, materials (e.g. webinar recordings) and news related to HABs. An email listserv has also been established to share information, webinar announcements and recent news; as of August 2016 it includes 155 scientists and managers.

6. Advocate for refinements to U.S. federal policy and legislation to protect and improve water quality, including the U.S. Clean Water Act, the U.S. Safe Drinking Water Act, the U.S. Water Resources Development Act, and the U.S. Farm Bill.

Water Resources Development Act
The GLC continues to advocate for funding and policies that improve water quality as part of its policy and advocacy program. The Water Resources Development Act currently being considered by Congress includes numerous provisions affecting the Clean Water Act and Safe Drinking Water Act, particularly in relation to safeguarding drinking water and preventing water pollution from failing wastewater infrastructure. See the summary below in the Policy and Advocacy Section for additional details.
Water Management and Infrastructure

**Objective:** Ensure that the waters of the Great Lakes and St. Lawrence River basin continue to support the needs of communities, businesses, industries and ecology; are protected from development impacts, pollution, climate change and other stressors; and are managed in a balanced and sustainable manner for the use, benefit and enjoyment of people today and future generations.

**Strategic Actions:**

1. In partnership with the Conference of Great Lakes and St. Lawrence Governors and Premiers, support decision-making and measure progress under the Sustainable Water Resources Agreement and Water Resources Compact by compiling, interpreting and disseminating consistent water withdrawal, diversion and consumptive use information; supporting the cumulative impact assessment called for under the Compact and the Agreement; and providing information on regional trends and state and provincial programs, practices and policies related to water use and conservation.

**Regional Water Use Database Repository**

Through a cooperative agreement with the Conference of Great Lakes and St. Lawrence Governors and Premiers, the GLC continues to serve as the Regional Water Use Database Repository under the Great Lakes and St. Lawrence River Water Resources Compact and Sustainable Water Resources Agreement. In this capacity, the GLC works with its member states and provinces to collect annual water use data and issue annual water use reports and interim cumulative impact assessments. The GLC and the Conference work together to continuously improve the quality and usefulness of the database. A meeting of the region’s water use managers was convened in August 2016 to review and update processes and protocols for reporting and to explore opportunities to develop complementary information, such as demand forecasts for key water use sectors. The GLC is compiling state and provincial water use data and associated metadata through its online water use data management portal for the 2015 annual water use report, which will be completed and presented in December 2016. Water use reports for previous years are available on the GLC website. GLC staff presented on the Great Lakes Regional Water Use Database at the June 2016 International Association of Great Lakes Research Conference (IAGLR) in Guelph, Ont.

2. Lead and engage in the development and dissemination of data and information necessary for implementing drinking, storm and wastewater management programs that identify critical needs and advance solutions to the benefit of public health and safety, water infrastructure and delivery, ecosystem health and water quality.

As part of the Great Lakes Blue Accounting program, the GLC has established a Source Water Initiative to establish goals and metrics for the desired outcome of “a safe and sustainable domestic water supply.” See the Water Quality Program update for more details.

The GLC continues to monitor the drinking water crisis in Flint, Michigan. In consultation with the GLC Board of Directors, staff are exploring future opportunities to address aging infrastructure related problems in other Great Lakes communities.

3. Identify and advance solutions to water management and infrastructure challenges by facilitating forums, initiatives and partnerships, including the GLC’s working group on water infrastructure.

**Working Group on Water Infrastructure**

In July the GLC passed a resolution titled *Maintaining Safe and Sustainable Drinking Water and Infrastructure in the Great Lakes Basin.* The resolution commits the GLC to form a working group of its members to advise staff in preparing a report on the state of drinking water in the Great Lakes and St. Lawrence River basin; make recommendations to guide future GLC priorities; explore new and expanded information services through Blue Accounting; raise awareness of infrastructure financing challenges and infrastructure needs; and investigate creative financing solutions that might be employed by the Great Lakes states and provinces to meet their infrastructure needs. A complementary resolution will be considered at the
upcoming annual meeting to broaden the working group to look at storm and wastewater infrastructure in addition to drinking water infrastructure.

4. Raise awareness of the fundamental value of water and the need for infrastructure improvements by advocating for federal legislation and funding to support and accelerate drinking, storm and wastewater infrastructure improvements through the state drinking water and wastewater revolving loan funds and other water management programs and by promoting the benefits of integrating water delivery and wastewater management services to the states, provinces and municipalities in the region.

Greater Lakes
The GLC recently completed a project titled “Greater Lakes: Reconnecting the Great Lakes Water Cycle.” The project was led by the GLC with funding from the Great Lakes Protection Fund in partnership with the Alliance for Water Efficiency, Environmental Consulting & Technology Inc., and the Great Lakes and St. Lawrence Cities Initiative. The project and associated products were developed as part of a three-year initiative to examine the ecological and financial costs and benefits for pursuing water conservation and green infrastructure practices. It also evaluated how information can drive innovation in water management throughout the Great Lakes region. The final products included factsheets, an online green infrastructure calculation tool, handbooks and videos.

Advocacy for Clean Water and Safe Drinking Water State Revolving Fund Programs
The GLC continues to convey to Congress the critical need to support level or enhanced funding for the Clean Water and Safe Drinking Water State Revolving Fund programs. In FY 2017 the GLC called on Congress to provide funding for these programs to help repair failing water infrastructure, replace lead pipes in drinking water systems, enhance treatment to avoid toxic algae, separate combined sewers and upgrade sewage treatment plants. For additional details, see the Policy and Advocacy update below.

Commercial Navigation

Objective: Improve the efficiency, competitiveness, security and sustainability of the Great Lakes-St. Lawrence River maritime transportation system to support the regional and national economies of the United States and Canada.

Strategic Actions:

1. Collaborate with the Regional Maritime Entity and other stakeholders to support implementation of the governors’ and premiers’ Strategy for the Great Lakes-St. Lawrence River Maritime Transportation System, with a focus on establishing a maritime careers portal, maintaining the maritime asset inventory, managing data and information to track progress in implementing the strategy, and aligning data collection and reporting with the Blue Accounting initiative.

Support for the Governors’ and Premiers’ Maritime Strategy
The Conference of Great Lakes and St. Lawrence Governors and Premiers has requested the GLC support implementation of the new maritime strategy, with a focus on establishing a maritime careers portal, maintaining the maritime asset inventory, and managing data and information to track progress under the strategy as part of the Blue Accounting initiative. The GLC has convened a data working group with representatives from the states and provinces to assist with these tasks and will present to the new Regional Maritime Entity at its first meeting in late September 2016 in Montreal. With input from the regional entity, staff effort will proceed, with a report on progress to the governors and premiers at their meeting in 2017. The GLC will consider a resolution at the upcoming annual meeting endorsing the maritime strategy and committing itself to supporting its implementation.

2. In collaboration with the Regional Maritime Entity and other stakeholders, identify and advocate for priorities to maintain and strengthen the Great Lakes-St. Lawrence River maritime transportation system, including allocating funds from the Harbor Maintenance Trust Fund; constructing a new large lock at the Soo Locks; dredging to maintain authorized depths of channels and harbors and additional depth needed
in critical areas; repairing and investing in aging navigation infrastructure; ensuring adequate icebreaking capacity; developing sustainable strategies for managing dredged material; and supporting the development of technologies to improve the system’s environmental performance.

Support for Study of Additional Navigation Depth in the St. Marys River, Michigan
In July the GLC wrote to the Army Corps of Engineers expressing a non-binding offer to consider participating as a nonfederal sponsor of a study of deepening the navigation channel in the St. Marys River, Michigan, a priority recommendation called for in the Governors’/Premiers’ strategy. The study would investigate the economic and environmental benefits of enabling vessels to carry full loads when transiting this critical portion of the Great Lakes Navigation System.

Great Lakes Priorities in the Water Resources Development Act
The GLC has advocated with Congress for provisions in WRDA legislation that support the Great Lakes Navigation System, including appropriation of all funds collected for the Harbor Maintenance Trust Fund, allocation of funding for the Great Lakes, and continued study of building a new large lock at the Soo Locks. See additional details in the Policy and Advocacy Program report below.

Future Science and Policy Issues for Dredged Material Management
The 2016 Great Lakes Dredging Team (GLDT) Annual Meeting in May in Chicago included a special session on future science and policy issues and needs for dredged material management. Issues discussed included how science can support beneficial use and associated evaluation tools; wetland mitigation; environmental windows; and how science can support permitting programs. In coming months, the GLC will explore opportunities for a symposium and/or webinar series to address these issues. The GLC will also plan and convene the 2016 GLDT fall webinar, and begin planning for the 2017 GLDT Annual Meeting, which will continue the discussion on science needs related to dredged material management.

A project with the University of Wisconsin’s National Center for Freight and Infrastructure Research and Education (CFIRE) exploring the concept of recovering and recycling dredged material from confined disposal facilities (CDFs) was completed in late 2015. The data produced in this project was summarized in the publication *Building More Sustainability into Great Lakes Dredged Material* (published in May 2016) and was used to enhance the existing GLC-housed web tool that provides information on recycling of dredged material in the Great Lakes.

3. Convene or participate in regional partnerships, forums and initiatives related to the Great Lakes-St. Lawrence River maritime transportation system, including the Regional Maritime Entity, Great Lakes Dredging Team, Great Ships Initiative, and the Great Lakes Small Harbors Coalition.

Great Lakes Dredging Team
The GLC continues to serve as secretariat to the GLDT, which works with state and federal agencies and industry partners to maintain navigation access to Great Lakes ports and harbors while pursuing sustainable and environmentally responsible dredging operations and management of dredged material. With the assistance of the GLDT co-chairs and steering committee, the GLC planned the 2016 Annual Meeting, held in Chicago, Illinois, on May 18-19. More than 40 people attended the meeting and reception held at the Chicago Architecture Foundation. The meeting included a special session, discussed above, on future science and policy issues related to dredged material management. The GLC also coordinated the publication of the spring 2016 issue of the GLDT newsletter.

Great Ships Initiative
GLC Executive Director Tim Eder is a member of the Great Ships Initiative (GSI) Advisory Committee, which provides advice to GSI leadership on program direction and activities. The GLC is currently working with the GSI to plan a Great Lakes ballast water management workshop in fall 2016. See the Aquatic Invasive Species Prevention and Control program update below for details.
Great Lakes Waterfront Community Revitalization and Economic Development

**Objective:** Support the efforts of the states and provinces – in collaboration with federal agencies, local communities, and nongovernmental stakeholders – to restore and revitalize waterfront areas and advance policies, programs and funding to leverage water resources to support a strong regional economy and high quality of life.

**Strategic Actions:**

1. Support research, disseminate information, and collaborate with regional leaders to quantify the economic value of Great Lakes water resources, the return on investments in environmental restoration and water-related infrastructure, and the ecosystem benefits and services generated by the Great Lakes, and facilitate a cooperative, regional approach to advancing the “Blue Economy.”

   **Understanding and Advancing the “Blue Economy” in the Great Lakes**
   GLC staff are engaged in discussions with several partner organizations to define and address key questions related to the “Blue Economy” in the Great Lakes region, including quantifying the value of Great Lakes water resources and their role in advancing business growth and economic development; quantifying the return on investment in Great Lakes restoration efforts, such as the GLRI, and identifying which investments best support both ecosystem and economic health; and assessing various Blue Economy initiatives underway and developing strategies to support them and promote a regional approach to leveraging the economic value of Great Lakes water resources. The discussions are ongoing and we hope to develop a suite of specific actions to pursue in collaboration with other partners.

   **Summit on Ecosystem Services in the Great Lakes**
   GLC staff participated in a recent summit on ecosystem services sponsored by the University of Michigan’s Cooperative Institute for Limnology and Ecosystem Research. The summit convened experts from multiple fields to grow a network of individuals focused on the valuation of ecosystem services in the Great Lakes and to set an agenda for continued work in this area.

   **IAGLR Symposium on Great Lakes Areas of Concern**
   GLC staff are serving on a steering committee that is organizing a symposium that will review achievements and lessons learned from the Great Lakes Areas of Concern (AOC) program, to be held as part of the 2017 International Association for Great Lakes Research (IAGLR) conference in Detroit, Michigan. The symposium is being cosponsored by IAGLR and the Aquatic Ecosystem Health and Management Society (AEHMS) and will generate a series of papers that will be published by the Ecovision World Monograph Series, Aquatic Ecosystem Health & Management Society (AEHMS) and Michigan State University Press. GLC staff are leading the session on “life after delisting” and assessing ecosystem services related to AOC restoration.

   **Study of Socio-Economic Benefits from Cleanup Efforts in the Muskegon Lake AOC**
   As part of its new regional habitat restoration partnership with NOAA (described in the Coastal Conservation and Habitat Restoration section below), the GLC is coordinating a study of socio-economic benefits from restoration efforts in the Muskegon Lake AOC in Michigan. The study will be conducted by faculty with Grand Valley State University (GVSU) and will complement and update a similar study completed in 2011 by GVSU that projected a 6-to-1 return on investment from the $10 million NOAA-Recovery Act funded habitat restoration project for Muskegon Lake coordinated by the GLC. The new study is expected to be completed in early 2018.

2. Support the work of the Conference of Great Lakes and St. Lawrence Governors and Premiers’ regional economic task force, and collaborate with other partners such as the Council of Great Lakes Industries and the Great Lakes Metro Chambers Coalition, to strengthen water-related infrastructure, industries and commerce and facilitate a cooperative approach to improve regional economic performance and competitiveness.
GLC staff are engaged in ongoing discussions with Conference leaders on how to best support their new economic task force and related initiatives. This topic will be further explored in a panel session at the annual meeting. Staff with the Council of Great Lakes Industries and the Great Lakes Metro Chambers Coalition are working with the GLC to explore opportunities to advance the “Blue Economy,” as discussed previously. These organizations also collaborate with the GLC to advocate with the federal government for regional Great Lakes priorities, including water infrastructure and commercial navigation.

3. Support implementation of the GLRI and other regional programs to clean up and restore waterfront areas, and advance policies, funding and information exchange to assist the states, provinces and local communities in strategically leveraging water resources to strengthen local economies and provide benefits for residents and visitors.

**Communicating with U.S. EPA on State Engagement to Support GLRI Implementation**

Supporting the GLRI – including continued funding and legislative authorization by Congress – continues to be a top priority for the GLC. Over the past year the GLC has coordinated communications from the Great Lakes states to U.S. EPA regarding better communication, coordination and funding support to the states to support GLRI implementation. In 2015 U.S. EPA proposed a new approach to funding state support to the GLRI and broader Great Lakes management efforts. Responding to state concerns communicated by the GLC, the U.S. EPA administrator invited the states to participate in quarterly meetings with the federal Regional Working Group regarding work under the GLRI. Following extensive discussions among the states, the GLC sent a letter to the administrator in August 2016 proposing a revised formula for state capacity funding for the GLRI and related Great Lakes programs. The letter emphasized that state capacity funding is essential to carrying out state responsibilities but has not been adequate to keep up with the increasing workload. The GLC will continue to coordinate the states’ collective views to U.S. EPA to ensure successful implementation of the GLRI and other Great Lakes programs.

**Support for the Statewide Public Advisory Council for Michigan’s AOC Program**

GLC staff assist the State of Michigan in supporting the Statewide Public Advisory Council for Michigan’s AOC Program. Staff attended council meetings in March and June and provided updates on GLC activities, including policy and advocacy efforts in support of the AOC program.

**Support for the 2016 Annual Conference for the U.S. Great Lakes AOC Program**

GLC staff assisted in planning and convening the 2016 Annual Conference for the U.S. Great Lakes AOC program, sponsored by U.S. EPA and held March 2-3 in Dearborn, Michigan. Approximately 250 people attended the conference, which included dozens of presentations on the status of AOC cleanup efforts. Conference presentations are available online.

4. Advocate with Congress and federal agencies for programs, policies and funding that support state and local efforts to clean up and revitalize waterfront areas, including the GLRI, Coastal Zone Management Act, National Sea Grant College Program, and brownfields redevelopment programs, and assist in effectively implementing these programs and linking them with state and provincial priorities.

**Waterfront Community Revitalization and Resiliency Act**

The GLC continues to explore opportunities to support state and local efforts to revitalize waterfront areas, particularly those benefitting from restoration work under the GLRI. In July the U.S. Senate passed the Waterfront Community Revitalization and Resiliency Act, sponsored by Wisconsin Sen. Tammy Baldwin, and the GLC called for House passage of companion legislation. The bill creates a voluntary Resilient Waterfront Community designation within the U.S. Department of Commerce; establishes a Resilient Waterfront Communities network; and provides technical assistance to communities to support waterfront planning and development. It is national in scope but is especially important for the Great Lakes region. Building on its longstanding work supporting AOC cleanup efforts, coastal zone management and related activities, the GLC hopes to advance continued progress in revitalizing waterfront communities in collaboration with other partners.
5. Collaborate with other water-related commissions in the U.S., Canada, and abroad to share information, exchange strategies, and advance common goals directed at solving problems affecting water resources and leveraging them as vital regional assets.

<table>
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<tr>
<th>“Tri-Commission” Coordination</th>
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<tbody>
<tr>
<td>The GLC is collaborating with the Great Lakes Fishery Commission and the International Joint Commission on periodic “Tri-Commission” discussions to share information, identify common priorities, and communicate collectively with U.S. EPA and other parties on Great Lakes issues.</td>
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<th>Coordination with other Water Commissions</th>
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<tr>
<td>Substantial potential exists for the GLC to collaborate with other water-related commissions, particularly those involving the Great Lakes states, to advance common priorities. The GLC is evaluating upcoming opportunities to achieve this objective.</td>
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Coastal Conservation and Habitat Restoration

**Objective:** Conserve coastal ecosystem functions and values that contribute to the diversity, resilience and economy of the Great Lakes-St. Lawrence River basin by protecting natural communities that sustain populations of desirable fish and wildlife species; restoring degraded areas; and managing coastal resources to improve ecosystem services while supporting sustainable economic development.

**Strategic Actions:**

1. Lead and support regional programs that restore, protect and manage valuable habitat and water resources through implementation of the NOAA-GLC Regional Partnership in Areas of Concern, in coordination with U.S. EPA, NOAA, the states and local organizations.

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<tr>
<th>NOAA Regional Partnership to Support AOC Habitat Restoration</th>
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<td>The GLC is leading two NOAA Regional Partnerships under the GLRI to support habitat restoration in AOCs. Since 2013 more than $29 million has been allocated for 13 habitat restoration projects in the St. Marys River and Muskegon Lake AOCs in Michigan, and the Buffalo River AOC in New York. In August 2016 the GLC was awarded a new NOAA Regional Partnership with funding up to $40 million over five years. Initial work under the 2016 partnership will support a large habitat restoration project in the Muskegon Lake AOC; a socio-economic study on the benefits of restoration; and communications about NOAA’s Great Lakes work in AOCs. Additional projects to be supported by the partnership will be identified by NOAA in consultation with U.S. EPA, the states and local AOC leaders. Ongoing restoration projects being funded under the NOAA-GLC partnership include:</td>
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- **St. Marys River AOC:** $9,441,749 for the Little Rapids Restoration Project to restore 70 acres of river rapids and aquatic habitat, in partnership with the Chippewa County Road Commission. Construction of the new 600-foot bridge that will improve habitat is underway and major construction is expected to be complete in November 2016 with follow-up plantings in 2017.

- **Buffalo River AOC:** $6,276,558 for eight restoration and design projects that will restore 6,320 linear feet of shoreline habitat, 10.67 acres of riparian habitat and 3.31 acres of invasive species management in partnership with the Buffalo Niagara Riverkeeper. These projects are in various stages of construction: two sites are complete and in the monitoring phase and the other six are in the design phase with major construction anticipated this fall, followed by spring 2017 plantings.

- **Muskegon Lake AOC:** $21,822,519 for four restoration projects that will restore 7,011 feet of shoreline, 65.3 acres of emergent wetland, 44.6 acres of open water wetland, and 27.9 acres of fill removed (272,228 tons) in partnership with the West Michigan Shoreline Regional Development Commission. New funding allocated in August 2016 will complete the final habitat restoration project for the Muskegon Lake AOC; completion of all partnership projects is anticipated to lead to the removal of the AOC’s habitat-related beneficial use impairments. Three projects are currently being implemented with two undergoing major construction; the most recently funded...
The GLC also participated in events in two AOCs, attended both the regional AOC conference and state specific AOC meetings in Michigan and New York, and coordinated with state agency staff in Wisconsin, New York, Ohio and Michigan on strategies to advance habitat restoration.

2. Elevate awareness of coastal conservation issues among decision-makers, managers, researchers and the public by convening meetings, coordinating action and developing communication products such as websites, webinars, and publications.

Joint Workplan Activities with the USGS-Great Lakes Science Center
The GLC is partnering with federal agencies to facilitate communication and coordination between states and federal research laboratories. GLC staff, in cooperation with staff from USGS, are engaged in multiple activities outlined in the third annual joint workplan under a five-year Memorandum of Understanding between the USGS-Great Lakes Science Center and the GLC. The joint workplan has three funded initiatives and five unfunded initiatives:

1. Phragmites (Great Lakes Phragmites Collaborative, Collaborative for Microbial Symbiosis and Phragmites Adaptive Management Framework)
2. Nutrients and Harmful Algal Blooms (HABs Collaboratory)
3. Invasive Mussels Collaborative
4. Coastal Science Strategy
5. Urban Coastal Revitalization
6. Beach and Coastal Health
7. Coastal Infrastructure and Nearshore Habitats
8. Lake Michigan Monitoring Coordination Council (2014-2015 funding from the GLC-USGS MOU and 2015-2016 funding via Michigan DEQ)

Those in bold are funded and detailed updates are provided elsewhere in this workplan update. The other initiatives are not yet funded but identify joint priorities and prospective actions around which funding can be pursued.

As part of the NOAA Regional Partnership, the GLC is leading a communications project using a solutions journalism approach to explore the topic of AOC habitat restoration, highlighting NOAA and GLC interest in promoting the impact of their partnership, as well as the impact the work had on the quality of life of the communities affected.

3. Explore and develop data and information-sharing opportunities to support ongoing coastal wetland restoration prioritization, contribute to decision-making and measure progress on coastal conservation and habitat restoration across the region.

Mapping Avian Resources in the Great Lakes
The third phase of Monitoring and Mapping Avian Resources Over Selected Areas of the Great Lakes is underway with a $260,000 grant from the U.S. Fish and Wildlife Service. During phases 1 and 2 the GLC coordinated aerial bird surveys over selected areas of lakes Michigan, Huron, St. Clair and Erie, with more than 1.8 million bird observations collected from 2012-2014. In Phase 3, previously collected data will be used to develop a set of over-lake models for individual bird species that will be relevant to natural resource managers. The GLC is leading a data and information needs assessment directed at wildlife and natural resource management. A survey of managers was conducted to explore how pelagic bird data and information can support wildlife and natural resource management decisions in the Great Lakes. This information helped guide a management engagement workshop held in Ann Arbor on March 22-23, 2016. A summary report of the workshop has been published.
Adaptive Management Framework for Phragmites

The GLC is partnering with USGS to develop an adaptive management framework for the non-native plant Phragmites. The adaptive management approach will help improve the management of Phragmites through increased management efficiency and reduced uncertainty associated with treatment options, contributing to the restoration of ecologically resilient and diverse ecosystems at both the local and regional scales. The GLC received funding to add capacity to provide regional coordination for this program and to engage partners, including state and federal natural resource managers.


Great Lakes Landscape Conservation Cooperative

The GLC sits on the steering committee of the Upper Midwest and Great Lakes Landscape Conservation Cooperative and participates on the Coastal Conservation Working Group. The Steering Committee met in May and decided to embrace Blue Accounting as the framework for an information platform to mark progress toward habitat and species conservation goals. The GLC cooperates with other federal partners, including NOAA, USGS and the U.S Army Corps of Engineers on habitat and coastal projects and programs.

5. Advocate for legislation and funding for federal programs, policies and laws, such as the GLRI, Great Lakes Fish and Wildlife Restoration Act and the Farm Bill, and support their effective implementation and alignment with state and provincial priorities.

Great Lakes Fish and Wildlife Restoration Act

The GLC has adopted a resolution supporting reauthorization of the Great Lakes Fish and Wildlife Restoration Act as a mechanism through which the federal government, the Great Lakes states, tribes, and other stakeholders can continue to implement cooperative conservation, restoration and management actions for fish and wildlife in the Great Lakes Basin, including actions to achieve the goals of the Great Lakes Restoration Initiative.

Aquatic Invasive Species Prevention and Control

Objective: Prevent the introduction and spread, and when necessary, advance the management and control of aquatic invasive species (AIS), that are or have the potential to negatively impact water resources or the economy of the Great Lakes-St. Lawrence River basin.

Strategic Actions:

1. Develop and promote communication products and services, including websites, webinars, and publications (e.g., Great Lakes Aquatic Invasions) that provide AIS information and advance progress on AIS prevention and control.

Great Lakes Aquatic Invasions Publication

The GLC continues to work with members of the Great Lakes Panel on Aquatic Nuisance Species (GLP) to revise, update and reprint the Great Lakes Aquatic Invasions booklet, last published in 2007. Draft content for the updated booklet is currently under review by GLC staff and GLP members and graphic design will begin this fall. The group is aiming to have the updated booklet available in early 2017.
2. Develop and promote the use of adaptive management frameworks and data and information integration platforms in order to support decision-making (including evaluating costs and benefits) and measure progress on AIS prevention and control across the region.

**Great Lakes Blue Accounting – AIS Pilot**
GLC AIS program staff are working with staff at The Nature Conservancy to develop and implement the AIS pilot of the Great Lakes Blue Accounting program. The pilot is focused on developing metrics and reporting progress on regional goals for AIS prevention and control. A proposed approach will be presented to the GLP at their fall meeting for feedback. Initial outcomes from this work will be completed by the end of 2017 and are likely to be focused on species risk assessments, policies, monitoring and surveillance.

**Sea Lamprey Control Map**
The GLC, in collaboration with the Great Lakes Fishery Commission, has maintained the barrier mapping application built over the last two years, which represents the location of lamprey barriers in the Great Lakes basin. It provides historical maximum extent data, showing how far up waterways sea lamprey larvae have been found, barrier fact sheets, and images of lamprey traps where relevant.

**Geospatial Data Exchange for Invasive Species Monitoring**
GIS and data management staff are continuing their collaboration with the Michigan Department of Environmental Quality under a U.S. EPA Exchange Network challenge grant to develop a data integration tool for citizen-scientist observations of invasive species. The project is a test case for a larger regional data integration tool that will allow data from multiple species identification and tracking programs to be consolidated into a central database. Finalized data transformation protocols are being implemented on a database housed at Michigan State University.

3. Facilitate regional forums and collaboratives working to advance effective and coordinated approaches to AIS prevention and control, including the Great Lakes Panel on Aquatic Nuisance Species, the Chicago Area Waterway System Advisory Committee, and the Great Lakes Phragmites and Invasive Mussel collaboratives, among others.

**Great Lakes Panel on Aquatic Nuisance Species**
The GLC continues to provide staff support to the GLP and its committees. The GLP held its spring meeting in Traverse City, Michigan, on May 3-4, 2016. The meeting was held jointly with the federal Aquatic Nuisance Species Task Force and featured a session on state, federal and regional AIS activities funded through the GLRI. Staff are supporting two GLP ad-hoc committees focused on grass carp and risk assessments. The fall GLP meeting will be held November 2-3, 2016 in Ann Arbor, Michigan. Meeting summaries, presentations and other materials are posted on the GLP website.

**Chicago Area Waterway System Advisory Committee**
The GLC continues to convene a 30-member advisory committee that is the primary regional stakeholder forum seeking solutions to the threat of Asian carp and other AIS passing through the Chicago Area Waterways System (CAWS) while maintaining current uses of the system. The committee last met on May 9 in Chicago. The meeting provided updates on several Asian Carp planning and study efforts, as well as presentations and discussion on process and technical assessments conducted to inform committee efforts moving forward. The next meeting of the Advisory Committee is scheduled for October 14 in Chicago. An independent assessment of the Advisory Committee process was prepared by Dr. Frank Dukes of the Institute for Environmental Negotiation at the University of Virginia under the oversight of the Gail Bingham, co-lead of the advisory committee facilitation team. Its aim was to gather lessons learned from the committee’s work between March 2014 and January 2016 to guide future efforts. The assessment found strong consensus among the members in the value of the group and support for continuing to meet, although with some changes to the committee’s structure and operations. There was clear recognition that the committee is the best forum for addressing the complex problem of AIS transfer through the CAWS. Future priorities for the committee include
• tracking and advocating for implementation of the committee’s recommendations;
• advising on what questions stakeholders would like to see addressed in future studies about the effects of, and mitigation for, implementation of AIS control points in the CAWS;
• guiding and receiving information from upcoming evaluations of hydraulic and hydrology issues associated with establishing control points in the CAWS and options for treating lock water to prevent AIS transfer;
• evaluating transportation needs in the CAWS and considering impacts to commercial navigation from AIS control measures and options to address them; and
• raising questions and learning about multi-jurisdictional governance and cost sharing models.

Great Lakes Phragmites Collaborative
The GLC continues to expand a partnership with the USGS-Great Lakes Science Center to lead communications and regional efforts to address the invasion of the non-native plant *Phragmites*. The Great Lakes Phragmites Collaborative (GLPC) engages the resource management community by facilitating regional collaboration, supporting technology transfer, linking science and management, and providing needed information products. The GLPC provides outreach via an interactive web hub, webinar series, social media presence and email list. A recent addition to the website is a series of case studies highlighting best management practices. The GLPC is guided by a regional advisory and steering committee using an approach known as Collective Impact. This approach provides structure to the collaboratives necessary to address complex natural resource challenges. The GLPC was described in the GLRI Action Plan II as a model for invasive species collaboratives and in April 2016 staff published a peer-reviewed paper in the journal Biological Invasions that showcases this approach as a novel strategy to align priorities and resources for complex issues. The GLPC is also advancing the science of non-native *Phragmites* management by launching the Phragmites Adaptive Management Framework (PAMF), a program that will develop a model to analyze monitoring data across the region to provide *Phragmites* managers with site-specific management recommendations.

Invasive Mussel Collaborative
Working in partnership with USGS, the Great Lakes Fishery Commission and NOAA, the GLC is supporting the Invasive Mussel Collaborative, which is providing a framework for communication and coordination among scientists, managers and others to share information and lessons learned, guide supporting research, and inform management actions related to control of zebra and quagga mussels. The collaborative is organized around a steering committee and a science team. This fall the collaborative will begin work on a strategy for *dreissenid* management in the Great Lakes that will include the identification of management and research priorities. The Collaborative is hosting webinars to facilitate learning and information sharing on topics related to control of *dreissenid* mussels; webinar announcements and recordings are available online. The website and an email listserv have been established to provide and share information, webinar announcements and recent news, and to connect researchers, managers and others interested in *dreissenid* management.

4. Collaborate with other partner groups engaged in AIS prevention and control to support and advance common AIS priorities, including the GLWQA Annex 6 Subcommittee, the Conference of Great Lakes and St. Lawrence Governors and Premiers AIS Task Force, the Great Lakes Fishery Commission, the International Joint Commission, the federal Aquatic Nuisance Species Task Force, and other regional ANS panels, among others.

Regional Coordination
The GLC participated in national Aquatic Nuisance Species Task Force meeting in May. Staff continues to participate on the GLWQA Annex 6 Subcommittee and coordinate with the committee in regional AIS meetings and related efforts.
5. Advocate for legislation and funding to support effective implementation of federal programs, policies and laws, such as the National Invasive Species Act, Lacey Act, GLRI, and Asian Carp Action Plan.

**Invasive Fish and Wildlife Prevention Act**
The GLC continues to support federal efforts to prevent the importation of potentially harmful non-native species. The GLC issued a news release in support of the *Invasive Fish and Wildlife Prevention Act of 2016*, legislation introduced by U.S. Sens. Kirsten Gillibrand (D-NY), Gary Peters (D-MI), Chuck Schumer (D-NY) and Debbie Stabenow (D-MI) that would expand the authority of the U.S. Fish and Wildlife Service to prohibit harmful nonnative species from being imported or sold in the United States.

6. Lead regional projects that advance policies and solutions to reduce the risk of AIS introduction and spread through priority pathways, including internet sales of organisms in trade, canals and waterways, and ballast water.

**Great Lakes Detector of Invasive Aquatics in Trade**
The GLC completed work on a GLRI-funded project to develop software and tools to track, identify and monitor the sale of invasive species via the internet. The web-crawling software system – the Great Lakes Detector of Invasive Aquatics in Trade (GLDIATR) – is complete and in operation. The GLC was awarded a second GLRI grant in May to continue this work, including making improvements to the system and targeting reductions in the availability of specific species. Ongoing work will be coordinated with a multi-stakeholder team that includes NGOs, industry, and state and federal agencies.

**Great Lakes Ballast Water Workshop**
The GLC is leading planning efforts to convene government agencies, industry representatives, NGOs and others for a ballast water workshop scheduled for November 16-17 in Detroit, Michigan. The workshop objectives are to share information and promote a common understanding of the state of ballast water regulation, technology development, and associated issues and challenges. The GLC is also developing a background briefing paper to distribute in advance of the workshop. This effort is being conducted with funding from the Great Lakes Fishery Trust.

**Asian Carp and the Chicago Area Waterway System (CAWS)**
The GLC became a member of the Asian Carp Regional Coordinating Committee (ACRCC) in March and continues to participate on the Executive Steering Committee of the Great Lakes and Mississippi River Interbasin Study (GLMRIS), and serves as convener of the CAWS Advisory Committee (see above). The technical consultant for the Advisory Committee, HDR Inc., began work on a scoping exercise to outline potential hydrologic, hydraulic, and water quality investigations that are needed to inform and evaluate the conceptual elements identified by the committee for a long-term solution to AIS transfer through the CAWS. The specific aim of the investigations is to assess whether and how control points could be implemented consistent with the mid-system locations identified in the GLMRIS report (variations of GLMRIS Alternatives 6 and 7). A workshop with key stakeholders was held March 1, 2016 to discuss and receive input on existing data, models, and resources, and items requiring additional study. The scoping exercise will be completed by the end of the calendar year, after which funding will be sought to carry out the detailed studies, which will set the stage for more substantive planning, design and policy development. In addition, HDR prepared a case study of the Fargo-Moorhead Flood Diversion Project to illustrate multiple regional jurisdictions forming an entity to be a cost-share partner for a large water management project; the institutional arrangements and anticipated cost-sharing framework utilized; and the process for generating funding and allocating costs and responsibilities.
Information Management and Blue Accounting

Objective: The GLC’s member states and provinces have access to high-quality, curated information about Great Lakes issues from a neutral and authoritative source.

Strategic Actions:

1. Deliver consistent, continuous and unbiased information to the GLC’s member states and provinces on issues and outcomes of mutual interest and concern, including the support of other GLC Program Areas described in the Strategic Plan.

   **Great Lakes Commission’s Information Architecture**
   The GLC’s web sites are a central element of its information delivery program. Staff and a contractor recently completed a review of the GLC’s information architecture to make sure the most important and frequently-used information is easily found. In the course of this project, the team spoke with stakeholders and assessed the needs of key audiences to create a new approach to publishing information. This new approach will consolidate into the GLC’s website key elements of the Great Lakes Information Network (GLIN), including GLIN Daily News, the Great Lakes Calendar, the GLC Listservs, and many of the information pages about the lakes. This transformation is in progress. After a short period of overlap, GLIN will be retired and references to content from it will be forwarded to glc.org.

2. Establish Blue Accounting as the leading information service to track the region’s progress toward shared goals and outcomes using consistent data, metrics and methods, working with The Nature Conservancy and other partners in both countries. Specifically, provide support to the Source Water Initiative, described in the Water Quality Program Area, as Blue Accounting pilot projects.

   **Blue Accounting Initiative**
   The development of Blue Accounting – an information monitoring, strategy and delivery system that supports the region’s priority water outcomes – has been initiated by the GLC in response to a 2013 request from the Great Lakes governors and premiers. The full report, *Great Lakes Blue Accounting: Empowering Decisions to Realize Regional Water Values*, is available online. In May 2015 the GLC signed a Memorandum of Agreement with The Nature Conservancy that formalizes a partnership between the two organizations with the purpose of collaborating to implement Blue Accounting and develop a new, regional online information management and delivery platform. A Great Lakes Blue Accounting Advisory Committee has been formed to support the initiative with representation from state, federal and local governments, business, academia and NGOs from the Great Lakes basin. This committee meets quarterly and provides invaluable advice to the program.

   The Blue Accounting initiative includes the development of three pilot programs. Two pilots led by The Nature Conservancy are being developed to measure progress in reconnecting rivers and streams, and managing aquatic invasive species. The GLC is leading the Source Water Initiative, consisting of the ErieStat program and a Drinking Water Supply project as pilot programs focused on the Blue Accounting desired outcome for a “safe and sustainable domestic water supply.” These pilots are described above in the Water Quality program report.

   The GLC’s work in building the Blue Accounting initiative and the Source Water Initiative is funded through a cornerstone grant of $4 million from the C.S. Mott Foundation with additional grants from the Erb Family Foundation, the Joyce Foundation and an anonymous funder.

3. Develop and maintain mutually-beneficial relationships with agencies and entities across the region, in both nations, at federal, state, provincial, tribal/First Nations, local and municipal scales to coordinate information management and provide information to the GLC for use by its members.

   Through its programs and projects GLC staff continue to work across the region to develop information services and products that support its members. Staff are actively involved in the GLWQA Annexes, the Information Coordination and Flow workgroup of the IJC’s Science Priority Committee and the Science
and Information Subcommittee of the Great Lakes Advisory Board. Staff also continue to support other Great Lakes programs and projects as advisors and collaborators to develop and deliver timely and useful information to GLC members.

4. Support and enhance the efforts of Annex 10 of the GLWQA, the IJC’s Science Priority Committee and the Great Lakes Advisory Board’s Science and Information Subcommittee to improve information coordination and flow between entities and agencies in the Great Lakes region.

GLC staff are actively engaged in the efforts of Annex 10 of the GLWQA, the IJC’s Science Priority Committee and the Great Lakes Advisory Board to find ways to improve the flow of relevant and timely information across Great Lakes institutions. The GLC was engaged by the Information Coordination and Flow workgroup of the IJC’s Science Priority Committee to help the workgroup better understand the status of data collection and flow in support of environmental decision-making in the Great Lakes region and provide recommendations for improvement. This report to the workgroup was completed in July 2016.

5. Coordinate and provide information to support spill prevention and response programs, working with U.S. EPA across the Great Lakes basin and continuing current work with the Region 5 Regional Response Team to build intergovernmental relationships that improve planning and make response efforts more efficient.

Statewide Inland Sensitivity Atlases
GLC staff maintain statewide Inland Sensitivity Atlases (ISAs) for use by spill responders and response planners. Updates to the Ohio ISA were interrupted to incorporate new data on hazardous materials sites and rail lines, and staff is updating the ISA for Indiana. Staff continue to work closely with the federal Region 5 Regional Response Team to maintain the team’s website and the Region 5 Regional Contingency Plan. As part of this work, staff has been working with U.S. EPA On-Scene Coordinators and local agencies to complete contingency planning for the Patoka Wildlife Refuge in Indiana. Staff is preparing for similar engagement in southeast Ohio and the Cuyahoga River area. Staff continues to work with U.S. EPA staff and other regional responders to develop “field days” in the region to enhance mapping products and response plans.

6. Provide facilitation and information management services to support development of strategies and policies to ensure protection of the region’s water resources in the context of increases in North American oil production and associated oil transportation to and through the Great Lakes and St. Lawrence River region.

Oil Transportation Advisory Committee
Formal activities of the Oil Transportation Advisory Committee are on hold while we re-evaluate the role of the committee. A meeting will be scheduled later this year to discuss next steps for the committee. The GLC has received a grant from the Mott Foundation to commission research or briefing papers on oil transportation topics related to risk, infrastructure, response planning and impacts of oil on the economy. Two proposals have been selected for papers addressing infrastructure and an economic overview. Options for two more proposals are being explored. These papers will be completed by March 2017.

The GLC has been expanding its collaboration with other groups on this topic. We have been partnering with Great Lakes Sea Grant on a series of webinars on issues related to crude oil transportation across the Great Lakes Basin and will cohost a panel session at the Restore America’s Estuaries-The Coastal Society joint meeting in December 2016. The GLC has also been invited to participate in the IJC’s energy transport science synthesis working group. The GLC is reviewing and updating the project pages on its website to increase the efficiency of information dissemination.
Policy Coordination and Advocacy

The centerpieces of the GLC’s policy coordination and advocacy program are its annual legislative priorities statement and Great Lakes Day in Washington. The 2016 statement, *Sustaining Great Lakes Restoration and Economic Revitalization*, was released on February 25 – Great Lakes Day 2016 – and guided the GLC’s advocacy activities in 2016. The top priorities for 2016 are:

- Pass authorizing legislation to strengthen and accelerate efforts to revitalize the Great Lakes economy and environment.
- Provide resources to maintain and enhance critical infrastructure that supports the Great Lakes Navigation System, including dredging and a new lock at Sault Ste. Marie, Michigan.
- Continue progress in restoring the health of the region’s most polluted areas by sustaining funding for the Great Lakes Restoration Initiative in Fiscal Year 2017.
- Coordinate with Illinois and other Great Lakes states and federal and local partners to maintain successful monitoring and control efforts that have reduced the carp population in the Illinois River. Provide the necessary funding to the Army Corps of Engineers to complete the current study to fully assess the viability of strengthening a single control point at the Brandon Road Lock and Dam to prevent the one-way, upstream transfer of aquatic invasive species while maintaining or enhancing beneficial uses of the waterway system for flood control, water quality, recreation and barge transportation.
- Help communities upgrade aging water infrastructure and safeguard drinking water.
- Ensure Farm Bill programs are effectively targeting watersheds contributing the most polluted runoff to the Great Lakes.

Below is a brief summary of actions taken on these federal priorities since the 2016 Semiannual Meeting, as well as reports on other policy and advocacy issues affecting the Great Lakes that have come up since then.

At the end of this update is a recent letter sent to the Great Lakes Congressional Delegation urging action on Great Lakes priorities before the end of this session of Congress. This provides a comprehensive summary of the status of key priorities in Congress and the GLC’s recommended action on each.

**FY 2017 Appropriations for Major Great Lakes Programs**

The following table summarizes appropriations (in millions of dollars) for selected Great Lakes programs for Fiscal Year 2016, the President’s budget request for FY 2017, and Congressional action to date on FY 2017 appropriations.

<table>
<thead>
<tr>
<th>Program</th>
<th>Final FY 2016 Appropriations</th>
<th>FY 2017 Budget Request</th>
<th>Congressional Actions to Date on FY 2017 Appropriations</th>
</tr>
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<tbody>
<tr>
<td>Great Lakes Environmental Research Laboratory</td>
<td>$10.5</td>
<td>$10.5</td>
<td>House: No detail provided Senate: No detail provided</td>
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<tr>
<td>Chicago Sanitary and Ship Canal Dispersal Barrier</td>
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<td>House: $1,263 Senate: $1,300</td>
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<tr>
<td>Great Lakes and Mississippi River Interbasin Study</td>
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<tr>
<td>Clean Water State Revolving Fund</td>
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<tr>
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<tr>
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<td>House: $300 Senate: $300</td>
</tr>
<tr>
<td>BEACH Grants</td>
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<td>$0.0</td>
<td>House: $0.0 Senate: $9.5</td>
</tr>
<tr>
<td>Great Lakes Science Center</td>
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<td>$9</td>
<td>House: No detail provided Senate: No detail provided</td>
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<tr>
<td>Section 106 Water Pollution Control</td>
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<td>$246</td>
<td>House: $231</td>
</tr>
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</table>
### Program Summary

<table>
<thead>
<tr>
<th>Program</th>
<th>Final FY 2016 Appropriations</th>
<th>FY 2017 Budget Request</th>
<th>Congressional Actions to Date on FY 2017 Appropriations</th>
</tr>
</thead>
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<tr>
<td>Great Lakes Fishery Commission</td>
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<td>Great Lakes Fishery and Ecosystem Restoration</td>
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<td>National Sea Grant College Program</td>
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<td>$62</td>
<td>House: $64 Senate: $64</td>
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<tr>
<td>Coastal Zone Management Act (grants only)</td>
<td>$75</td>
<td>$75</td>
<td>House: $65 Senate: $856</td>
</tr>
</tbody>
</table>

1. Funding for operation and maintenance only; construction of barrier is expected to be completed with remaining FY2016 funds.
2. An additional $2.6 million is being provided from the GLRI for the Brandon Road feasibility study in FY 2016, which is being conducted under GLMRIS.
3. Includes $3.45 million for sea lamprey control and water quality improvements in the Lake Champlain Basin.
4. Includes $15 million for Regional Coastal Resilience Grants

### Pass authorizing legislation to strengthen and accelerate efforts to revitalize the Great Lakes economy and environment

Legislation has been introduced in both the House and Senate formally authorizing the GLRI. Rep. David Joyce and Sen. Mark Kirk introduced the *Great Lakes Restoration Initiative Act* in 2015 (H.R. 223 and S. 1024), which authorizes the GLRI at $300 million annually. Sen. Tammy Baldwin has introduced the *Great Lakes Ecological and Economic Protection Act* (S. 504), which authorizes the GLRI at $475 million annually; reauthorizes EPA’s Great Lakes National Program Office; reauthorizes the Great Lakes Legacy Act at $150 million annually; establishes a Great Lakes Advisory Board; and authorizes a Federal Interagency Task Force. Rep. Joyce’s bill passed the House in April and Sen. Kirk’s bill was passed by the Senate EPW Committee in February and later added to the Senate WRDA bill awaiting consideration by the full Senate.

Staff in both chambers consulted with the GLC on amendments to the legislation, including suggestions from U.S. EPA. Both bills authorize the GLRI, which is the primary aim of the legislation and the GLC’s top priority. The House bill includes additional provisions directing U.S. EPA to consult with states, tribes and stakeholders in implementing the GLRI; authorizes use of GLRI funds for U.S. EPA's Great Lakes office, the Great Lakes Legacy Act and for grants to nonfederal entities; requires the GLRI Action Plan to be updated every five years in consultation with the states and others; requires monitoring and reporting on progress under the GLRI; and directs U.S. EPA to designate a point person from an appropriate federal agency to coordinate GLRI activities involving harmful algal blooms. While both bills achieve the primary goal of formally authorizing the GLRI, the GLC has expressed support for the House bill due to the additional provisions.

The GLC submitted letters in early 2016 to the House and Senate committees supporting the bills and joined a joint letter with other regional agencies and organizations urging Congressional leaders to adopt the legislation. We are hopeful that this legislation will be passed by Congress this year and will provide a strong legal foundation to sustain the GLRI into the next administration. This is a significant accomplishment and we are pleased that the GLC has been an influential voice – together with our regional partners – in supporting congressional action.

### Provide resources to maintain and enhance critical infrastructure that supports the Great Lakes Navigation System, including dredging and a new lock at Sault Ste. Marie, Michigan

In 2014 Congress passed and the President signed a new Water Resources Reform and Development Act with important benefits for the Great Lakes, including increased funding for the Harbor Maintenance Trust Fund (HMTF); funding authorization for operating and maintaining the Great Lakes Navigation System; and direction to the Army Corps of Engineers to manage and allocate funding for the Great Lakes Navigation System (GLNS) as a single, comprehensive system. Since that time funding for the HMTF has increased each year, reflecting the legislation’s provisions directing incremental increases in expenditures until they reach 100 percent of the fund’s receipts in 2025.
In May the GLC wrote to the House Transportation and Infrastructure Committee expressing support for formally authorizing the 2014 WRDA provision allocating 10 percent of annual “priority” HMTF spending for the Great Lakes, and for maintaining the authorization for construction of a second large lock at the Soo Locks. The GLC reiterated its navigation priorities in WRDA in a recent letter to the Great Lakes Congressional delegation urging action on the full range of Great Lakes priorities.

The GLC continues to track the Corps of Engineers’ progress in implementing an approach that manages the Great Lakes Navigation System as a single, comprehensive system, as directed in the 2014 WRDA bill. We also are following work on an Economic Re-evaluation Report on constructing a new large lock at the Soo Locks in Sault Ste. Marie, Michigan, which is updating the cost-benefit analysis for this project.

Continue progress in restoring the health of the region’s most polluted areas by sustaining funding for the Great Lakes Restoration Initiative in Fiscal Year 2017

Congressional support for the GLRI continues to be strong, as evidenced by Congress providing level funding of $300 million for the Initiative in FY 2016, a $50 million increase from the president’s budget request. The GLC continues to devote substantial efforts to urging Congress to fully fund the GLRI, including factsheets showing GLRI projects funded in each state and showcasing economic benefits from the Great Lakes, and outreach to the states and local stakeholders urging them to convey support for the GLRI to their congressional representatives. The GLC has urged the Great Lakes congressional delegation to sign on to several letters to appropriations committees urging continued funding for the GLRI in FY 2017. In March a record-setting 55 members of the House Great Lakes Delegation supported level funding of $300 million for the GLRI. In their work to date on FY 2017 appropriations bills, both the House and Senate have allocated $300 million for the GLRI. As such, it is likely that Congress will provide this level of funding for the program in FY 2017, likely in an omnibus appropriations bill or long-term continuing resolution to be adopted following the fall election.

As discussed above, the GLC has worked closely with state agency staff to articulate a revised formula for allocating funding from U.S. EPA to the states to support the GLRI and other Great Lakes programs, such as activities under the Great Lakes Water Quality Agreement. The GLC will continue to coordinate joint communications from the states to U.S. EPA on opportunities to strengthen the GLRI program.

Coordinate with Illinois and other Great Lakes states and federal and local partners to maintain successful monitoring and control efforts that have reduced the carp population in the Illinois River. Provide the necessary funding to the Army Corps of Engineers to complete the current study to fully assess the viability of strengthening a single control point at the Brandon Road Lock and Dam to prevent the one-way, upstream transfer of aquatic invasive species while maintaining or enhancing beneficial uses of the waterway system for flood control, water quality, recreation and barge transportation

The GLC continues to work with Congress and regional stakeholders to advance measures to prevent the movement of Asian carp and other invasive species through the Chicago Area Waterway System (CAWS) and other pathways. Following release of the Great Lakes and Mississippi River Interbasin Study (GLMRIS) in January 2014, there is significant interest in Congress and among regional stakeholders to develop and implement short-term actions to reduce the risk of Asian carp movement while a long-term solution is developed. GLC staff participate on the Asian Carp Regional Coordinating Committee and the Executive Steering Committee for GLMRIS and continue to communicate with agency staff and congressional leaders on funding and legislative priorities in this area.

As discussed in detail above in the aquatic invasive species program update, the CAWS Advisory Committee is an important forum for convening stakeholders, reviewing information, and articulating consensus policies related to preventing AIS movement through the CAWS. In January 2016 the committee submitted its recommendations to Congress and the President calling for completion of studies necessary to develop a Chief’s Report evaluating a system of control points with AIS locks in the CAWS, consistent with the mid-system location identified in the GLMRIS alternatives. The committee has also expressed support for the evaluation of the Brandon Road Lock and Dam as a control point to prevent Asian carp and other species moving from the Mississippi River into the Great Lakes basin. The Advisory Committee’s letters and
recommendations, along with the summary of technical investigations conducted for the committee, are available online.

The Corps of Engineers is expected to release a Tentatively Selected Plan under the Brandon Road Feasibility Study in January 2017. This will be an important milestone for assessing a proposed plan and costs for the deployment of control technologies to prevent the one-way, upstream movement of Asian carp and other AIS at this location. The GLC is following this closely and will review the proposed plan and consider options to advance it with Congress and the states. A significant outstanding question is identifying a nonfederal sponsor to provide cost share and support implementation of recommendations from this study. Discussions on this matter are ongoing and likely will continue as the plan and its costs are better understood.

The GLC continues to monitor and, where possible, support the regional Asian carp action plan, emergency procedures, rapid response protocols, monitoring, and other measures developed by the Corps of Engineers, U.S. Fish and Wildlife Service, the State of Illinois, and other partners.

The GLC is supporting the Invasive Fish and Wildlife Protection Act of 2016, legislation introduced in the House and Senate in July that would expand the authority of the U.S. Fish and Wildlife Service to prohibit harmful nonnative species from being imported or sold in the United States. Under the current system established by the Lacey Act of 1900, nonnative species are frequently deemed “injurious” only after they are established and causing environmental and economic damage. The legislation would establish a new injurious species listing process based on risk to natural resources, and would provide the U.S. Fish and Wildlife Service with temporary authority to make emergency designations for wildlife that pose an imminent threat.

Help communities upgrade aging water infrastructure and safeguard drinking water

There has been considerable focus in Congress on drinking water safety in reaction to the drinking water crisis in Flint, Michigan and other communities. As shown in the table above, Congress may appropriate $200 million more for the Drinking State Revolving Fund (DWSRF) program for FY 2017 than was provided in FY 2016, and $50 million more than the President’s budget request. Numerous bills have been introduced in Congress addressing various issues associated with drinking water infrastructure. Provisions from many of these bills have been incorporated into the Senate Water Resources Development Act (WRDA), approved by that chamber in early September. The House WRDA bill does not include these provisions and the differences will have to be reconciled in conference committee, likely following the November election.

The Senate WRDA bill, S. 2848, was approved in committee in June by a 19-1 vote and includes a number of provisions affecting the Safe Drinking Water Act and the Clean Water Act. Highlights include a new grant program to address lead or other contaminants in drinking water (including replacement of private water lines); authorization of new DWSRF uses (including additional loan forgiveness for projects using innovative technologies); and mandatory and discretionary funding to aid the City of Flint. The GLC expressed support for the WRDA bill and these provision in a recent letter to the Great Lakes Congressional delegation.

Ensure Farm Bill programs are effectively targeting watersheds contributing the most polluted runoff to the Great Lakes

Over the past year GLC staff participated in workshops and in December 2015 provided written comments on the Natural Resource Conservation Service’s Western Lake Erie Basin Initiative Strategy. The final strategy was released by NRCS in March 2016 with the announcement of more than $40 million in additional Environmental Quality Incentives Program funds for farmers to install sediment and phosphorus reduction practices on contributing lands in the Western Lake Erie Basin over federal fiscal years 2016-2018. The GLC has advocated for GLRI funding to address nutrient runoff and is demonstrating the value of the GLRI through various water quality projects, discussed above. In addition to its current work under the GLRI, the GLC’s Water Quality Program is laying the foundation for efforts to strengthen agricultural pollution prevention programs in the Great Lakes in the 2018 Farm Bill.
Other Policy and Advocacy Issues

**Ballast Water**

Congress continues to actively consider the Vessel Incidental Discharge Act (VIDA) in both the House and Senate. VIDA impacts federal and state ballast water discharge requirements, including setting the 2012 U.S. Coast Guard ballast treatment regulations as the uniform standard nationwide, with the U.S. EPA in a consultation role and state authority significantly reduced, among other provisions. In the House, VIDA is currently included as Title XXXVI of H.R. 4909, the National Defense Authorization Act (NDAA); VIDA was not included in the Senate version of the NDAA. This legislation is scheduled to go into conference this fall and conferees will decide whether to accept the language as is, accept it with amendments, or fully strike it. The Administration is on record opposing the VIDA provisions. The version of VIDA included in H.R. 4909 does not include a provision that would require vessels entering the Great Lakes through the St. Lawrence River to conduct saltwater flushing, an amendment that was included in previous versions of VIDA considered in the Senate. The Senate Commerce, Science and Transportation Committee, which passed a version of the bill in 2015, is also said to be circulating a revised version of the legislation. It is unclear at this time what changes may have been made compared to earlier bills. Because there is not consensus among the GLC’s jurisdictions on VIDA, we are not taking a position on the issue at this time.
September 12, 2016

Dear Members of the Great Lakes Congressional Delegation:

I am writing on behalf of the Great Lakes Commission and its member states and provinces to urge you to take action on key priorities for the Great Lakes before adjourning the 114th Congress. With 90 percent of our nation’s supply of fresh surface water, the Great Lakes are a natural treasure and a vital economic asset for our eight-state region. The priorities below are vital for advancing our regional strategy to restore the Great Lakes, protect drinking water, create jobs, stimulate economic development and strengthen waterfront communities.

Pass bipartisan legislation authorizing the Great Lakes Restoration Initiative:
Formally authorizing the GLRI will provide a solid legislative platform to ensure our region continues to work together successfully, with effective Congressional oversight, to implement our Great Lakes restoration strategy. The House has unanimously passed H.R. 223 and the Senate EPW Committee has approved S. 1024 authorizing the GLRI, which has also been added to the Senate WRDA bill. The two bills must be reconciled, and we urge the Senate to pass the House bill or amend the version in WRDA to reflect the House bill.

Provide funding for vital Great Lakes programs: We support the following funding levels for programs that are vital to the environmental and economic health of the Great Lakes:

- **Great Lakes Restoration Initiative** (Interior-EPA): $300 million [House and Senate recommendation]
- **Clean Water State Revolving Fund** (Interior-EPA): $1.350 billion [Senate recommendation]
- **Drinking Water State Revolving Fund** (Interior-EPA): $1.070 billion [House recommendation]
- **Great Lakes and Mississippi River Interbasin Study** (Energy and Water): $2.6 million [House, Senate and President’s budget recommendation]
- **Chicago Sanitary and Ship Canal Dispersal Barrier** (Energy and Water): $12 million [House, Senate and President’s budget recommendation]
- **Harbor Maintenance Trust Fund** (Energy and Water): $1.263 billion [House recommendation]
- **Great Lakes Fishery Commission** (State, Foreign Operations): $24.22 million [House recommendation for the Great Lakes]

Include Great Lakes priorities in the Water Resources Development Act: The House and Senate WRDA bills (H.R. 5303/S. 2848) contain provisions supporting the Great Lakes. We urge that these provisions be included in the final WRDA bill passed by Congress:

- Extend the authorization of the Army Corps’ Great Lakes Fishery and Ecosystem Restoration program, which helps restore the Great Lakes [House bill, Sec. 118]
- Ensure the Harbor Maintenance Trust Fund (HMTF) is fully used for its authorized purposes [House bill, Sec. 108]
- Authorize the Great Lakes Restoration Initiative [Senate bill, Sec. 7611]
- Address critical water infrastructure needs by modernizing the State Revolving Loan Fund programs and reauthorizing funding to control sewer overflows and safeguard drinking water [Senate bill, Title VII]
- Add language authorizing 10% of annual HMTF appropriations for the Great Lakes Navigation System, as opposed to 10% of only priority HMTF appropriations as provided in the 2014 WRDA bill.
Pass the Great Lakes Fishery Research Authorization Act (H.R. 4595/S. 2569): This bill authorizes vital research being conducted by the U.S. Geological Survey to effectively manage Great Lakes fishery resources and safeguard the lakes from harmful invasive species such as Asian carp. This work supports state and binational actions to strengthen and conserve Great Lakes fishery resources.

Support House passage of the Waterfront Community Revitalization and Resiliency Act (S. 1935): This legislation was adopted unanimously by the Senate in July and should be taken up and passed in the House to help communities along the Great Lakes leverage the economic potential of their water resources. The bill will support community efforts to attract water-dependent industries and investments, revitalize neighborhoods, and strengthen recreation and tourism. It creates a voluntary Resilient Waterfront Community designation within the Department of Commerce; establishes a Resilient Waterfront Communities network; and provides technical assistance to communities to support waterfront planning and development. The bill is national in scope but is especially important for the Great Lakes region, where communities are cleaning up degraded and underutilized waterfront areas and developing valuable new commercial and recreational opportunities.

These priorities are supported by resolutions adopted unanimously by the Commission or actions of its Board of Directors in 2016, 2015, 2014 and 2013.

We are making tremendous progress in restoring the Great Lakes and maximizing their value as an environmental and economic resource for our region. The Great Lakes Congressional Delegation has been instrumental to our successes to date, and we urge you to support the priorities listed above to ensure we sustain progress in protecting our region’s most valuable natural resource – the Great Lakes. If you have questions or we can be of assistance, please contact the Commission’s Executive Director, Tim Eder (734-971-9135, teder@glc.org).

Sincerely,

Jon W. Allan, Chair
Reference

This section includes:

- Great Lakes Basin Compact
- Commission Bylaws
- Membership lists
  - Commissioners, Associate Commissioners and Alternates
  - Observers
  - Staff
GREAT LAKES BASIN COMPACT

(With State & Federal Legislative History)

Reprinted by

Great Lakes Commission
Eisenhower Corporate Park
2805 S. Industrial Hwy., Suite #100
Ann Arbor, Michigan 48104-6791
GREAT LAKES BASIN COMPACT

The party states solemnly agree:

ARTICLE I

The purposes of this compact are, through means of joint or cooperative action:

1. To promote the orderly, integrated, and comprehensive development, use, and conservation of the water resources of the Great Lakes Basin (hereinafter called the Basin).

2. To plan for the welfare and development of the water resources of the Basin as a whole as well as for those portions of the Basin which may have problems of special concern.

3. To make it possible for the states of the Basin and their people to derive the maximum benefit from utilization of public works, in the form of navigational aids or otherwise, which may exist or which may be constructed from time to time.

4. To advise in securing and maintaining a proper balance among industrial, commercial, agricultural, water supply, residential, recreational, and other legitimate uses of the water resources of the Basin.

5. To establish and maintain an intergovernmental agency the end that the purposes of this compact may be accomplished more effectively.

ARTICLE II

A. This compact shall enter into force and become effective and binding when it has been enacted by the legislature of any four of the States of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin and thereafter shall enter into force and become effective and binding as to any other of said states when enacted by the legislature thereof.

B. The Province of Ontario and the Province of Quebec, or either of them, may become states party to this compact by taking such action as their laws and the laws of the Government of Canada may prescribe for adherence thereto. For the purposes of this compact the word 'state' shall be construed to include a Province of Canada.

ARTICLE III

The Great Lakes Commission created by Article IV of this compact shall exercise its powers and perform its functions in respect to the Basin which, for the purposes of this compact shall consist of so much of the following as may be within the party states:

1. Lakes Erie, Huron, Michigan, Ontario, St. Clair, Superior, and the St. Lawrence River, together with any and all natural or manmade water interconnections between or among them.

2. All rivers, ponds, lakes, streams, and other watercourses which, in their natural state or in their prevailing conditions, are tributary to Lakes Erie, Huron, Michigan, Ontario, St. Clair, and Superior or any of them or which comprise part of any watershed draining into any of said lakes.
ARTICLE IV

A. There is hereby created an agency of the party states to be known as The Great Lakes Commission (hereinafter called the Commission). In that name the Commission may sue and be sued, acquire, hold and convey real and personal property and any interest therein. The Commission shall have a seal with the words, 'The Great Lakes Commission' and such other design as it may prescribe engraved thereon by which it shall authenticate its proceedings. Transactions involving real or personal property shall conform to the laws of the state in which the property is located, and the Commission may by by-laws provide for the execution and acknowledgment of all instruments in its behalf.

B. The Commission shall be composed of not less than three commissioners nor more than five commissioners from each party state designated or appointed accordance with the law of the state which they represent and serving and subject to removal in accordance with such law.

C. Each state delegation shall be entitled to three votes in the Commission. The presence of commissioners from a majority of the party states shall constitute a quorum for the transaction of business at any meeting of the Commission. Actions of the Commission shall be by a majority of the votes cast except that any recommendations made pursuant to Article VI of this compact shall require an affirmative vote of not less than a majority of the votes cast from each of a majority of the states present and voting.

D. The commissioners of any two or more party states may meet separately to consider problems of particular interest to their states but no action taken at any such meeting shall be deemed an action of the Commission unless and until the Commission shall specifically approve the same.

E. In the absence of any commissioner, his vote may be cast by another representative or commissioner of his state provided that said commissioner or other representative casting said vote shall have a written proxy in proper form as may be required by the Commission.

F. The Commission shall elect annually from among its members a chairman and vice-chairman. The Commission shall appoint an Executive Director who shall also act as secretary-treasurer, and who shall be bonded in such amount as the Commission may require. The Executive Director shall serve at the pleasure of the Commission and at such compensation and under such terms and conditions as may be fixed by it. The Executive Director shall be custodian of the records of the Commission with authority to affix the Commission's official seal and to attest to and certify such records or copies thereof.

G. The Executive Director, subject to the approval of the Commission in such cases as its by-laws may provide, shall appoint and remove or discharge such personnel as may be necessary for the performance of the Commission's function. Subject to the aforesaid approval, the Executive Director may fix their compensation, define their duties, and require bonds of such of them as the Commission may designate.

H. The Executive Director, on behalf of, as trustee for, and with the approval of the Commission, may borrow, accept, or contract for the services of personnel from any state or government or any subdivision or agency thereof, from any inter-governmental agency, or from any institution, person, firm or corporation; and may accept for any of the Commission's purposes and functions under this compact any and all donations, gifts, and grants of money, equipment, supplies, materials, and services from any state or government of any subdivision or agency thereof or inter-governmental agency or from any institution, person, firm or corporation and may receive and utilize the same.

I. The Commission may establish and maintain one or more offices for the transacting of its business and for such purposes the Executive Director, on behalf of, as trustee for, and with the approval of the Commission, may acquire, hold and dispose of real and personal property necessary to the performance of its functions.
J. No tax levied or imposed by any party state or any political subdivision thereof shall be deemed to apply to property, transactions, or income of the Commission.

K. The Commission may adopt, amend and rescind by-laws, rules and regulations for the conduct of its business.

L. The organization meeting of the Commission shall be held within six months from the effective date of the compact.

M. The Commission and its Executive Director shall make available to the party states any information within its possession and shall always provide free access to its records by duly authorized representatives of such party states.

N. The Commission shall keep a written record of its meetings and proceedings and shall annually make a report thereof to be submitted to the duly designated official of each party state.

O. The Commission shall make and transmit annually to the legislature and Governor of each party state a report covering the activities of the Commission for the preceding year and embodying such recommendations as may have been adopted by the Commission. The Commission may issue such additional reports as it may deem desirable.

ARTICLE V

A. The members of the Commission shall serve without compensation, but the expenses of each commission shall be met by the state which he represents in accordance with the law of that state. All other expenses incurred by the Commission in the course of exercising the powers conferred upon it by this compact, unless met in some other manner specifically provided by this compact, shall be paid by the Commission out of its own funds.

B. The Commission shall submit to the executive head or designated officer of each party state a budget of its estimated expenditures for such period as may be required by the laws of that state for presentation to the legislature thereof.

C. Each of the Commission's budgets of estimated expenditures shall contain specific recommendations of the amount or amounts to be appropriated by each of the party states. Detailed commission budgets shall be recommended by a majority of the votes cast, and the costs shall be allocated equitably among the party states in accordance with their respective interests.

D. The Commission shall not pledge the credit of any party state. The Commission may meet any of its obligations in whole or in part with funds available to it under Article IV(H) of this compact, provided that the Commission takes specific action setting aside such funds prior to the incurring of any obligations to be met in whole or in part in this manner. Except where the Commission makes use of funds available to it under Article IV(H) hereof, the Commission shall not incur any obligations prior to the allotment of funds by the party states adequate to meet the same.

E. The Commission shall keep accurate accounts of all receipts and disbursements. The receipts and disbursements of the Commission shall be subject to the audit and accounting procedures established under the by-laws. However, all receipts and disbursements of funds handled by the Commission shall be audited yearly by a qualified public accountant and the report of the audit shall be included in and become a part of the annual report of the Commission.
F. The accounts of the Commission shall be open at any reasonable time for inspection by such agency, representative of the party states as may be duly constituted for that purpose and by others who may be authorized by the Commission.

ARTICLE VI

The Commission shall have power to:

A. Collect, correlate, interpret, and report on data relating to the water resources and the use thereof in the Basin or any portion thereof.

B. Recommend methods for the orderly, efficient, and balanced development, use and conservation of the water resources of the Basin or any portion thereof to the party state and to any other governments or agencies having interests in or jurisdiction over the Basin or any portion thereof.

C. Consider the need for and desirability of public works and improvements relating to the water resources in the Basin or any portion thereof.

D. Consider means of improving navigation and port facilities in the Basin or any other portion thereof.

E. Consider means of improving and maintaining the fisheries of the Basin or any portion thereof.

F. Recommend policies relating to water resources including the institution and alteration of flood plain and other zoning laws, ordinances and regulations.

G. Recommend uniform or other laws, ordinances, or regulations relating to the development, use and conservation of the Basin's water resources to the party states or any of them and to other governments, political subdivisions, agencies of inter-governmental bodies having interests or in jurisdiction sufficient to affect conditions in the Basin or any portion thereof.

H. Consider and recommend amendments or agreements supplementary to this compact to the party states or any of them, and assist in the formulation and drafting of such amendments or supplementary agreements.

I. Prepare and publish reports, bulletins, and publications appropriate to this work and fix reasonable sales prices therefore.

J. With respect to the water resources of the Basin or any portion thereof, recommend agreements between the governments of the United States and Canada.

K. Recommend mutual arrangements expressed by concurrent or reciprocal legislation on the part of Congress and the Parliament of Canada including but not limited to such agreements and mutual arrangements as are provided for by Article XIII of the Treaty of 1909 Relating to Boundary Waters and Questions Arising Between the United States and Canada. (Treaty Series, No 548).

L. Cooperate with the governments of the United States and of Canada, the party states and any public or private agencies or bodies having interests in or jurisdiction sufficient to affect the Basin or any portion thereof.

M. At the request of the United States, or in the event that a Province shall be a party state, at the request of the Government of Canada, assist in the negotiation and formulation of any treaty or other mutual agreement between the United States and Canada with reference to the Basin or any portion thereof.
N. Make any recommendation and do all things necessary and proper to carry out the powers conferred upon the Commission by this compact, provided that no action of the Commission shall have the force of law in, or be binding upon, any party state.

ARTICLE VII

Each party state agrees to consider the action the Commission recommends in respect to:

A. Stabilization of lake levels.
B. Measures for combating pollution, beach erosion, floods and shore inundation.
C. Uniformity in navigation regulations within the constitutional powers of the states.
D. Proposed navigation aids and improvements.
E. Uniformity or effective coordinating action in fishing laws and regulations and cooperative action to eradicate destructive and parasitical forces endangering the fisheries, wildlife and other water resources.
F. Suitable hydroelectric power developments.
G. Cooperative programs for control of soil and bank erosion for the general improvement of the Basin.
H. Diversion of waters from and into the Basin.
I. Other measures the Commission may recommend to the states pursuant to Article VI of this compact.

ARTICLE VIII

This compact shall continue in force and remain upon each party state until renounced by the act of the legislature of such state, in such form and manner as it may choose and as may be valid and effective to repeal a statute of said state, provided that such renunciation shall not become effective until six months after notice of such action shall have been officially communicated in writing to the executive head of the other party states.

ARTICLE IX

It is intended that the provisions of this compact shall be reasonably and liberally construed to effectuate the purposes thereof. The provisions of this compact shall be severable and if any phrase, clause, sentence or provision of this compact is declared to be contrary to the constitution of any party state or of the United States, or in the case of a Province, to the British North America Act of 1867 as amended, or the applicability thereof to any state, agency, person or circumstances is held invalid, the constitutionality of the remainder of this compact and the applicability thereof to any state, agency, person or circumstance shall not be affected thereby, provided further that if this compact shall be held contrary to the constitution of the United States, or in the case of a Province, to the British North America Act of 1867 as amended, or of any party state, the compact shall remain in full force and effect as to the remaining states and in full force and effect as to the state affected as to all severable matters.
STATE LEGISLATIVE HISTORY:

Illinois: (69th GA House Bill, No. 983, 1955)
Indiana: (Chapter 220 (H. 216, Approved March 10, 1955)
Minnesota: (Laws of Minnesota 1955, Chapter 691; S.F. No. 1982)
New York: (Chapter 643, Laws of 1960)
Ohio: (Amended House Bill 415, Effective October 9, 1963, 105 General Assembly)
Wisconsin: (No. 294 A, Chapter 275, Laws of 1955)

The Commission was officially organized and established December 12, 1955 subsequent to ratification of the compact by five states (Illinois, Indiana, Michigan, Minnesota and Wisconsin). The Commission office was established on the Campus of the University of Michigan in early 1956.

CONGRESSIONAL CONSENT - LEGISLATION

All interstate compacts require Congressional consent (Article I, Sec. 10, Clause 3, Constitution of the United States) in order to achieve full force and effect. Numerous bills were considered beginning in 1956. In 1968, Congress enacted S. 660 (PL 90-419) giving limited consent to the compact as follows:

"Public Law 90-419
90th Congress, S 660
July 24, 1968

"AN ACT

"Granting the consent of Congress to a Great Lakes Basin Compact, and for other purposes.

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the consent of Congress is hereby given, to the extent and subject to the conditions hereinafter set forth, to the Great Lakes Basin Compact which has been entered into by the States of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin in the form as follows:
"GREAT LAKES BASIN COMPACT"

(The full text of the State adopted Compact text is included in PL 90-419 at this point.)

"SEC. 2. The consent herein granted does not extend to paragraph B of article II or to paragraphs J, K, and M or article VI of the compact, or to other provisions of article VI of the compact which purpose to authorize recommendations to, or cooperation with, any foreign or international governments, political subdivisions, agencies or bodies. In carrying out its functions under this Act the Commission shall be solely a consultative and recommendatory agency which will cooperate with the agencies of the United States. It shall furnish to the Congress and to the President, or to any official designated by the President, copies of its reports submitted to the party states pursuant to paragraph O of article IV of the compact.

"SEC. 3. Nothing contained in this Act or in the compact consented to hereby shall be construed to affect the jurisdiction on, powers, or prerogatives of any department, agency, or officer of the United States Government or of the Great Lakes Basin Committee established under title II of the Water Resources Planning Act, or of any international commission or agency over or in the Great Lakes Basin or any portion thereof, nor shall anything contained herein be construed to establish an international agency or to limit or affect in any way the exercises of the treatymaking power or any other power or right of the United States.

"SEC 4. The right to alter, amend, or repeal this Act is expressly reserved. "Approved July 24, 1968."

FEDERAL LEGISLATIVE HISTORY:

PL 90-419 (90th Congress, S 660)
HOUSE REPORT No 1640 (Comm. on Foreign Affairs)
SENATE REPORT No. 1178 (Comm. on the Judiciary)
CONGRESSIONAL RECORD, Vol. 114 (1968):
  June 12: Considered and passed Senate.
  July 15: Considered and passed House.
  July 24: Signed by the President.
BYLAWS

Pursuant to the powers and authority vested in the Great Lakes Commission by paragraph K of Article IV of the Great Lakes Basin Compact, the following Bylaws are adopted and shall remain in force until amended.

ARTICLE I
COMPONENT STATES

The states of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin having ratified the Great Lakes Basin Compact by act of their legislatures are recognized as the component states of this Compact which has become operative in view of the provisions of Article II, section A of this Compact. The provinces of Ontario and Québec, by actions of their governments through a Declaration of Partnership, are recognized as associate (non-voting) members of the Compact.

ARTICLE II
MEMBERSHIP

SECTION 1 - The members appointed by and certified to the Commission by the component states shall constitute the members of the Commission.

SECTION 2 - Pursuant to the provisions of the Compact, each state shall have a total of three votes on any matters coming before the Commission to be cast in accordance with the applicable laws of such state. Should any Commission or any committee, special committee, or task force member be absent from any Commission or committee, special committee or task force meeting, their vote may be cast by a duly appointed proxy in accordance with Article IV, Section E of the Compact, whose authority shall be in writing and filed with the Chair of the Commission or committee, as the case may be, at the time of or before said meeting.

SECTION 3 - Each state or the Commission itself shall be permitted to make use of advisors and consultants of its own choice at any meeting of the Commission or of any committee, special committee or task force. Such advisors and consultants may be permitted to participate in discussions and deliberations without the power to vote.

SECTION 4 - The Commission shall be permitted to designate observers representing the United States and Canadian federal governments, regional organizations, or any others it may so designate to advance the goals and objectives of the Great Lakes Basin Compact. Observers may be permitted to participate in discussions, deliberations and other activities as approved by the Commission, but shall have no vote.
ARTICLE III
BOARD OF DIRECTORS

SECTION 1 - There is established a Board of Directors (hereafter referred to as “the Board”) to be composed of a Commissioner from each component state. The governors of each state, where not inconsistent with state law, shall designate the person who shall serve on the Board. The Chairs of the Ontario and Québec delegations to the Commission shall serve in an associate (non-voting) capacity on the Board. The Chair and Vice Chair of the Commission shall be elected by the Commission from among the state delegation members and, upon election shall also be members of the Board. The Chair of the Commission shall also hold the title of Chairman of the Board.

SECTION 2 - The Board shall evaluate the work, activities, programs and policies of the Commission and shall recommend to the Commission the taking of any action by the Commission relative to such areas. It shall also serve in an advisory capacity to the Chair and Vice Chair of the Commission and shall perform such other duties and functions as the Commission shall delegate to it or otherwise authorize it to perform from time to time on behalf of the Commission. It shall meet on the call of the Chair.

SECTION 3 - The Board shall adopt budget(s) following review by the full Commission in accordance with Article VII. Pursuant to Section 8, Article VII, the Board shall authorize, by majority vote of members present, the adoption of changes to the general operating budget of the Commission. The Board may authorize increases or decreases of the budget by majority vote of members present. Alterations within previously approved amounts of spending categories, not changing the general operating budget amount, may be adopted by majority approval of the Board members present.

SECTION 4 - The Board shall, from time to time, review the personnel policies of the Commission and receive recommendations from Commissioners and the President/Chief Executive Officer on these personnel policies. The Board may authorize changes to the Commission’s “Personnel Policies and Procedures” and authorize changes in compensation for the President/CEO and staff personnel within available budget amounts. Compensation includes salary and fringe benefits available to staff.

SECTION 5 - The Board shall review proposed policies that are prepared for consideration by the Commission and shall report to the full Commission on the findings of the review and provide recommendations on adoption or suggested changes.

SECTION 6 - The Board shall report on all Board meetings at the next regularly scheduled or special Commission meeting. Draft minutes of Board meetings will be furnished to all Commissioners as soon as possible.

SECTION 7 - Board meetings will be held as needed, including by conference call or in conjunction with full Commission meetings to conserve travel costs to the extent practical for member states. Board meetings shall be open to all Commissioners as observers. All meetings will be announced to the entire membership. Board decisions will be made on the basis of a majority vote of those present.

SECTION 8 - The Board will act on Commission policy and budget matters in accordance with the following guidelines:
a) The Commission at a special or regularly scheduled meeting, refers the issues to the Board for action. All Commissioners may participate in discussions, but only Board members will be entitled to vote on the issue.

b) The Commission is unable to adequately resolve an issue (e.g., additional research, discussion or coordination is required, in a timely manner not available to the full Commission.) The Board may receive a referral from the Commission, or the Chair, and after discussion with the Vice Chair and President/CEO, may notify all Commissioners that an issue has been referred to the Board for action and resolution. Any objections shall be considered by the Chair. Other Commissioners desiring to participate may do so through the Board member representing their state or province.

c) For issues in which circumstances require an immediate decision or action, the Chair, after discussion with the Vice Chair and President/CEO, may refer the issue to the Board when a full Commission meeting is not an option for resolution. The Chair will report on all action taken by the Board to the full Commission by regular mail or equivalent as soon as practicable.

SECTION 9 - There is established the position of Immediate Past Chair to be held by the departing Chair for the period of his/her successor’s tenure as Chair. The Immediate Past Chair may be designated, by the Chair in consultation with the Board, to undertake special activities as deemed appropriate.

SECTION 10 - The Chair may designate members of the Board to undertake other special responsibilities as deemed appropriate.

ARTICLE IV OFFICERS

SECTION 1 - Nominations for Chair and Vice Chair of the Commission shall be made by a nominating committee appointed by the current Chair, and election shall be held at the annual meeting of the Commission. Election to each office shall be by majority vote and each state shall be entitled to three votes. The Chair and Vice-chair shall hold office for one year or until their successors are elected and qualified. In the event the office of Chair becomes vacant, nomination and election to fill the vacancy shall be effected at any meeting of the Commission after due notice to all Commissioners.

SECTION 2 - Chair: The Chair shall take office immediately following adjournment of the meeting at which elected. The Chair shall preside at all meetings of the Commission and of the Board from such time until a successor shall take office. The Chair shall appoint, or establish the process of appointing, the members of committees, special committees, and task forces. The Chair shall serve as a voting member of the Board.

SECTION 3 - Vice Chair: The Vice Chair shall act for the Chair in the event of the latter’s absence or disability. The Vice Chair shall serve as a voting member of the Board.

SECTION 4 - President/CEO: Subject to the general supervision of the Commission, the President/CEO shall be the full time executive officer of the Commission. The President/CEO shall be employed by the Commission and shall hold office at the pleasure of the Commission; and shall:

(a) Carry out its policies;
(b) Serve as editor of any Commission publication;
(c) Coordinate the activities of all committees, special committees and task forces;
(d) Arrange details and facilities, including secretarial and other services for all Commission and Committee meetings;
(e) Serve as ex-officio member without vote for all committees, special committees and task forces;
(f) Cause to be made a record of the proceedings of the Commission and Board and preserve the same in the headquarters office;
(g) Give notice of all meetings;
(h) Make recommendations on programs, policies, and activities of the Commission;
(i) Exercise general supervision under the direction of the Commission of all the Commission programs and activities;
(j) Have immediate charge of the headquarters office and personnel.

SECTION 5 - Executive Staff: The executive staff of the Commission shall consist of President/CEO and such other staff members as may be designated by a majority vote of the Board from time to time.

ARTICLE V
COMMITTEES

SECTION 1 - The Commission may, from time to time and as deemed necessary, delineate committees, special committees, and task forces to carry out its initiatives. Each committee, special committee, or task force shall consist of persons from each interested state and province, nominated by the Chair of the delegation and appointed by the Chair. Each state shall be entitled to one vote on each committee, special committee and task force. In addition, the Chair of each committee, special committee or task force may arrange for associates or advisors, without payment of compensation or expenses to the same unless authorized by the Commission, to assist the committee, special committee or task force and participate in its deliberations and discussions without power to vote on recommendations.

SECTION 2 - The committees, special committees, and task forces shall conduct studies and research, prepare memoranda and reports in their assigned fields and on that basis make recommendations to the full Commission for specific action to be taken in a particular field. Any and all action on legislative recommendations of a committee, special committee or task force other than discussion, study and voting will be made only with the approval of the Commission.

SECTION 3 - Each committee, special committee or task force shall meet as needed to conduct assigned duties. Through its Chair, or the Chair’s designee, each committee, special committee or task force shall periodically submit a written report to the Commission at regular annual meetings of the Commission or at other times as deemed appropriate. Recommendations by the committees, special committees and task forces calling for action by the Commission shall be received in writing by the Chair of the Commission and the President/CEO at least one month prior to the date of the meeting of the Commission at which such action is to be sought, unless special permission is granted by the Commission Chair for a late report.

ARTICLE VI
MEETINGS

SECTION 1 - Annual and semiannual meetings: The Commission shall meet at least twice annually. The annual meeting normally shall be held during the month of October; the semi-annual meeting normally shall be held during the second half of the fiscal year (January – June). The Chair shall consider recommendations and invitations of Commissioners in selecting meeting locations, and views on conditions which tend to over-ride the normally established meeting dates.

SECTION 2 - Notice: The President/CEO shall mail notice in writing of the time and place of each regular meeting of the Commission to each member not later than 60 days prior to the date of the meeting.
SECTION 3 - Special meetings: Special meetings of the full Commission may be called by the Chair to be held at times and places identified in an official call for such meetings.

SECTION 4 - Order of business and rules: The order of business which may be developed by Bylaws, tradition or ruling of the presiding officer of the Commission or Board may be changed at any meeting of the body proposing a change in its order of business by vote of a majority of members present, except as otherwise provided by the Compact or the Bylaws. The usual applicable parliamentary rules and precedents will govern all proceedings.

ARTICLE VII
BUDGET AND FINANCE

SECTION 1 - All component states shall share equally in the expenses of the Commission. Each individual state shall bear the expenses of its Commissioners at Commission annual, semiannual and Board meetings, and such expenses shall not be paid out of funds in the Commission treasury.

SECTION 2 - In the case of committee, special committee or task force programs the Commission may authorize the payment of expenses of committee, special committee or task force members from Commission funds.

SECTION 3 - Financial remittances to the Commission by each member state shall be requested for each fiscal year. The amount of each remittance shall be determined by the Commission in accordance with Sections 1, 6, 7 and 8, this Article and Article V of the Compact.

SECTION 4 - The President/CEO shall, on a quarterly basis, prepare and submit to the Board a statement presenting the Commission’s financial condition.

SECTION 5 - With the approval of the Board, the President/CEO may make transfers of funds within the approved budget of the Commission.

SECTION 6 - The budget of estimated expenditures referred to in Article V of the Compact shall be adopted by the Board prior to the relevant fiscal year, and presented at the next meeting of the Commission.

SECTION 7 - The budget of the Commission shall consist of two parts:

a) The "general operating budget" shall include, but not be limited to funds remitted by each member state, Commission reserve funds and interest earned. Expenditures will normally include routine operating costs for the Commission.

b) The "restricted fund budget" shall include income from projects, grants and other sources not considered as a routine revenue. Expenditures will normally be made to fund costs of the projects or grants incurred by the Commission. Transfers to pay Commission operating expenses may be made in accordance with grant or project authorization.
SECTION 8
a) The President/CEO shall prepare a proposed annual budget for review and evaluation by the Board at least 45 days prior to the new fiscal year. The proposal shall include estimated income and expenditures for each part of the budget.
b) The Board will make necessary changes to the proposal, will distribute a draft budget to the full Commission for review, and following consultation with the full Commission will adopt a final budget document. The general operating budget component shall be used to determine the financial remittance required by each member state. Only a majority vote by the full Commission shall authorize a change in a member state’s required financial remittances.

SECTION 9 - Certain changes and alterations are expected to occur within the approved budget. These will be handled as follows:

a) Changes in the general operating budget, not requiring a change in required member state remittances, may be made by majority vote of the Board or by a majority vote of the full Commission.
b) Changes in the restricted fund budget, not amending the general operating budget, may be adopted by a majority vote of the full Board or by a majority vote of the full Commission.
c) Changes in the budget, requiring alterations in the required member state remittance will only be authorized by majority vote of the full Commission.
d) Changes in the budget requiring immediate action, where a Board or full Commission meeting is not possible, may be made by the President/CEO in consultation with the Chair or Vice Chair, as available. A subsequent report to, and ratification by, the Board or Commission, as appropriate, will be sought.

ARTICLE VIII
AMENDMENT OF BYLAWS

These Bylaws may be altered and amended at any regular meeting upon the affirmative majority vote of the Commission. However, no amendment may be considered at any such meeting unless the proposed amendment shall have been received by the Chair and President/CEO at least one month prior to the first day of the month of which said regular meeting shall be held. Immediately upon receipt of such proposed amendment the President/CEO shall refer it to the Board and shall send a copy thereof to each member of the Commission within fifteen days after the receipt thereof, together with notice of the date on which the proposed amendment will be acted upon by the Commission.

August 12, 2016

Board of Directors
Jon W. Allan, Chair, Michigan
John Linc Stine, Vice Chair, Minnesota
Kelvin Burch, Retired, Immediate Past Chair, Pennsylvania

Wayne A. Rosenthal, Illinois
Dan Schmidt, Indiana
Jon W. Allan, Michigan
John Linc Stine, Minnesota
Basil Seggos, New York

James Zehringer, Ohio
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**MICHIGAN**

**Commissioners**

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