1- Agenda – p. 3

2- Observer Request and Minutes – p. 7

3- Action Items – p. 45

4- Strategic Plan Updates – p. 64

5- Reference – p. 103
Please note: Due to the large number of newly appointed Great Lakes Commissioners, some portions of the 2019 Semiannual Meeting are set aside for commissioner orientation and opportunities for commissioners and staff to get acquainted with one another.

Thank you for understanding and respecting this important opportunity. The Commission will resume a traditional format in future meetings.

**Tuesday, May 21**  
*All times are EDT*

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Venue</th>
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</thead>
</table>
| 11:45 a.m. | Introductions/Overview of Activities Lunch with Commissioners in Detroit | Darren Nichols, Executive Director  
Dossin Great Lakes Museum  
Belle Isle State Park, Detroit  
100 Strand Drive  
Detroit MI 48207 |
| 1:15 p.m. | Tour of Detroit Waterfront (Tour will visit sites along the Detroit Waterfront) | Tour – Great Lakes Commission staff Remarks – Invited guests |
| 5:00 p.m. | Event Wrap Up/Closing Remarks                                         | Sharon Jackson, Vice Chair  
Darren Nichols, Executive Director |
| 5:15 p.m. | Depart for Ann Arbor                                                   | (Evening and dinner on your own) |

**Wednesday, May 22**

**Commission Work Session (Commissioners & Staff Only)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Venue</th>
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</table>
| 7:00 a.m. | Breakfast                                                            | Weber’s Boutique Hotel  
Century Ballroom  
3050 Jackson Ave  
Ann Arbor, MI 48103 |
| 8:00 a.m. | Introductions/Icebreaker/Meeting Overview                            | John Linc Stine, Chair  
East-West Room |
| 8:20 a.m. | Orientation for Great Lakes Commissioners and staff                   | Darren Nichols, Executive Director  
- History and Background  
- Great Lakes Basin Compact  
- GLC Strategic Plan  
- GLC Operations |
### 2019 Great Lakes Commission Semiannual Meeting

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Presenter/Leader</th>
</tr>
</thead>
</table>
| 9:30 a.m. | An Independent Assessment of the GLC  
- The need for an assessment  
- Internal/external considerations  
- Benefits of an assessment  
- Timing of the assessment | Darren Nichols, Executive Director |
| 10:30 a.m. | Break                                                                                     |                                |
| 10:45 a.m. | 2019 Semiannual Meeting: Call to Order and Roll Call                                     | John Linc Stine, Chair         |
| 10:50 a.m. | Business of the Great Lakes Commission  
- Approval of Agenda  
- Approval of Minutes from 2018 Annual Meeting  
  - Green Marine Observer Request  
- Discussion of Draft Resolutions  
- Discussion/Consultation on Recommended FY2020 Budget  
  - Board vote | John Linc Stine, Chair |
| 11:30 a.m. | Adjourn for Lunch                                                                         |                                |

### Annual Meeting and Reception (all are welcome)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Venue/Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 a.m.</td>
<td>Registration</td>
<td>Weber’s Boutique Hotel</td>
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<tr>
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<td>Outside East-West Room</td>
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<tr>
<td>11:45 a.m.</td>
<td>Lunch and Welcome from Chair and Executive Director</td>
<td>John Linc Stine, Chair</td>
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<td></td>
<td>Darren Nichols, Executive Director</td>
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<td></td>
<td>Century Ballroom</td>
</tr>
<tr>
<td>12:30 p.m.</td>
<td>2019 Semiannual Meeting Call to Order</td>
<td>John Linc Stine, Chair</td>
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<tr>
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<td></td>
<td>East-West Room</td>
</tr>
<tr>
<td>12:35 p.m.</td>
<td>Welcome to Michigan</td>
<td>Hon. Dana Nessel</td>
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<td></td>
<td>Michigan Attorney General and Great Lakes Commissioner</td>
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<tr>
<td>12:50 p.m.</td>
<td>Great Lakes Water Tension in the 21st Century</td>
<td>Peter Annin, Author “Great Lakes Water Wars” and Director of the Mary Griggs Burke Center for Freshwater Innovation – Northland College, Ashland, WI</td>
</tr>
<tr>
<td>1:30 p.m.</td>
<td>Building Consensus for a Sustainable Future: Tools for Resolving Conflict towards Collaborative Governance</td>
<td>Jerry Cormick, Mediator, Facilitator</td>
</tr>
<tr>
<td>2:15 p.m.</td>
<td>Q&amp;A with Peter and Jerry</td>
<td>Commissioners and Observers</td>
</tr>
<tr>
<td>2:30 p.m.</td>
<td>Roundtable Discussion 1: The Economic Future of the Great Lakes-St. Lawrence River Region</td>
<td>Maria Carmen Lemos, University of Michigan School for Environment and Sustainability</td>
</tr>
<tr>
<td></td>
<td>A series of short presentations and discussions will focus on the needs, opportunities and roles in the future of a Great Lakes Basin “stewardship economy.”</td>
<td>Neil Hawkins, Fred A. And Barbara M. Erb Family Foundation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sanjiv Sinha PhD, ECT Consulting</td>
</tr>
<tr>
<td>3:30 p.m.</td>
<td>Roundtable Discussion 2: Blue Accounting’s Role in the Great Lakes: Restoration, Stewardship and Economy</td>
<td>Helen Taylor, The Nature Conservancy</td>
</tr>
<tr>
<td></td>
<td>A series of short presentations describing the power and potential of Blue Accounting to build consensus and support Great Lakes restoration and the Basin economy.</td>
<td>Bob Lambe, Great Lakes Fishery Commission</td>
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<td>Dave McLean, Dow Chemical</td>
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<td>Joel Brammeier, Alliance for the Great Lakes</td>
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<td>Bruno Pigott, Indiana Department of Environmental Management</td>
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<tr>
<td>Time</td>
<td>Session</td>
<td>Presenter</td>
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<tr>
<td>4:40 p.m.</td>
<td>Invitation to 2019 Annual Meeting</td>
<td>John Linc Stine, Chair</td>
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<tr>
<td>4:50 p.m.</td>
<td>Closing Remarks</td>
<td>John Linc Stine, Chair</td>
</tr>
<tr>
<td>5:00 p.m.</td>
<td>Adjourn for the Day</td>
<td>John Linc Stine, Chair</td>
</tr>
</tbody>
</table>
| 6:00 – 7:30 p.m. | Reception for Commissioners and Guests               | Wyndham Garden Ann Arbor Jackson Ballroom
|             |                                                                        | 2900 Jackson Ave
|             |                                                                        | Ann Arbor, MI 48103                                                     |

**Thursday, May 23**

**Commission Work Session (Commissioners & Staff Only)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>7:30 a.m.</td>
<td>Breakfast</td>
<td>Weber’s Boutique Hotel</td>
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<td></td>
<td>Century Ballroom</td>
</tr>
<tr>
<td>8:20 a.m.</td>
<td>Reconvene, Recap of Day 1 and Housekeeping Items</td>
<td>John Linc Stine, Chair</td>
</tr>
<tr>
<td>8:30 a.m.</td>
<td>Welcome to Commissioners: The Importance of Binational Collaboration in the Great Lakes Basin</td>
<td>Joe Comartin, Canadian Consul General, Detroit</td>
</tr>
<tr>
<td>9:00 a.m.</td>
<td>Vessel Incidental Discharge Act (VIDA): Overview and recommendations for approaching consensus-based long-term binational solutions</td>
<td>John Linc Stine, Chair</td>
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<td>Brian Manwaring, U.S. Institute for Environmental Conflict Resolution (USIECR)</td>
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<td>Dana Goodson, USIECR</td>
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<td>Melanie Knapp, USIECR</td>
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<td>Jerry Cormick, CSE Group</td>
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<tr>
<td>9:45 a.m.</td>
<td>Break</td>
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<tr>
<td>10:00 a.m.</td>
<td>Agency Administrative Assessments: Examples, Approaches and Best Practices</td>
<td>Dr. Craig Shinn, Center for Public Service, Hatfield School of Government, Portland State University</td>
</tr>
<tr>
<td>10:30 a.m.</td>
<td>Legal Assessment of the Great Lakes Basin Compact for the Great Lakes Commission</td>
<td>Richard L. Masters, Special Counsel, Council of State Governments (CSG) National Center for Interstate Compacts (NCIC)</td>
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<td></td>
<td>Nahale Freeland Kalfas, Legal Counsel, CSG NCIC</td>
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<td>Jeffrey B. Litwak, Adjunct Professor of Law, Lewis and Clark Law School and Senior Counsel to the Columbia River Gorge Commission</td>
</tr>
<tr>
<td>11:30 a.m.</td>
<td>Proposed next steps in the assessment process</td>
<td>John Linc Stine, Chair</td>
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<td>Darren Nichols, Executive Director</td>
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<tr>
<td>Time</td>
<td>Event</td>
<td>Speaker/Details</td>
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<tr>
<td>12:05 p.m.</td>
<td>Closing Remarks</td>
<td>Sharon Jackson, Vice Chair</td>
</tr>
<tr>
<td>12:10 p.m.</td>
<td>Adjourn Meeting</td>
<td>John Linc Stine, Chair</td>
</tr>
<tr>
<td>12:15 – 1:30 p.m.</td>
<td>Great Lakes Commission luncheon with guests</td>
<td>Weber’s Boutique Hotel</td>
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<td>Century Ballroom</td>
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</table>
Observer Request and Minutes

Attached is a request for Observer status from Green Marine.

Also attached, for review and approval, are minutes from the Commission’s 2018 Annual Meeting, held October 2-3, 2018, in Indianapolis, Indiana.

Included for your information are minutes of the Board of Directors conference calls held on October 18 and November 15, 2018; and on January 24, February 21 and March 21, 2019; and the in-person Board of Directors meeting held March 6-7, 2019 in Washington, D.C.
February 27, 2019

Mr. Darren Nichols
Executive Director
Great Lakes Commission

Subject: Application for observer status

Dear Sir,

On behalf of Green Marine, I would like to express our desire to become a formal observer to the Great Lakes Commission.

Green Marine is an environmental certification program for the North American marine industry. It is a voluntary, transparent and inclusive initiative that addresses key environmental issues through its 12 performance indicators. Participants are shipowners, ports, terminals, Seaway corporations and shipyards. To receive their certification, participants must benchmark their annual environmental performance through the program’s self-evaluation guides, have their results verified by an accredited external verifier and agree to publication of their individual results.

Green Marine was created in 2008 and is a non-profit organization incorporated in both Canada and the United States. This initiative was initially intended exclusively for the Great Lakes and St. Lawrence region but it has now expanded to become the largest environmental certification program for the marine industry in Canada and the United States. There are currently about 25 ports and shipping companies that are part of Green Marine in the Great Lakes and 45 along the St. Lawrence River.

Green Marine shares the Great Lakes Commission’s goal to enhance economic prosperity in a sustainable manner. We had the pleasure recently to work with the Great Lakes Commission and the Blue Accounting initiative on the development of relevant metrics to measure the marine industry’s environmental performance. Participation in the Green Marine program was also encouraged in the Strategy for the Great Lakes-St.Lawrence River Maritime Transportation System adopted by the Great Lakes and St. Lawrence Governors and Premiers.
Considering the increased focus in the last few years on maritime transportation and sustainability in the Great Lakes, we believe that Green Marine is in a perfect position to contribute in a positive way to the discussion. Our organizational philosophy is based on principles of partnership and transparency. A pivotal element of Green Marine’s success from the outset has been the active support from environmental stakeholders and governments. Several of those organizations and agencies participate in shaping and reviewing the environmental program.

We are very interested in taking an active part in the Commission’s meetings and activities, and hope to find opportunities for joint initiatives with the Commission and its members.

Additional information on Green Marine is available on our website (www.green-marine.org). Attached to this letter are a one-pager overview and the list of our members.

Looking forward to your response,

Best regards,

David Bolduc
Executive Director
Green Marine
# OVERVIEW

## Green Marine Environmental Program

Green Marine is a voluntary environmental certification program for the marine industry in North America.

### What is Green Marine?

- Unique program designed for the marine industry – nothing like it in the world
- Addresses multiple environmental issues: land, air and water
- Participating companies implement concrete actions, practices and technologies
- Program participants include more than 125 shipping companies, port authorities, terminal operators, shipyards and St. Lawrence Seaway Corporations in Canada and the United States

### Goals

- Exceed regulatory compliance
- Continuously improve environmental performance of marine industry
- Reduce environmental footprint and risk

### 12 Performance Indicators

- For ship owners: aquatic invasive species, greenhouse gases, air emissions (SOx, NOx, PM), oily water, garbage management, underwater noise
- Ports, terminals & shipyards: greenhouse gases, community impacts, dry bulk handling, environmental leadership, spill prevention, waste management, underwater noise

### Performance Rating Levels

- Performance ranked on a scale of 1 (Monitoring of regulations) to 5 (Excellence & Leadership)

### Credibility & Transparency

- Program requirements available on website
- CEO sign-off on performance self-assessments
- Independent verification of results / Public disclosure of individual company results
- Stakeholder participation in the program revision and development process

### Results to Date

- Over 300 organizations – participants, partners, associations and supporters
- Company results improving year over year: 2017 = Level 3.1 (2008 = Level 2)
- Committee structure encourages sharing of ideas and best practices

### Governance & Management

- CEO leadership and commitment through Board of Directors
- Green Marine Management Corporation – legal entity, federally incorporated (U.S.A. & Canada), manages program and provides support to participants with a staff of 6
- Stakeholder funded (not-for-profit basis)

### Growing Support & Recognition

- Supporters include government (Transport Canada, Environment Canada, etc.)
- Major NGOs supporting industry's efforts (WWF-Canada, Environmental Defense Fund, Ducks Unlimited, Carbon War Room, Great Lakes & St. Lawrence Cities Initiative, Seattle Aquarium.)
- Lloyd's List North American Maritime Award 2015 Winner - Environmental Excellence
- Green Shipping Initiative of the Year- Sustainable Shipping Awards 2011
Green Marine participants are committed to continuously improving their environmental performance.
GREEN MARINE PARTNERS

INDUSTRY SERVICES, PRODUCTS & TECHNOLOGY PROVIDERS

• ABB Turbocharging
• Aderco International SA
• Bell Marine & Mill Supply
• Centre Environnement C.R.
• Certified Laboratories
• Conflow Technologies
• Creative Pultrusions, Inc.
• Drew Marine
• DSS Group of Companies
• Earthwise Sorbents
• Enerburn – a diesel combustion catalyst
• EnviroBlu
• Envirolin Canada
• Envirosystems Inc.
• EVAC
• Filtramax
• GHGES
• Hermont Marine
• InnoMarine Inc.
• International Paint
• Jasco Applied Sciences
• Main Filter Inc.
• Marine Clean Ltd.
• Marine Construction Technologies, PBC
• Marine Press
• Moran Coastal & Ocean Resources, Inc.
• Multi-Électronique (MTE) Inc.
• OceanWorks International
• OpDAQ Systems
• Palantir AS
• Sanexen
• Schneider Electric
• Seagulf Marine Industries Inc.
• SINTO
• The Energy Conservation Group
• Thordon Bearings Inc.
• Total Bio Solution LLC
• Total Marine Solutions Inc.
• Urgence Marine Inc.
• VapCor Inc.
• Wärtsilä Canada

CLASS SOCIETIES, VERIFICATION & VETTING SERVICES

• American Bureau of Shipping
• Canadian International Bureau of Shipping
• DNV-GL
• Lloyd’s Register Marine North America
• RightShip Americas

SHIPPERS, LOGISTICS & SHIP MANAGERS

• Aluminerie Alouette
• K+S Windsor Salt Ltd.
• Quickload CEF

PILOTAGE

• Corporation des pilotes du St-Laurent Central
• Corporation of Lower St. Lawrence Pilots
• Great Lakes Pilotage Authority
• Laurentian Pilotage Authority
• Pacific Pilotage Authority
• The BC Coast Pilots Ltd.

ENERGY COMPANIES

• Energir
• Methanex
• Puget LNG

ENGINEERING AND ENVIRONMENTAL CONSULTING

• Chamard Environmental Strategies
• Climate Smart Businesses Inc.
• Concept Naval
• EcoLogix Naval
• Envirochem
• Groupe-Conseil Génipur Inc.
• Hemmera
• HydroComp, Inc.
• Johnson & Anderson, Inc.
• Kennedy/Jenks Consultants
• Keystone Environmental
• McElhanney Consulting Services Ltd.
• Moffatt & Nichol
• Noise Control Engineering LLC
• SNC-Lavalin Environment
• Stantec
• Ventus Development Services Inc.
• WSP Canada

R&D, RESPONSE, TRAINING & COOPERATIVE

• Georgian College’s Great Lakes International Marine Training Centre
• Human Resources Sectorial Committee of the Maritime Industry (CSMOIM)
• Marine Exchange of Puget Sound
• Maritime Innovation
• Triox Environmental Emergencies
• Western Canada Marine Response Corporation

Partners are suppliers of services, products, technology and/or equipment that offer environmental advantages or opportunities to help Green Marine participants to improve their environmental performance.
GREEN MARINE SUPPORTERS

GREEN MARINE ASSOCIATION MEMBERS

Associations serve as ambassadors for the environmental program.

- American Association of Port Authorities
- American Great Lakes Ports Association
- American Society of Naval Engineers
- Association of Canadian Port Authorities
- BC Marine Terminal Operators Association
- Canadian Ferry Association
- Canadian Marine Pilots Association
- Chamber of Marine Commerce
- Chamber of Shipping of America
- Chamber of Shipping of British Columbia
- Council of Marine Carriers
- Florida Ports Council
- International Ship-Owners Alliance of Canada
- Michigan Aggregates Association
- NAMEPA
- North Atlantic Ports Association Inc.
- Shipping Federation of Canada
- St. Lawrence Economic Development Council
- St. Lawrence Shipoperators
- U.S. Great Lakes Shipping Association
- Washington Maritime Federation
- Washington Public Ports Association
- Worldwide Network of Port Cities (AIVP)

GOVERNMENTS
- Environment Canada
- Fisheries and Oceans Canada
- Inter-American Committee on Ports of the Organization of American States
- Ministère de l’Énergie et des Ressources naturelles du Québec
- Ministère des Transports du Québec
- Ministère du Développement durable, de l’Environnement et de la Lutte aux Changements Climatiques du Québec
- Ministère des Forêts, de la Faune et des Parcs du Québec
- Ministry of Transportation of Ontario
- New Brunswick Department of Environment and Local Government
- NewFoundland & Labrador Department of Municipal Affairs and Environment
- Nova Scotia Environment
- Port Edward Harbour Authority
- Puget Sound Clean Air Agency
- Transport Canada
- Washington State Department of Ecology
- Washington State Department of Commerce
- City of Longueuil
- City of Matane
- City of Montréal
- City of Montréal-Est
- City of Port-Cartier
- City of Prince Rupert
- City of Québec
- City of Saint-Amable
- City of Sept-Îles
- City of Varennes
- Communauté métropolitaine de Québec
- District of Port Edward
- Great Lakes and St. Lawrence Cities Initiative
- Marguerite-D’Youville MRC

ENVIRONMENTAL GROUPS AND NGOS
- Carbon War Room
- Clean Nova Scotia
- Ducks Unlimited Canada
- Environmental Defense Fund
- Georgia Strait Alliance
- Georgian Bay Forever
- International Secretariat for Water
- Marine Mammals Observation Network
- Nature Conservancy of Canada
- Nature Québec
- One Drop
- Pacific Salmon Foundation
- Point Blue
- Pollution Probe
- Sedna Foundation
- Stratégies Saint-Laurent
- World Wildlife Fund Canada

RESEARCH, EDUCATION & CONSERVATION
- Anthropocene Institute - Protected Seas
- Canadian Whale Institute
- Center of Excellence for Marine Manufacturing & Technology
- Clear Seas
- CPEQ
- EcoMaris
- Great Lakes Maritime Research Institute
- INREST
- Northwest Community College
- Ocean Exchange
- Ocean Networks Canada
- Ocean Wise (Vancouver Aquarium)
- Promotion Saguenay
- Saguenay–St. Lawrence Marine Park
- Seattle Aquarium
- Société de promotion économique de Rimouski
- St. Lawrence Global Observatory
- St. Lawrence River Institute of Environmental Sciences
- Technopole Maritime du Québec
- Upcycle the Gyres Society –UpGyres–

Green Marine Supporters encourage and support the sustainable development initiative undertaken by the marine industry.
Great Lakes Commission
2018 Annual Meeting
Conrad Hotel, Indianapolis, IN
October 1-3, 2018

Summary Minutes

Summary of Actions
1. Approved minutes of the 2018 Semiannual Meeting held March 6-8, 2018 in Washington D.C.
2. Approved one resolution: Support for Advancing Construction of a Second Poe-Sized Soo Lock.
3. Approved an action item to rescind the 2008 resolutions: Support for the extension of Federal Production Tax Credit and Federal Energy Efficiency Profile, Great Lakes Commission support for the Great Lakes-St. Lawrence River Basin Water Resources Compact, Reducing atmospheric toxic deposition to the Great Lakes, Great Lakes Commission support for legislation reauthorizing the Great Lakes Legacy Act, Great Lakes Commission support for the City of Chicago’s bid to host the 2016 Olympic and Paralympic Games, and Heightened urgency for Soo Lock expansion.
4. Announced the date for the Great Lakes Day Congressional Breakfast to be held March 7, 2019 in Washington, D.C.
5. Announced plans to hold the 2019 Semiannual Meeting in Ann Arbor in May

October 1, 2018

Working Session - Commissioners and Staff   1:00 p.m. – 4:00 p.m.

Chairman John Linc Stine and Executive Director Darren Nichols facilitated a working session to review and discuss the GLC’s mission and vision in the context of the 2017 Strategic Plan and the Great Lakes Basin Compact of 1955. The session was designed to inform the Commissioners of the agency’s history and accomplishments, to review the intent, powers and authorities of the Great Lakes Basin Compact and begin a preliminary discussion of the desirability and benefits of conducting an assessment of the GLC to help it better understand its responsibilities and commitments as outlined in the Compact.

To inform this discussion, Executive Director Nichols facilitated a session on Compacts covering the history, use, powers and benefits of a compact to the party states.

The Commissioners ended the day with a tour of the Indiana State House followed by dinner.

October 2, 2018

Working Session - Commissioners and Staff   8:00 a.m. – 10:30 a.m.

The Commissioners participated in a series of staff briefings on projects and initiatives under four of the seven program areas of the strategic plan. The program areas covered included: Economic Development and Waterfront Community Revitalization; Information Management and Blue Accounting; Commercial Navigation; and Water Management and Infrastructure.
Summary Minutes

October 2, 2018

The Annual Meeting was called to order at 10:50 a.m. EDT by John Linc Stine (MN), GLC Chair. The following Commissioners, Associate Commissioners and Alternates were present:

- Daniel Injerd, Loren Wobig - Illinois
- Sharon Jackson, Kay Nelson, Jody Peacock, Steve Fisher - Indiana
- Jon Allan, Emily Finnell, Candice Miller, Peter Manning, Helen Taylor - Michigan
- John Linc Stine, Ann Rest, Jennifer Schultz, Paul Torkelson - Minnesota
- Jim Tierney, Don Zelazny - New York
- James Zehringer, Jim Weakley, Tom Rayburn - Ohio
- Bill Carr - Ontario
- Brenda Sandberg, Patrick Harkins, Tim Bruno, Tim Schaeffer - Pennsylvania
- Jean-François Hould, Frederic Lecomte - Québec
- Steve Galanneau - Wisconsin

Staff present: Darren Nichols, Tom Crane, Victoria Pebbles, Matt Doss, Elaine Ferrier, Dan Gold, Jack Cotrone, Beth Wanamaker, Pat Gable.

1) **Call to order, opening remarks:** Chair Stine called the meeting to order and welcomed new Commissioners/Alternate Commissioners attending their first meeting. He also recognized retiring Commissioners (Andy Ware (OH), Karl Gebhardt (OH), Sister Pat Lupo (PA), Jim Whitestone (ONT), Dan Injerd (IL)).

2) **Roll Call:** Executive Director Darren Nichols called the roll. A quorum was present with all eight states and Ontario and Québec represented at the start of the meeting.

3) **Approval of Agenda:** Chair Stine briefly reviewed the agenda for the meeting. A motion to approve the agenda was made by Wisconsin, seconded by Pennsylvania. The agenda for the meeting was approved unanimously.

4) **Approval of minutes of 2018 Semiannual Meeting:** Chair Stine called for a motion to adopt the minutes of the 2018 Semiannual Meeting held March 6-8, 2018. A motion to approve the minutes was made by Pennsylvania, seconded by Indiana. The minutes were approved unanimously.

5) **Presentations of Resolutions and Action Items:** Stine presented and summarized the action items under consideration by the GLC for the meeting to be voted on the following day. Most of the discussion focused on the draft resolution to support construction of a new Poe-sized Soo Lock, the only new resolution considered at this meeting. Additionally, Stine presented six resolutions passed by the Commission in 2008 to be considered for sunsetting. Stine asked individual Commissioners to provide background on each resolution as appropriate.

Jim Weakley (OH) provided background on the new resolution - *Support for Advancing Construction of a Second Poe-Sized Soo Lock*. The resolution is an update of 30 years of prior work by the GLC calling for advancing construction of a second Poe-sized lock at the Soo Locks. This update reconsiders the issue in the context of the current federal administration and urges President Trump to include maximum funding for the lock. If the current Poe Lock were to shut down, three million people in the U.S., Canada, and Mexico would be unemployed and there would be tremendous economic consequences for the Great Lakes region and the nation. As such, construction of a new lock is paramount to maintain the
economic vitality of the region. Construction of the new lock would take place within the footprint of the existing lock, meaning it would have minimal impact on the environment.

Discussion occurred over the lack of a call for state funding for the project in the resolution. Weakley explained that the federal government views this as a regional project that should be funded federally. Because of this, the U.S. Army Corps of Engineers has had difficulty accepting project funds from states that have set them aside and the GLC wants to avoid these types of complications by specifically calling for state funds in the resolution.

Steve Galarneau (WI) discussed six resolutions to be considered for sunsetting. A committee of four Commissioners (Loren Wobig, Bill Carr, Jennifer Schultz, Steve Galarneau) met to review the 2008 resolutions to be considered for sunsetting. The committee recommended all six resolutions for sunsetting; Support for the extension of Federal Production Tax Credit and Federal Energy Efficiency Profile, Great Lakes Commission support for the Great Lakes-St. Lawrence River Basin Water Resources Compact, Reducing atmospheric toxic deposition to the Great Lakes, Great Lakes Commission support for legislation reauthorizing the Great Lakes Legacy Act, Great Lakes Commission support for the City of Chicago’s bid to host the 2016 Olympic and Paralympic Games, and Heightened Urgency for Soo Lock Expansion. It was suggested that the 2008 Soo Lock resolution be updated with a new resolution which was discussed previously.

Brief discussion ensued over the recommendation to sunset two of the resolutions. Regarding the resolution on the Great Lakes-St. Lawrence Water Resources Compact, it was suggested that the GLC maintain its close working relationship with the Conference of Great Lakes and St. Lawrence Governors and Premiers through a 2009 Memorandum of Understanding between the two organizations.

Regarding the Great Lakes Legacy Act reauthorization, it was suggested that the GLC should retain its support for this and similar important legislation and programs to protect and restore the Great Lakes and could preclude the GLC’s ability to speak to similar acts that may come up. Chair Stine clarified that the lack of a resolution does not eliminate the Commission’s role in advocating for a law, regulation or policy in the future.

Following the discussion of resolutions and action items, Executive Director Nichols provided a report to the Commissioners on discussions of the Board surrounding the need for an organizational assessment of the GLC. Nichols described the opportunity to engage the member states and provinces in a bottom-up assessment of the organization, to consider its responsibilities under the Compact, and the cost of funding these responsibilities. Nichols encouraged the Commission and the Board to continue to have earnest conversation on this issue and establish a goal to formalize a plan for conducting an assessment by the end of the calendar year.

6) **Report of Nominating Committee:** Each year prior to the Annual Meeting, a nominating committee is formed and charged with examining the current Commissioner list, considering the history of service and to the extent practicable following a rotation of service to allow each member state to assume leadership on a regular basis. The Nominating Committee for this meeting included Loren Wobig (IL), Jim Zehringer (OH), and Steve Galarneau (WI). Galarneau provided the report of the committee, which recommended that John Stine (MN) continue in the role of chair and that Sharon Jackson (IN) continue in the role of vice chair. Galarneau asked for additional nominations from the floor three times; no additional nominations were given.

7) **Election of Officers:** Commissioner Galarneau (WI) placed the names of John Stine (MN) for chair and Sharon Jackson (IN) for vice chair and made a motion to elect these two candidates. Stine and Jackson were elected unanimously.
8) **Lunch:** Chair Stine moved to adjourn the meeting for lunch after which the meeting will be reconvened. Commissioners and guests gathered for lunch. During lunch Chair Stine gave opening remarks about the importance of the Commission’s work to the Great Lakes region.

9) **Reconvene and Call to Order:** Chair Stine reconvened the meeting, welcomed the Commission’s Observers and guests and invited Vice Chair Jackson to provide a welcome to Indiana.

10) **Welcome to Indiana:** Vice Chair Sharon Jackson (IN) welcomed Commissioners to Indiana on behalf of Governor Eric Holcomb and Lt. Governor Suzanne Crouch. Jackson provided a brief history of Indiana and shared some facts and figures about several things that Indiana is best known for including Indiana limestone. Indiana is well known for its dimension building stone. Indiana Limestone (properly named Salem Limestone) is mined in south-central Indiana but is used all over the United States. Indiana Limestone has helped construct such iconic buildings as the Empire State Building, the Pentagon, The Washington National Cathedral, and many venerable official, commercial, or religious structures.

11) **Economic Impacts of Maritime Shipping in the Great Lakes-St. Lawrence:** Craig Middlebrook of the Saint Lawrence Seaway Development Corporation was welcomed to the podium to present the results of a report issued in July 2018 on the economic impacts of maritime shipping. This report is a follow-up to a study completed in 2011. The report was created by a consortium of U.S. and Canadian agencies and its scope included the review of maritime fleets in both countries. Interviews with individuals representing 770 firms were conducted by Martin Associates, a consulting firm that has a long history with the maritime industry. Findings indicate that over 237,000 jobs are directly linked to maritime transportation. Steel-related manufacturing was identified as a particularly significant contributor to the number of maritime transportation jobs.

Mr. Middlebrook provided an update on the traffic of oceanic ships in the Great Lakes-St. Lawrence system. Each year, there are between 45,000-50,000 transits through the system, 30 percent of which are completed by international vessels. Mr. Middlebrook also explained that in the 2011 study, most of the traffic consisted of bulk shipments, while 10 percent of shipments now consist of high-value non-bulk cargos with unique packaging or handling requirements (such as wind turbines and finished steel products).

12) **Discussion Panel:** Matt Doss, GLC policy director, moderated a panel on *Maritime Transportation as an Economic Driver for the Great Lakes-St. Lawrence River Region.* Doss introduced the speakers of the panel that included: William Bojalad, U.S. Steel; Craig Middlebrook, Saint Lawrence Seaway Development Corporation; Thomas Wynne, Interlake Steamship Company; Michael Broad, Shipping Federation of Canada; and Bruce Burrows, Chamber of Marine Commerce.

Bojalad provided an overview of U.S. Steel's history, market segments, and business activities.

Middlebrook discussed the importance of maintaining the decision-making infrastructure investments including hands-free mooring equipment.

Wynne provided an overview of the business activities, fleet improvements, and future opportunities of the Interlake Steamship Company including efforts to recruit and maintain career mariners.

Broad provided an overview of the Shipping Federation of Canada, its history, its structure, its scope of activity, investments and environmental improvements, and identified challenges with the recent U.S. steel tariffs.
Burrows described the origin and structure of the Chamber of Marine Commerce, reviewed its mandate, and outlined challenges and opportunities, including pilotage reform, icebreaker modernization, and infrastructure investment.

Following these remarks, Commissioners offered comments and questions to the panel for discussion. When asked to identify their greatest concerns around maritime navigation, panel members identified the poor condition of locks, lack of icebreaker capacity, and pilotage issues. They reported lack of icebreaker capacity was attributed to an aging and poorly maintained fleet with slow repairs and no funding. Concerns around pilotage were attributed to private monopolies and failure to adopt geospatial technology tools. When asked about the time it takes to install hands-free mooring systems in locks, panel members reported that the process of installing these systems takes about two years per lock to complete. Work is conducted during the 2.5 months of downtime over the winter. When asked about the most important skills for training new mariners in the modern era, panel members identified that an education in environmental policy and management will be a valuable skillset for future jobs in the maritime transportation industry. Panel members also identified that the ability to adapt to emerging technological advancements in navigation and operations will be essential for new employees in the sector.


Buckner described the origin, purpose and scope of a recently completed project to estimate the economic benefits of the Great Lakes Restoration Initiative (GLRI) using standard economic methodologies. The study also considered eight case study locations which were chosen because they are hotspots of GLRI investment. The study found that every dollar of GLRI funding creates over $3.35 of economic activity in the region.

Korleski discussed the GLRI economic valuation study as a powerful product that points to strong industry and agency partnerships toward common goals. He identified the website www.GLRI.us as a source for daily news stories on GLRI-funded projects. He described the goals of GLRI Action Plan 3, which will include a strong focus on nutrients, better integration of data into decision-making, and improved state and tribal representation.

Carl discussed the value of science-related projects and programs under the GLRI to inform management decisions. He referred to certain projects that identify priority watersheds and monitor effectiveness of restoration work. He described work to restore the Coregonine (whitefish) fishery through partnerships and adaptive management, and assessments of Cladophora in support of Annex 4 of the GLWQA. He cited the Great Lakes Phragmites Collaborative and the Invasive Mussel Collaborative as examples of successful partnerships to advance effective science and management.

Wodrich described a multi-year restoration project on the Grand Calumet River. The project has been designed and executed with both federal and private partners, and the estimated cost is over $150 million. Restoration methods include dredging, capping, and removal of invasive species among others. An extensive dune and swale restoration and re-planting project was undertaken by restoration crews from The Nature Conservancy and Indiana DNR. An earthen berm has been constructed at Eagle Marsh to prevent introduction of Asian Carp into Lake Michigan.
Following these remarks, Commissioners offered comments and questions to the panelists and solicited their responses. The GLRI economic benefit assessment and its collaborative nature was the subject of positive comments from multiple Commissioners. In response to a question about whether a snowball effect from the economic benefits of GLRI may be seen, Buckner replied that while this project focused on actual dollars spent, a portion of the study investigated quality of life benefits and derivative impacts from GLRI, and those results are an indicator of a benefit snowball effect.

14) Observer Remarks: Chair Stine invited GLC Observers to give remarks on priorities and issues of common interest for them, the states, provinces, and the GLC. Additional details on each Observer’s comments is available upon request. The following Observers spoke about their organization’s priorities and issues of common interest for the states, provinces and the GLC.

- Peter Johnson, Conference of Great Lakes and St. Lawrence Governors and Premiers
- Carl Platz, U.S. Army Corps of Engineers
- Rear Admiral Joanna Nunan, U.S. Coast Guard Ninth District
- Jill Reinhart, USDA-Natural Resources Conservation Service
- Jennifer Day, National Oceanic and Atmospheric Administration
- Felicia Minotti, Global Affairs Canada
- Molly Flanagan, Alliance for the Great Lakes
- Lana Pollack, International Joint Commission
- Gail Hesse, National Wildlife Federation
- Andrea Danton, Shedd Aquarium

15) Commissioner Comments: Chair Stine asked the Commissioners if they had any additional comments or announcements before the conclusion of Tuesday’s session. Ohio announced that the state is expanding requirements for farmers to create nutrient management plans in areas where nutrient run-off is a key issue. Timothy Schaeffer (PA) announced that a similar program to reduce nutrient run-off is underway in the Chesapeake Bay watershed. He also highlighted an industry-led initiative: an ice cream manufacturer requiring their dairy suppliers to have nutrient management plans in place to provide milk products to their business. Jon Allan (MI) announced that he had just returned from the second summit of the Great Lakes Islands Alliance – an organization of year-round island residential communities.

16) Chair Stine moved to adjourn the meeting. The motion was seconded by Jackson and passed unanimously. The meeting was adjourned for the day at 5:18 p.m. EDT.

October 3, 2018

17) Reconvene: Chair Stine called the meeting to order at 8:40 a.m. EDT. He did a brief recap of the previous day and discussed a few housekeeping items.

18) Emerging Thoughts on Pre-Disaster Preparedness/Resiliency in the Great Lakes Region: Stine introduced Federal Emergency Management Agency (FEMA) Region 5 Mitigation Division Director, Mary Beth Caruso. Caruso presented information on emerging trends in disaster preparedness and mitigation work being performed by FEMA. She noted that 47 million people were affected by natural disasters in 2017; both impacts and response related to these events remain ongoing. She emphasized that many different sectors play a role in emergency response and called for a culture of preparedness and increased outreach about available resources for disaster victims. Caruso stated that her top priority is to reduce the complexity of FEMA by streamlining assistance programs. Her second priority is to increase
readiness for catastrophic disasters. FEMA is currently working with state, territorial, and local partners to help prepare for smaller-scale events so that FEMA can focus on large scale events. In addition, Caruso highlighted her Division’s plans to hire a Resiliency Officer and increase coordination with the Corps of Engineers and FEMA’s newly formed National Continuity of Operations Office. She spoke about the economic benefits of preparedness, including the relative efficiency of using federal investments in prevention compared to disaster response. In closing, Caruso called attention to the importance of learning from past disasters, highlighting the improved planning and construction methods that have successfully mitigated financial risks in the Mississippi River Basin following the historic 1993 floods.

19) Discussion Panel: GLC Program Director Victoria Pebbles moderated a panel titled: Challenges and Opportunities for Enhancing Climate Resiliency. Panelists included: John Dickert, Great Lakes and St. Lawrence Cities Initiative; Roy Widrig, New York Sea Grant; Cameron Davis, GEI Consultants; and Matt McKenna, Northeast-Midwest Institute

Before introducing the panelists, Pebbles discussed the GLC’s work related to green infrastructure and specifically the Green Infrastructure Champions project. She highlighted how green infrastructure can increase resiliency by reducing flooding. She noted that most actions to increase resiliency happen locally, but that states, provinces and federal governments can help by creating enabling conditions for local action.

Dickert complemented the GLC staff for their work on green infrastructure. He spoke about the responsibility of mayors to protect their cities, and the associated financial burden when state or federal assistance is not available. He urged mayors to take preparatory action by completing resiliency reviews. He highlighted the importance of having a holistic perspective on resiliency planning noting that flooding impacts everything from electric grids and roads, to other types of infrastructure. He discussed several collaborative efforts including a GLRI-like fund and a phosphorus reduction initiative. In closing he urged cities to invest upfront to avoid greater costs later.

Widrig provided a general overview of Sea Grant and the work that it is carrying out in the Great Lakes Basin. He highlighted several problems with region-wide impacts including climate change, increased severity of storms, fluctuating water levels caused both by humans and natural factors, and invasive species. He continued by providing additional detail on several projects and available resources in each Great Lake state. He also noted the importance of private property management and engaging with landowners when addressing regional water quality issues.

Davis called on all meeting attendees to think ahead about coastal resiliency and noted a long history of regional collaboration. He described work done at Orchard Beach State Park in Michigan as a prime example of the policy, science, and technical issues that he wanted to address. The park has 1,800 linear feet of shoreline and a historic structure that has endured multiple threats including coastal bluff failure. Many coastal assets in other locations face similar challenges. He noted recent reports predicting higher than average lake levels for years to come, which may cause further damage. He connected coastal erosion to urban and industry impacts like the addition of sand to channels, which can increase the need for dredging. He spoke about opportunities for improving regulatory approaches to promote greater resiliency, noting that every stretch of coastline is unique, but many common denominators exist for both threats and solutions. To close, he called for the creation of a coastal resiliency collaborative and suggested that the Commission or other regional groups jumpstart this effort by creating a blue paper that outlines key policy factors across the region.

McKenna provided an overview of federal coastal resiliency work, noting that funding levels for resiliency-related programs have not increased in recent years to meet rising needs. He described a hesitancy in Washington to create new grant funding programs and spoke about how this was the
impetus to create an innovative task force to jumpstart the creation on new funding sources. He praised the GLC’s recent report on green infrastructure policy and said that it makes a compelling case to the U.S. EPA to support this resiliency strategy. He spoke about the 2018 Water Resources Development Act (WRDA), which has passed the House, and may be voted on by the Senate shortly. He highlighted specific WRDA provisions such as those that relate directly to stormwater, wastewater technical assistance, and combined sewer overflow control grants. To close, he noted that forthcoming changes in Congress could impact efforts to improve regional resiliency by potentially creating enabling conditions for a big infrastructure package.

Following the presentations, Commissioners offered comments and questions to the panelists and solicited their responses. It was noted that the resiliency issue should be non-partisan and governments and decision-makers at all levels should be supportive of efforts to increase and improve resiliency. Collaboration is important as there are a lot of agencies, companies and organizations doing resiliency-related work. Developing and using technology to monitor and better understand coastal bluff processes is important. The USACE Coastal Resiliency Study will be very important to the region and collaboration with the Corps was mentioned as being critically important. Utilizing private sector expertise was mentioned. Insurance companies need to be partnered with and need to be brought into discussions very early when planning resiliency projects. Davis indicated that he had hoped for more momentum behind a federal insurance program following recent hurricanes, but that this has not materialized. It was noted that risks to coastal assets are biological as well as physical and there is a need for a holistic approach to resiliency. Pebbles closed the session and thanked the panelists for their insights.

20) Business of the Great Lakes Commission: Chair Stine moderated a session addressing the following Commission business items:

- **Resolution** – Support for Advancing the Construction of a Second Poe-Sized Soo Lock. The resolution recognizes the international economic importance of this passageway and highlights the vulnerability and risks associated with the current sole reliance on the single 50-year-old Poe Lock. The resolution urges the President to include the maximum amount of annual funding that the U.S. Army Corps of Engineers can execute each year on construction of a new large lock in the FY 2020 and subsequent budget requests and urges Congress to appropriate the requested funding. It also urges the Army Corps to allocate funding from the FY 2019 workplan to complete the design and begin construction of the new lock. Changes to the draft resolution were presented that would revise the following two “Whereas” clauses:

  **Whereas**, with efficient funding, the building of a second large lock at the Soo from two obsolete smaller locks may take as long as 10 years from the time construction is initiated, thus further placing the economies of the United States and Canada in an extended period of risk; and

  **Whereas**, in the recently passed America’s Water Infrastructure Act of 2018, legislation anticipated to be passed before the end of 2018, Congress is expected to formally authorized construction of a new large Soo lock consistent with the Economic Validation Study and Post-Authorization Change Report released by the Army Corps of Engineers in June 2018, with an authorized cost of $922 million.

A motion was made by Jim Weakley (OH) and seconded by Steve Galarneau (WI) to approve the revised resolution as presented. There was no further discussion among Commissioners.

*Action*: The motion to approve the resolution passed unanimously.

- **Action Item** – Sunsetting 2008 Resolutions. The Commission had previously discussed the sunsetting of the following 2008 Resolutions: Support for the extension of Federal Production Tax Credit and Federal Energy Efficiency Profile, Great Lakes Commission support for the Great Lakes-St. Lawrence River Basin Water Resources Compact, Reducing atmospheric toxic deposition to the Great Lakes, Great Lakes Commission support for legislation
reauthorizing the Great Lakes Legacy Act, Great Lakes Commission support for the City of Chicago’s bid to host the 2016 Olympic and Paralympic Games, and Heightened urgency for Soo Lock expansion. A motion to approve the action item was made by Jon Allan (MI) and seconded by Jim Weakley (OH).

Action: The action item as presented was approved unanimously.

21) Invitation to the Great Lakes Day Congressional Breakfast and 2019 Semiannual Meeting: Chair Stine stated that Great Lakes Day will be held in Washington D.C. on March 7, 2019, but that the Commission will not convene a full semiannual meeting as in previous years. Discussions are ongoing about holding a board meeting in D.C. during Great Lakes Day but holding the GLC Semiannual Meeting at a different date and location. Ann Arbor was suggested as the location for the meeting. Chair Stine then stated that no final decision has been made and that plans for the meeting will be further discussed on upcoming board calls.

Closing Remarks: Chair Stine thanked the Indiana delegation for their hospitality and complimented them on the choice of venue. Stine also thanked Commission staff for their work preparing for the meeting. Chair Stine then introduced Executive Director Nichols, who briefed Commissioners on work currently being done in different program areas including Blue Accounting, green infrastructure, and resilience planning. Nichols referred the Commissioners to a memo in the briefing book detailing activity and services beyond normal program and project work that the GLC is currently engaged in. He explained that these activities are important to consider as they relate to the need for staff capacity in areas related to legal services, HR, financial management and operations, service obligations to states, increasing staff expertise and advancing professional development, among others. Nichols noted that documenting these needs will help the Commission better understand the need for and value of an organizational assessment.

Chair Stine offered a final word by reiterating the importance of an organizational assessment. He commented on the Board’s healthy discussions regarding the future direction of the GLC and encouraged the Commission to approve in principle the need to move forward with an organizational assessment.

Adjournment: Jim Weakley (OH) moved to adjourn the meeting, and Dan Injerd (IL) seconded the motion. The meeting was adjourned at 11:16 a.m. EDT.

Respectfully submitted,

Thomas R. Crane
Deputy Director
The meeting was called to order at 3 p.m. EST by John Stine, Chair. The following members were present:

Loren Wobig - Illinois
Sharon Jackson - Indiana
Emily Finnell - Michigan
John Stine - Minnesota
Jim Tierney, Don Zelazny - New York
Jim Zehringer, Tiffany Cavillac - Ohio
Ranissah Samah, Trevor Snyder - Ontario
Tim Bruno - Pennsylvania
Jean Francois Hould - Quebec
Steve Galarneau - Wisconsin

Staff present: Darren Nichols, Tom Crane, Matt Doss, Beth Wanamaker

1) **Introductions and Call Objectives:** The agenda was unanimously approved. Three sets of minutes were considered:
   a. September 20 call: Approved unanimously.
   b. October 3 meeting: Approved unanimously.
   c. October 5 call: Approved unanimously.

2) **Recap Annual Meeting:** Board provided feedback:
   a. Wisconsin: Commissioner-only sessions were appreciated. Compacts 101 session was edifying. Ballast water candor from Commissioners was appreciated.
   b. Illinois: Compacts 101 was educational.
   c. Indiana: Commissioner-only time was important; should continue to have discussions about the focus of the work of the GLC. Compacts 101 was well done.
   d. Ohio: new format is great, Commissioner-only sessions were important.
   e. Pennsylvania: Program area committees were fantastic, format is great. VIDA conversation was important and appreciated doing that in person.
   f. New York: agreed with previous comments about Commissioner-only sessions; Zelazny asked the Board/chair how to follow up on recommendations from the coastal resiliency panel on moving the ball forward. Stine suggested asking the staff to put together a memo for the next Board call. Nichols noted that a briefing later in the call would provide more info.
   g. Quebec: no answer, may have dropped the call momentarily.
   h. Ontario: Samah noted that Carr found the meeting very valuable.
   i. Michigan: the format was great, as a newer Commissioner the Compact 101 session was valuable.
   j. Minnesota: meeting put the GLC in a good position for the future, especially valued the Commissioner-only time at the beginning of the meeting as an opportunity to connect with Commissioners and develop cohesion and agreement prior to the public meeting time.

2) **VIDA briefing:** Doss noted that GLC staff has been working with congressional staff since last spring on ballast water issues. Initially the legislation called for a Great Lakes Discharge Commission; GLC expressed concerns with the proposal. The latest Great Lakes provisions came out shortly before the Annual Meeting; the language provides for governors to petition for a different Great Lakes standard and established a process and voting structure for a Great Lakes recommendation. GLC staff worked to ensure that bill language does not undermine the Great Lakes Basin Compact of 1955. The legislation will be taken up November 12, with a vote for final passage on November 14. It’s unclear if there are any additional opportunities for edits or if there are enough votes to pass the bill. Stine asked Board members to be prepared to engage again on the issue if necessary.
3) **Coastal Resiliency study letters of support**: The Corps has formally requested that states and the GLC consider sending letters of support for the USACE Coastal Resiliency Study. Detroit District Commander Lt. Colonel Turner informally has asked what the GLC’s next steps are on resiliency and Cam Davis’ request for a white paper on the issue. Tierney noted that many federal agencies are doing different things regarding resiliency and there is a role for the GLC to pull all of these programs and current state-of-play together. Nichols noted that staff believes the resources to create a white paper would depend on its scope, but staff could pull something together relatively quickly. Funding may be an issue. Colonel Turner also inquired whether General Toy or another higher level USACE official should serve as the GLC’s formal Observer. Wobig noted that he believes the Coast Guard is rushing the GLC and Illinois on this issue. Nichols noted that the GLC could urge the Corps to accept a white paper/assessment as in-kind match especially if USACE is included in scoping the white paper. Stine suggested the Board direct staff to examine the issue for further conversation on the next Board call. Zehringer noted Ohio’s 25% match is going to be in-kind as well; he offered Dr. Mackey, the head of their coastal program to help the GLC.

4) **Tribal coordination**: Stine noted that the Duluth meeting had very strong participation from tribes and the Executive Committee would like to follow up with options on better integration. Allan particularly is interested but was not on the call. Nichols noted he would like to put an outreach proposal to ask tribal leaders how they would like to engage with the GLC. Crane noted that there was follow up on this issue after the Duluth meeting and the Board did not want staff to develop a strategy and preferred a process for outreach. Zehringer noted that at the Compact Council meeting in Indianapolis, tribal leaders expressed concerned about water withdrawals. Finnell noted that Michigan has 12 recognized tribes and is happy to share info. Hould noted Quebec has 11 recognized nations and would be happy to help the GLC; Samah said the same from Ontario. Zelazny suggested that staff reach out to the Conference of Great Lakes St. Lawrence Governors and Premiers about work they did on engaging with tribes and First Nations. Stine directed the staff to do information gathering on this issue.

5) **2019 Semiannual and Annual Meeting and Great Lakes Day update**: Crane outlined the current state of planning for the spring meetings, including a recommendation to meet May 22-23, 2018. No objections were raised to those dates. Crane noted that staff will send a save-the-date to Commissioners ASAP.

6) **ED update**: Nichols has been working on three optional approaches to an organizational assessment. He invites feedback or suggestions from Board members. Stine encouraged Nichols to create an interview process for all Board members on this proposal and then bring it to the November meeting.

With no further business, the call was adjourned at 4:30 p.m.

Respectfully submitted,
Darren Nichols
Executive Director
/bw
The meeting was called to order at 3 p.m. EST by John Stine, Chair. The following members were present:

Loren Wobig     - Illinois
Emily Finnell, Jon Allan (joined late)   - Michigan
John Stine      - Minnesota
Don Zelazny, Jim Tierney    - New York
Jim Zehringer      - Ohio
Trevor Snyder      - Ontario
Tim Bruno      - Pennsylvania
Jean Francois Hould     - Quebec
Steve Galarneau      - Wisconsin

Staff present: Darren Nichols, Tom Crane, Matt Doss, Beth Wanamaker, Joe Bertram

1) **Introductions and Call Objectives:** The agenda was unanimously approved. The October minutes were unanimously approved.

2) **Quarterly Financial Report:** Bertram noted that there is a net operating gain to date after staff budgeted for a loss; however, the gain will likely fall back into line later in the year. Auditors just wrapped up their field work for FY18. Six states have paid their dues for FY18. Reserves are showing unrealized gain of over $67,000. Crane noted that the audit committee will have a call in the next few weeks.

3) **Coastal Resiliency Assessment:** Stine noted a memo on the topic was sent to the Board and asked the Board if there is a need for a white paper and how to move forward if they agree it is necessary. Nichols asked the Board to react to the proposal and the potential for funding. Wobig noted the assessment is needed and most states have already submitted letters of support to the Corps on their assessment. Nichols responded that the GLC would help inform the Corp’s work by identifying the breadth of the issue and where there is agreement between the states on identified need. Tierney noted that there is a need to see who is doing what and what data is being collected. He suggested starting with the four federal agencies in this space: USGS, NOAA, Corps, and FEMA. Zelazny noted some Commissioners and state coastal management programs have had conference calls on this issue since the Annual Meeting and that most of the background in Phase I and some of Phase II in the memo has already been done. They have learned that most of the data collected so far provides a good overview but doesn’t help with local management. Zelazny noted that there is need to find out what the federal agencies are planning and create a better definition of coastal resiliency. Bruno noted that there are other state organizations that would be involved. Wobig noted that much of the support provided by states for the Corps study is in-kind work. Board members agreed that the GLC should be involved in the work and agreed that staff should put together a work plan and timelines. Nichols noted that in total phase I would be 20-40 hours of staff time mostly by Nichols. Phase II would require adding additional capacity. Zelazny suggested convening a task force of Commissioners and other interested state parties on the issue; there was agreement on this approach. Zelazny, Bruno, Galarneau, Dr. Mackey from Ohio, Ronda Wuycheck from Michigan, Diane Tecic from Illinois were suggested.

4) **Tribal Engagement:** Stine noted a memo was sent to the Board on this topic and that the conversation came out of the Duluth meeting. Allan noted that tribal participation with the GLC has been superficial in the past. He argued that is inadequate to think of tribal nations as solely Observers and there is no mechanism currently in place to work adequately with tribal nations. Nichols noted that there is no legal mechanism to engage with tribal nations and that states and provinces are in very different places in their relationships. The memo recommends that a committee be formed on the issue. Hould noted that Quebec has a department in charge of relations with First Nations that would be good to consult on the issue.
Stine agreed with the approach laid out in the memo. Stine noted that it’s important to be mindful of sovereignty in reaching out to tribes.

5) **Blue Accounting:** Pebbles noted that staff recently drafted a transition plan to move Blue Accounting to GLC that will be presented to the Blue Accounting steering committee and the Board in December. Stine noted that he would like to understand what the transition means for resource allocation and relationships with funders. Pebbles noted that the plan includes financials and an updated MOU for the transition through the end of 2019. Nichols noted that staff indicated that they will not be able to finalize any sort of transition until it’s confirmed by the Board. Allan noted that Michigan is fully supportive of GLC’s continued commitment to Blue Accounting. Hould noted that he would like to have a conversation on maritime data collection with staff next week. There was agreement to put the briefing on the calendar for December for about 15-20 minutes. Pebbles agreed to include an assessment of where Blue Accounting is and what benefits have been seen so far at Zelazny’s request.

6) **December 2018 Board meeting:** One-day, in person retreat to discuss the status of the GLC and put together a transition memo for future Board members. December 10 and 17 are the current leaders. Nichols has also reached out to a facilitator. Bruno requested that the dates and agenda be sent through immediately.

7) **Gubernatorial transition, strategic opportunities:** Stine noted that the transition in Minnesota is from a Democrat to another; the new Lieutenant Governor is the first elected registered member of a tribe. Stine will be reaching out to the new Governor to request to remain head of GLC delegation through 2019. Wobig noted that Illinois has a change of party but the current administration plans to make the transition very smooth. Galarneau noted there are likely to be no substantive changes in Wisconsin. New York is status quo. Ohio will have a new Commission member; Zehringer is going to recommend the Lake Erie Commission chair, who has not been replaced yet. Michigan has changed parties and the new governor has campaigned on ensuring clean water; there will be some new Commissioners.

8) **ED update:** Nichols asked the Board to forward any potential candidates for the GLC staff or Commissioners to him as administration transitions take place. Crane noted that the GLC-Sea Grant fellowship will be paused for 2019 to do a full review of the program.

With no further business, the call was adjourned at 4:30 p.m.

Respectfully submitted,
Darren Nichols
Executive Director
/bw
The meeting was called to order at 9:30 a.m. EST by John Stine, Chair. The following members were present:

Loren Wobig - Illinois  
Sharon Jackson - Indiana  
Emily Finnell - Michigan  
John Stine - Minnesota  
Don Zelazny, Jim Tierney - New York  
Bill Carr - Ontario  
Tim Bruno - Pennsylvania  
Kerith Brand, Jean Francois Hould - Quebec  
Steve Galarneau - Wisconsin

Staff present: Darren Nichols, Tom Crane, Matt Doss, Beth Wanamaker, Victoria Pebbles

1) **Introductions and Call Objectives:** The agenda was unanimously approved. The November minutes were unanimously approved.

1) **2020 Budget Schedule:** Staff reviewed a proposal for the 2020 budget that Board members received in their meeting packet. The revised schedule would produce a budget slightly earlier than usual, with a goal of the budget being approved at the Semiannual Meeting in May. The finance committee will be appointed in February. The budget will be based on a revenue model but also consider operational needs. If the Semiannual Meeting is moved back to March, the process will revert to Board-only approval at its May meeting. New York moved to approve the timeline; Indiana seconded. The motion passed unanimously.

2) **Prep for Board Meeting in D.C.:** Nichols discussed the agenda outline for the D.C. meeting that the Board received in their meeting packet. Tierney noted that March scheduling will be challenging for Commissioners and staff may want to compress the schedule to two core days. Tierney suggested that a dinner with the Great Lakes Task Force instead of breakfast would allow new Commissioners to attend both the dinner and the Congressional breakfast; Nichols noted that the Canadian embassy reception will take place Wednesday night. Stine suggested looking at Wednesday and Thursday as the core days with Tuesday as additional time for meetings as necessary. Jackson noted that Congress likely won’t come into session until Tuesday evening.

3) **Blue Accounting Discussion:** Pebbles discussed notes from the Blue Accounting advisory committee that were included in the Board packet, as well as Blue Accounting’s accomplishments to date. One highlight is that Annex 4 now serves as the steering committee for ErieStat. Pebbles agreed to send around a list of organizations currently involved with Blue Accounting pilots. Pebbles noted that the governance of Blue Accounting is being moved to the GLC on an accelerated schedule and that this change allows for the GLC Board or a subset becoming the Blue Accounting steering committee. Pebbles agreed to sketch out a process for this potential transition for consideration at the May meeting. Zelazny suggested using graphics to visualize the process.

4) **2019 Federal Priorities:** Doss discussed the schedule for the GLC’s federal priorities statement that was included in the Board packet. Input from the Board on the initial draft is requested by Friday, February 1, with a final draft sent to the Board on Friday, February 8. Doss also discussed the one-page joint statement of regional priorities; draft text for that document will follow in a few weeks. He noted that this year’s joint statement will likely not include the Council of Great Lakes Industries as they have suspended operations; the groups working on the document are considering additional organizations to add. Updating the state GLRI fact sheets has been delayed because of the government shutdown and it is unlikely that they will be ready for D.C. However staff will make the 2018 fact sheet available. Tierney...
noted that the state fact sheets are very effective and agreed with making the 2018 versions available. He also suggested including “fully fund the GLRI” as the first bullet on the first page. Galarneau suggested including “showcase” projects for each state in lieu of the 2019 fact sheets. Doss noted that the invasive species paragraph is quite involved because it includes several different issues. Doss noted that the Brandon Road study is out for review currently, so it is only included at a high level in the federal priorities document. Nichols noted that several environmental groups have inquired about whether the GLC can support a request that the Brandon Road project be fully federally funded and funding for preliminary engineering and design. Wobig noted Illinois has changed its stance on Brandon Road but he is waiting for direction from the new administration. He noted his concern regarding the word “all” from “to prevent all AIS transfer between the Mississippi River and Great Lakes watersheds.” Stine encouraged Board members to review the document as quickly as possible and provide feedback to Doss.

5) **Assessment Committee Update:** Nichols noted that the assessment committee met the week of January 14. The assessment’s goals would be to 1) provide funding stability; 2) a better understanding of the value of the GLC, and 3) a better understanding of how and why the GLC does its work. The committee agreed to begin teeing up its work now but leaving the main work of the assessment for after the Semiannual Meeting. Nichols asked the Board for recommendations of organizations or individuals to undertake the assessment.

6) **ED update:** Nichols noted that staff is tracking the shutdown and that the Board will be updated as it continues. Some EPA work has been paused already; however, the NOAA work continues. Nichols noted he is speaking with partners about building GLC information management leadership following Steve Cole’s department. A consultant may be hired to help. Nichols has had conversations about the GLC’s potential role in developing a white paper assessment of coastal resiliency across the region. It was suggested that it would be helpful if the GLC undertook the assessment, but the Army Corps must be involved. Nichols and Crane have scheduled a meeting with General Toy to discuss. Nichols noted there is a memo in the Board packet about continuing the NOAA habitat restoration work; the deadline for submitting a proposal in February 4. Non-AOC areas are now eligible for habitat restoration funding. Stine asked Board members to stay in touch with staff about transitions and impacts of the government shutdown.

With no further business, the call was adjourned at 11:00 a.m.

Respectfully submitted,

Darren Nichols
Executive Director

/bw
The meeting was called to order at 9:30 a.m. EST by John Stine, Chair. The following members were present:

- Loren Wobig - Illinois
- Sharon Jackson - Indiana
- Emily Finnell - Michigan
- John Stine (joined late) - Minnesota
- Jim Tierney - New York
- Mindy Bankey - Ohio
- Bill Carr - Ontario
- Tim Bruno - Pennsylvania
- Jean Francois Hould, Yvon Boilard - Quebec
- Steve Galarneau - Wisconsin

Staff present: Darren Nichols, Matt Doss, Beth Wanamaker, Joe Bertram

1) **Introductions and Call Objectives**: The January minutes were unanimously approved.

2) **Appointment of Finance Committee**: Bertram gave an overview of the role of the finance committee, which will look at the FY 2020 budget. Stine nominated Galarneau, Wobig, Carr and Zelazny to serve, and suggested Galarneau and Zelazny as chairs if necessary. As Zelazny was not on the call, Tierney agreed to serve if Zelazny was not available. Galarneau agreed to serve as chair.

3) **Quarterly Financial Report Briefing**: Bertram noted that the financial report has a new format that should be easier to understand. There are three statements that were in the Board packet. The pass-through funds have been removed from the general budget, as they tended to skew views of the overall budget. Those funds are available in form three. Although showing a net operating loss to date, overall the GLC remains in good financial condition, with approximately $987,000 in cash available. More information is available in the memo.

4) **Board Meeting in D.C.**: Nichols reviewed a draft agenda for D.C. that was sent in advance to the Board. Stine noted he may not be attending, pending approval from the Minnesota Governor. He noted two Commissioners – Ann Rest and Jen Schultz – serve on the GLLC Executive Committee. Tierney asked if he could bring members of the New York D.C. office to events – Nichols said that would likely work and to let him and Wanamaker know which events. Bruno and Wobig asked the same question; Nichols asked them to contact Wanamaker. Hould noted Quebec’s concern about the president’s “Buy American” directive in regard to water infrastructure; Nichols asked him to follow up with Doss.

Wisconsin moved to approve the agenda pending necessary changes; Illinois seconded the motion. The motion passed unanimously.

5) **2019 Federal Priorities**: Doss reviewed three advocacy items were sent to the Board in advance of the call: the federal priorities, regional priorities and draft talking points for office visits. The federal priorities have been approved by the Board and sent to the printer. Doss noted he has been working with Wobig on language on the draft Brandon Road plan in the regional priorities. Wobig noted that he is still working on confirming the position of the new Illinois governor's office on the recommended plan. Tierney noted his support of Doss and Wobig's work on the issue. Finnell noted she is in a similar situation with the new Michigan administration. Nichols noted he is happy to set up a call specifically on this issue if desired. A final draft of the document will be sent to the Board shortly with any edits due by noon on Monday. Doss noted the major change is that CGLI has been removed following their disbandment and staff is proposing American Great Lakes Ports Association, the Great Lakes Legislative Caucus and the Blue
Green Alliance. No concerns about the documents were expressed by the Board. Doss noted the talking points document is intended to guide conversations in D.C. but not intended for distribution.

5) **Invasive Mussel Collaborative Briefing:** Jensen noted the Board was sent a draft statement in advance of the call. To summarize, GLC, IJC and GLFC staff have come to agreement that there should be more done under the GLWQA to address invasive mussels. They also agree that the Invasive Mussel Collaborative (IMC) is the right forum for development of regional approaches to address the issue. Each commission is pursuing formal endorsement of the Invasive Mussel Collaborative as this forum. All three commissions intend to release a formal statement of endorsement before the next GLEC meeting in the spring. Jensen offered to speak to Board members about the proposal at their request and agreed to send the IMC membership list to the Board. Board members agreed to take up the statement in D.C. to have more time to run it by their governors.

6) **International Joint Commission (IJC) Request:** The IJC has requested that the GLC endorse Jon Allan for reappointment to the IJC’s water quality board. The Board unanimously agreed with the endorsement.

7) **Executive Director Update:** Nichols noted that staff is beginning to hear from new governors about appointments to the GLC. Galarneau noted that Todd Ambs will be serving as Wisconsin’s new delegation chair and that Ambs has asked Galarneau to serve with him. Nichols noted that conversations about continuing about the GLC writing a white paper on the state of play regarding coastal resiliency in the Great Lakes Basin. Updates on the topic will likely come in April.

With no further business, the call was adjourned at 10:50 a.m.

Respectfully submitted,
Darren Nichols
Executive Director
/bw

Attendees: John Linc Stine (Chair, MN), Darren Nichols (GLC), Timothy Bruno (PA), Kathy Dahlkemper (PA), Todd Ambs (WI), Steve Galarneau (WI), Mary Mertz (OH), Emily Finnell (MI), Jon Allan (MI), Jim Tierney (NY), James Clift (MI), Don Zelazney (NY), Marc Gagnon (QC), Jean-Francois Hould (QC), Steve Fisher (IN), Sharon Jackson (IN), Bill Carr (ON), Loren Wobig (IL), Ann Rest (MN)

10:15 a.m. Welcome and Introductions – John Stine, GLC Chair and Darren Nichols, Executive Director

- Morning roundtable meeting with congressional staff was very successful
- Darren – Opening remarks
  - Downsized to just a board meeting from the typical full commission meeting, saves costs and allows us to focus more on our work on the hill

10:30 a.m. Orientation and Overview of the GLC – Darren Nichols, Executive Director

- 2018 Recap
  - Darren hired as executive director
  - Opened new office space in Ann Arbor, will host the next full commission meeting in Ann Arbor in May
  - 7 New administrations elected in the Great Lakes states – creates challenges and opportunities
  - GLRI proposed to be cut 90% and restored in full by members of congress, required a non-partisan response of the Great Lakes task force to respond and have it restored
  - Emergence of Vessel Incidental Discharge Act (VIDA) – got to a shared position from all our member states
  - Federal investment in a new Soo Lock
  - Annual meeting in Indianapolis – reanalyzed the compact and the role of the GLC in carrying it out, this will be an important part of our work going forward
  - 1-day meeting in Detroit – how to entice state investment in this organization, decided to take a look at preliminary steps needed to perform an organizational assessment
  - Added by commissioners
    - Stine (MN): preparing for the transition in administrations and new commissioners played into the decision to have a smaller meeting as appointments are still being figured out. Importance of being fair and open during our dialogues, regardless of political persuasion, this helps us to do better work.
      - Darren: Our job is to serve all states, help us to stay in a neutral respective space.

- 2019 Outline
  - If you see rosters or commissioner lists that are out of date during this period of turnover, please let us know.
  - Please help us find opportunities to engage with new commissioners and administrations and encourage them to share fresh perspectives.
o Step up our leadership in the region and around the world – begin by building our capacity in this region
o Darren traveling to the Netherlands to see their water innovation strategies and see how we can learn from them to build a “blue economy” in this region
o Beginning of administrative assessment – allows us to reconnect to our commitment under the compact
o Please look over the copy of the compact you have been given and think about untapped possibilities for work we could do from the powers granted to us in the compact
o Commission meetings – May 21-23 in Ann Arbor, October 9-12 in Quebec City
  ▪ Please continue to provide ideas for discussion at these meetings
• D.C. Objectives
  o Listen and lead – have an open ear as we hear from the congressional members and staff and our partner organizations.
  o Awaken a reinvestment in the Great Lakes basin. GLRI is the beginning of this, but we should continue to look for more opportunities for investment.
  o If you could deliver one message while we’re here what would that be?
    ▪ Bruno (PA) – GLC provides the venue for us to come together and tackle hard issues
    ▪ Dahlkemper (PA) – Finding opportunities to reinvest in the region
    ▪ Clift (MI) – Looking forward to using his policy experience to help us move forward
    ▪ Galarneau (WI) – Lean in on ballast water and embrace our role, consider specific actions on the coastal resiliency front, continue conversation on how to engage the tribes, coastal wetlands as they relate to other issues (nutrients, habitat, resiliency, etc.)
    ▪ Mertz (OH) – Is there a role we can play in improving our ability to work with the Army Corps? We shouldn’t write them off because they have a lot they can provide
    ▪ Finnell (MI) – Speaking with a common voice on important issues and being proactive on emerging issues such as PFAS
    ▪ Wobig (IL) - Helping congressional staff understand why they need to engage
    ▪ Tierney (NY) – Value of consensus action that has taken place in the Great Lakes region, this is the source of our power and credibility. Focus on the financial cost of projects and how that interests decision makers
    ▪ Allan (MI) – Need to spend more time on the worldwide stage; Reinforce the role of our communities and their role in decision making to improve the Great Lakes region and emphasize the love of place that drives our work. How can we use this narrative to help deploy private equity?
    ▪ Gagnon (QC) – Don’t forget about Canada
    ▪ Zelazney (NY) - Develop alliances with other organizations and learn from them; Consider our value as knowledge brokers; Provide more personal access to decision makers and people to the Great Lakes.
    ▪ Hould (QC) – Issues can cross borders and we should not forget this.
▪ Fisher (IN) - Be a consensus builder, integrate relationships between commissioners, board, and staff to make the biggest impact
▪ Jackson (IN) – Don’t overlook the fact that we are the 3rd largest economy in the world, we should refocus on the economic value of the lakes as a resource. This helps build our credibility.
▪ Carr (ON) – Opportunities to build and strengthen relationships with decision makers and stakeholders and reps from Canadian federal government
▪ Stine (MN) – Unique governance model of the commission. Perhaps we have been overly governmental in our focus. We should consider outside views and other expertise that could be partnered with around the basin. This will help us to find the new energy around re-investing.

11:00 a.m. Vessel Incidental Discharge Act (VIDA): Great Lakes

Part One: Ballast Water Policy Discussion – Senate Environmental & Public Works Committee Legislative Staff – Senator Stabenow, Senator Portman

Speaker 1: Christophe Tulou, Senate Environmental & Public Works Committee Legislative Staff

- Senate commerce committee took action on ballast water discharge a few years ago. Basic principles when this action was introduced:
  - Control of discharges should fall under the Clean Water Act (regulated as point sources of pollution by EPA)
  - Coast guard should maintain authority over appropriate technology practices that can be used to meet EPA regulations
  - The committee knew a consensus would be required and needed a leading republican voice. The result of these efforts is the existing VIDA bill
- Overview of VIDA
  - EPA will establish within 2 years standards of performance for controlling incidental discharges. These are based on Best Available Technology standards from the existing Vessel General Permit (VGP)
    - Must be reviewed every 5 years
    - Cannot be weaker than current VGP requirements or previous standards
  - There will be some pre-emption of states abilities to adopt more stringent laws – varying standards would make it very difficult for any cross-state shipment to happen
  - None of these state pre-emptions will come into effect until the Coast Guard’s implementation program is complete
  - Important exceptions to pre-emption apply specifically to the Great Lakes (to be discussed by the other speakers)
  - Other provisions
    - Authorities for EPA to issue an emergency order in the event of invasive species problem or to mitigate discharges that are making it impossible for states to meet water quality standards. EPA can be petitioned to issue one of these orders by the states
Governors can also petition to revise VIDA rulemaking in light of new issues/technology. These petitions cannot be ignored and must be responded to within 12 months.
Governors can petition EPA for the establishment of no discharge zones in critical waters.
Includes a $5 million authorization for the GLC to authorize its duties under this act.
$5 Million for AIS grant program.
$50 million for Great Lakes and Lake Champlain Invasive Species program.

Speaker 2: Sarah Pearce – Legislative assistant to senator Rob Portman (OH)

- How we got here:
  - Coast Guard bill brought to senate floor in Spring 2018, would have removed ballast water from the CWA- this was concerning, and the vote failed
  - Interest from Great Lakes senators to see if there was a compromise approach that can be made – VIDA reflects this compromise approach
- What’s in VIDA for the Great Lakes:
  - Allows Great Lakes states to weigh in on ballast water standards if they feel that the standard was inadequate – A governor of the Great Lakes can propose a more stringent standard to the national standards for the Great Lakes once they are released. This petitioning process will be managed by the GLC. The only way the standards can be changed is if the petition is approved by a consensus of all 8 Great Lakes states governors.
  - Governors also can petition to promote specific BMPs within the standards – this only requires 5/8 governors to agree
- Questions
  - Allan (MI) – Who does the governor petition to propose a change to the standards?
    - The governor would petition the Great Lakes Commission with a proposal. The commission would then facilitate the discussion between governors to achieve consensus
  - Jackson (IN) – Does the petition process presuppose that the national standard has been set already?
    - Yes, but the states do have the opportunity to weigh in on the national standards. During the period while these standards are being developed existing state statutes will still apply.

Aaron Suntag – Senator Stabenow

- Before original bill went to the floor, Senator Stabenow was advocating for a Great Lakes perspective – called together all members of the democratic caucus in the Great Lakes to determine perspectives. Concerns were exemptions for lakers, separation from the Clean Water Act, and loss of state authority to provide their own standards.
- Importance of bipartisan role/credibility of the GLC in helping to develop these compromises
• We view this as an opportunity to start a new dialogue over unique regulatory policies that give special consideration to the Great Lakes region and we see the GLC as a body that can help tackle these tough issues.

Questions and discussion

• Tierney (NY) – What is a BMP vs. a standard?
  o Numeric standards are regulated under the CWA (e.g. # of critters that can be released) or relate to specific technological standards. BMPs cannot be quantified or directly regulated, but represent behaviors/actions taken to reduce risk (E.G. saltwater exchange at sea)

Part Two: Environmental Protection Agency, US Coast Guard, Canadian Consul/Transport Canada

Sean Brady – U.S. Coast Guard

• As soon as VIDA passed, the Coast Guard started taking action and began working with EPA to understand standards that are being developed
  o Challenges – staffing and resources are limited (didn’t change with this law), dozens of new standards to regulate and multiple categories of effluents
  o List of Coast Guard actions to be taken (not an exhaustive list)
    ▪ Implementation of regulations within 2 years of EPA setting discharge standards
    ▪ Establish a partnership with EPA
    ▪ Establish a technical method review process
    ▪ Create technology certification standards
    ▪ Management of invasion data
    ▪ Dissemination of ballast water reports
    ▪ AIS response framework
    ▪ Vessel arrival data made available to states
    ▪ Working group for sharing enforcement data
    ▪ Monitoring procedures for federal standard
    ▪ Regulations for marine pollution control devices necessary to meet compliance standards
    ▪ Expand regulatory jurisdiction to include the contiguous zone (12-24 miles beyond the border of the united states)- adds many new things that fall under Coast Guard regulation
    ▪ Establish ballast water service and commissioning standards
    ▪ Develop monitoring and enforcement requirements

Jack Faulk – EPA Office of Water (technical lead on VIDA performance standards)

• Which office within EPA will write the standards? Office of Wetlands, Oceans, and Watersheds – Brian Fraser (division director) and Grace Rubio are leads
• Increased the number of staff supporting this program
• This month’s federal register agenda will have the initial proposed standards – hoping to finalize the standards by December 4, 2020.
• Meeting this afternoon on a stakeholder involvement and outreach plan – webinars in April/May to share VIDA info and receive input. May also have some face to face stakeholder meetings.
• EPA has to consult with the states on standards under VIDA and provide a written response to state governors. This will take place in the June/July timeframe.
• Starting a VIDA website on the EPA website to announce outreach opportunities and publications
• Great Lakes state petitioning process – there will be a public comment period following release and this is a good time to provide input on the standards. Likely a 60-day comment period.
• Nothing specific regarding interaction with Canada, but a dialogue is taking place.

Colin – Policy Lead for Ballast Water at Transport Canada

• Need for binational compatibility on ballast water standards
• Held several meetings with the coast guard to discuss issues and align priorities (even if draft text can’t be shared). When the text comes out this conversation can take place again to discuss details.
• Canada is party to the international ballast water convention, regulations last updated in 2006 and it is time for these standards to be updated under the convention.
• Challenges of feasibility of placing these technologies aboard Great Lakes ships
• Come up with an approach with several new elements
  o Focuses on the use of the equipment – put an approved ballast water management system on a ship that is operated and maintained correctly and meets the requirements
  o Challenges – can be expensive and disruptive to the ship, but we believe it can be done
  o Ships will have until 2024 to comply and get ballast water management systems on board
  o Ship owners don’t love the new regulation, but believe they can handle this as a way forward
• U.S. Ships – been in discussion with the Lake Carriers Association. The proposal is to exempt U.S. ships that travel through Canadian water on the way to U.S. ports. This is about 95% of U.S. Cargo. If they want to dump ballast water in Canada and deliver in Canada, they will have to undergo the same regulations as Canadian ships by 2024. This is significantly more flexible than the rules for other international ships. This is the exemption we feel we can give under the convention and considering the environmental issues.
• Timeline
  o Draft regulation in late spring 2019
  o Public comment period welcome opinions from all sides
  o Winter 2020- publishing a final rule

Q/A
• Tierney (NY) – Concerned over the rate at which Coast Guard moves on approvals. I urge the Coast Guard to meet the deadlines under this congressional act.
  o Please call Sean with specific concerns. Understand that there are outside factors that can delay implementation beyond the Coast Guard’s control and we share your
frustration. The Coast Guard does everything in its power to meet the deadlines presented.

- Stine – How can the commission be of service for a more streamlined process? With our authorization to support under the act we are open to suggestions on how we can help.

- Bruno (PA)
  - What if there is an individual introduction? How do we respond to prevent further introductions?
    - EPA - These protocols are still being developed. VIDA does include a response framework that Coast Guard and EPA will track and develop responses.
    - Transport Canada – Executive powers can be applied by the minister and provisions in the convention that help prevent spread.

- Zelazny (NY) – Continue to support the Great Ships Initiative

12:00 p.m. Lunch Discussion VIDA next steps

- Around the table – should we lean forward or lean back?
  - Jackson (IN) – GLCs major involvement doesn’t seem it would come into effect until after the national standard is set. I think we should take an active role in helping to develop the initial standard and convening our states to make sure their opinions are listened to.
  - Fisher (IN) – I agree with commissioner Jackson we need to actively work with EPA to make sure that our views are represented in the national standard rather than trying to change it after it is developed.
  - Darren – I think we should lean in. I think proactive engagement serves us better than reactive. I also think that this is their intention with the $5 million authorization.
  - Bruno (PA) – I think our speakers view us as an important policy advisor and that they want us to be a heavy hitter during the comment period.
  - Raburn (OH) – I think we should be involved in those early stages on the national standards.
  - Francois – I tend to lean in, but it raises a lot of questions. Concerns over federal-provincial issues after elections on the Canadian sides.
  - Dahlkemper (PA) – Lean in early rather than waiting.
  - Clift (MI) - Lean in – our position becomes stronger if we’re involved early.
  - Carr (ON) – Inclination is to lean in up front.
  - Zelazny (NY) – If we fail to jump in on this, despite the risks, it could be bad for the lakes. We should lean in and take advantage of this opportunity.
  - Rest (MN) – Communication between the GLC and the house is going to be diminished under the new senate/house composition. I worry about a consensus and a majority being required for two different things. I don’t think it’s a choice, it’s a mandate that we be as active as possible given what the future is.
  - Galarneau (WI) – Lean in and get in early and we need to influence.
  - Allan (MI) – It seems the senators had lost confidence in this body. This is an opportunity to show them that we are a relevant organization for making decisions in this region.
Tierney (NY) – Lean in – develop a strong national floor that is already adequate for the Great Lakes. Given all of the risks and vectors for the transport of invasive species, getting involved is the right thing to do. The other value is that if something is a national standard is that it will actually happen. Early is better to make our presence known.

Mertz (OH) – Need to have conversations with ballast experts in Ohio

Finnel (MI) – lean in. Important to get involved early and help to restore our relevance and show we can come to a consensus


Ambs (WI) – I agree that it makes sense to be engaged in the conversation

Stine – If you don’t make your comments early and often enough, you won’t be a part of the conversation.

Rest (MN)- what are ways that we can weigh in from the beginning (writing the standards) not just being involved in the comments?

Bruno, Jackson, Raburn - We ask for the resources to engage early and then begin building new staff expertise

Doss – I think there are other important elements of this issue that we can convene and weigh in on (besides standards) – monitoring, control technology, etc. It could also take a while for the $5 million to come through from congress and we can’t sit on our hands during that time. We may have to try and take advantage of other funding to jump start our work.

Allan – Waiting for federal appropriation is not necessary, we as the board could move resources toward this area.

Tierney – If we could get a consensus of the board – we could get a letter to the EPA saying we want a strong national standard that protects the Great Lakes and get a commitment from EPA that they will engage us in developing that standard

Stine – We should develop some material for our next board call on March 21st that will focus our conversation on this issue.

Jackson – This means we will have to reach a consensus on what the standard should be regionally, but we also need to consider national needs since this is going to be a national standard.

Darren – I believe our intended role with this money is to be the convener of the conversation that commissioner Jackson described. I would suggest that we put together an appropriations proposal that defines our role in facilitating the national conversation on what the standard should be. I believe we are in a position to use some provisions in the compact to demonstrate that we are authorized to act in this way.

Allan – Let’s not lose sight of the fact that the Great Lakes are unique and need special standards that work in a freshwater environment.

What will the GLC staff be providing before the board conversation?

Draft/concept appropriation with enough detail to define what we want to do and how we will approach this problem

A secondary plan in case no appropriation is given
  - A draft resolution from the board of the approach we would like - to be given to the EPA

An internal plan for how we use our money to start staffing this issue immediately
• Consider using GLRI money to take care of near-term staffing needs – or at least make a general ask to EPA for funds and let them pick the source
• Make sure if you use GLRI that it’s not the long-term source
• Chairman Stine made a motion to address the staff to develop this material. Seconded by Commissioner Rest. The motion passes. GLC staff will get these requests as quickly as possible.

2:45 p.m. Introductions with the Great Lake Legislative Caucus – Lisa Janeiro, Ann Rest, Kurt Sunny

• Began as a like-minded group of legislators who would get together to discuss Great Lakes issues, eventually adopted rules of organization and now to become a member you must enroll (at no cost). Strive for non-partisan group – executive committee is split 50/50 between parties.
• Important role as the only Great Lakes organization with power to introduce policy and appropriate funds
• In 2017 a meeting was held to evaluate the effectiveness of the committee and a policy agenda was created to narrow focus, a communications plan, a strategic plan, and a financial security plan.
• Caucus has passed a resolution to have a task force that would work toward establishing a Great Lakes St. Lawrence Appreciation Day in every jurisdiction. Also passed a resolution on lead in drinking water and have drafted model policies on lead.
• Establishing Patricia Berkholtz Institute for Great Lakes policy – first one will focus on nutrients and take place in late October/early November
• Participate on Content Advisory Group for ErieStat
• Host webinars on Great Lakes issues – may do one on VIDA
• Questions and answers
  o Mertz (OH) - Is senator Dolan (finance chair) active with your group? Yes he is.
  o Stine – impressive list of members and good representation from newly elected officials
  o Darren – starting points for the relationship between GLC and GLLC:
    ▪ Council of state governments is the nation’s convener on interstate compacts
    ▪ Meeting with the GLC tomorrow to debrief what we’ve heard on the hill and what we might be able to do going forward

3:23 p.m. PFAS/PFOA Briefing – Victoria Pebbles, Program Director

• Draft white paper gives a broad overview of the issues
  o PFAS – a class of chemicals that is broadly used in industrial and commercial manufacturing (PFOS and PFOA are two of biggest concern), highly persistent in environment, human health effects, unregulated.
  o EPA has set an advisory standard, and a federal standard is being considered. Many states have been considering greater standards, the most stringent in NY
  o The general sense has been that the feds are not moving quickly enough and so states are having to act
- PFOA and PFOS are monitored under the unregulated contaminant monitoring rule (UCMR) – 2016 amendment within WRDA that changed SDWA, only monitors treated water supplies in largest communities
- **Why are we an appropriate forum to address this issue?**
  - Compact – Promote and develop water resources of the Great Lakes basin. This falls under what the compact defines as “special areas of concern.”
- **GLC** once passed a resolution on contaminants of emerging concern recognizing that they are a problem – this particular class of chemicals is asking us to revisit this issue.
  - What could we do? Compact allows us to recommend uniform laws and ordinances so we could develop a model legislation
  - Other ideas for how staff could help support this work?
    - Ambs (WI) – look at key issues for individual states that make PFAS management difficult (certifying labs, dealing with waste, regulatory authority to set drinking water standards)
      - Interstate regulatory council is tracking standards/numbers but not these more institutional challenges.
    - Allen (MI) – MI has done a lot work on PFAS and has tackled this issue, MN has done work as well. There are people with a lot of expertise on this issue that we could tap to learn more and ask them where they need clarity.
    - Mertz (OH) – Litigation can drive regulation, and many lawsuits have been filed on this issue. Analysis of how litigation could result in regulatory action.
      - Stine - MN Attorney General settled with 3M for 890 million on this issue. A challenging issue because it crosses many state authorities.
      - What about our mission would motivate us to engage on this issue? What is the clarity that we would want to add?
    - Galarneau (WI) – this is a national issue not a Great Lakes one. It’s more about communicating with each other better, but I don’t know if we need to go any deeper.
    - Stine – what about the idea of model legislation?
      - Tierney – this would have a cost associated. Engaging EPA to set standards seems conceivable. It’s hard to get the military to pay attention to this (many sites are contaminated military bases) and we could try and engage them to take this more seriously.
    - Darren – Let’s think about what the next emerging contaminant is? Is there a holistic conversation about pollutant management that we could have?
      - Allen (MI) – I think the commission could add some insight on starting to understand when we need to care about the next thing. Coming up with a protocol for prioritizing emerging contaminants (what is really going to become a problem vs. what is just noise?)
      - Bruno (PA) – why are we in this is situation in the first place having to do duplicative work? Maybe our role is to tell the federal government to establish federal standards.
        - We could get a pretty strong statement with support from a variety of groups on this
- Stine – let’s think about this for a little while. I encourage you to go back to your state agencies and see what their opinion is. I expect they will say they want to invest in other agencies/forums than the GLC.
  - We should come up with a few questions that we can ask these entities to see their response. What could an outside group do to help you or to provide clarity?

4:00 p.m. Coastal resiliency
- More on next board call

4:05 p.m. Asian Carp and Brandon Road

1:30 p.m. Asian Carp/Brandon Road – Matt Doss, Policy Director
- Overview (Loren Wobig)
  - Corps has completed public review period, the next step is a Chief’s Report
  - Preliminary engineering and design phase cost is about $4 million
    - Still concerns about the final price tag for the total project and if Illinois is willing to serve as the non-federal support with this higher price tag
  - Project needs a non-federal sponsor and Illinois agreed before the price tag update
  - Illinois has provided qualified support, but not at the price tag that the government has provided (30% of up to $800 million)
  - Received an ultimatum from the new corps that they need to decide if they will support the new project or not by March 1.
  - The new Illinois governor’s administration supports doing something at Brandon Road, but not at the cost. There are still options, but if the Corps doesn’t receive an answer they will push forward without a federal sponsor.
    - Mertz (OH) – have we asked for 100% federal funding?
      - We haven’t made that ask yet, but it is a possibility.
  - Zelazny (NY) – have you gotten any feedback on the public comment? What about how effective these new control methods will be? Corps listens to federal electorate, if we could organize a letter signed by them they would listen.
    - We believe these new methods will add to the system, though no measure is perfect
    - Most comments reiterated existing comments, but no new issues were raised that would change the Corp’s response.
- More on next Board Call – Does the board want to engage at a higher level than they have?

4:30 p.m. Preparation for May 22-23/October 9-12, 2019 GLC Meetings – John Linc Stine, Chair and All Board Members
- Full commission meeting in May (Ann Arbor)
  - Recognizing we have many new members, what would be helpful at this meeting to build our trust as a team. What issues do we want to discuss?
What are we thinking?
- Not having a public meeting with observers to get to know each other better
- Field trips looking at restoration sites in Detroit (first day)
- Put some questions in front of the commission about its role and priorities to give itself some focused direction – sets the stage for a follow up in Quebec.

If we could add one element to Ann Arbor/Quebec City agenda to help accomplish these goals, what would you like us to do?
- Clift (MI) – facilitative discussions of priorities in one day can be challenging and it is often good to have it go overnight.
- Galarneau (WI) – Blend of the field trips to see success and Commissioner Clift’s idea of overnight topics
- Mertz (OH) – HABs are the biggest concern in Ohio so any conversation on that is helpful to me
- Finell (MI) – Thinking about where are potential overlap with other groups that we might want to bring into committee meetings and board discussion.
- Tierney (NY) – How do we get the new commissioners up to speed before the meeting, so we aren’t spending it educating them?
- Ambs (WI) – Internal meeting is a good idea, especially with many other Great Lakes things happening around that time
- Zelazny (NY) – What do we do to tee up new commissioners? How do we organize a process to carry out responsibilities that congress has given for ballast water?
- Hould (QC) – lighter format, get to know new commissioners. More about priorities in terms of resolutions. Quebec could present their blue economy work.
- Raburn – Field trips that relate to specific GLC priorities, challenges, and successes. We need to be well under way on ballast water before May
- Wobig (IL) – Use a specific issue (e.g. ballast water) to focus our conversation on leadership and give them an example
- Jackson (IN) – Devote most of day 2 to the ballast water issue and solidify our preferred position on a ballast water regulation
- Bruno (PA) – Why are we splitting between Detroit and Ann Arbor? Wouldn’t one or the other be easier for travel?
- Dahlkemper (PA) – Getting new commissioners up to speed. Webinar before the meeting? More information on the compact.

5:00 p.m. Adjourn
Great Lakes Commission
Board of Directors
Conference Call Minutes
March 21, 2019

The meeting was called to order at 9:30 a.m. EDT by John Linc Stine, board chair.

The following members were present:

Loren Wobig - Illinois
Sharon Jackson - Indiana
Emily Finnell - Michigan
John Linc Stine - Minnesota
Mindy Bankey - Ohio
Don Zelazny - New York
Bill Carr - Ontario
Tim Bruno - Pennsylvania
Jean Francois Hould - Quebec
Steve Galarneau, Todd Ambs - Wisconsin

Staff present: Darren Nichols, Tom Crane, Victoria Pebbles, Matt Doss, Beth Wanamaker, Erika Jensen

1) **Introductions and Call Objectives:** The Board unanimously approved the meeting agenda and the February and March minutes with minor corrections.

2) **Invasive Mussel Collaborative update:** Jensen noted background for this issue was discussed on the February Board Call. Staff recommends a statement from the Board formally endorsing the IMC. The GLFC and IJC plan to endorse a similar statement with a goal of releasing a joint statement of support later this year prior to the June GLEC Meeting. Jensen noted nothing has changed in the statement since it was presented to the Board in February. Alternate Commissioner Finnell (MI) wondered whether the GLC needs an endorsement for work previously approved and to be done by itself. Stine noted that the endorsement supports work of the IMC done in coordination with many groups. Several Board members expressed support; others asked for additional time to run the statement by others in their agencies. Vice-chair Jackson asked for Board members to submit their comments and approval on the endorsement via email to Nichols and Crane by April 4, 2019. Galarneau asked for staff to email the Board this request.

3) **Request for Support – Congressional Letter re: Funding for USGS stream gauges:** Crane noted that for many years the GLC has been added to letters to Congress, coordinated by the Interstate Council on Water Policy (ICWP) asking for support for the USGS data and science program. The GLC has in the past been supportive of the stream gauge network program. He noted that a collaborative letter was not sent last year, so staff wanted to make the Board aware of the history of this relationship and past support. Stine noted that the Board packet included a document outlining the differences between this letter and past letters. Bruno (PA) moved to sign on to the letter, Wobig (IL) seconded. The Board expressed unanimous support for the GLC signing on to this year’s letter.

4) **Nominations and Appointments requests:** Galarneau noted that the Great Lakes Advisory Board (GLAB) has sent a broad request for nominations to serve on the GLAB. Galarneau has previously served on the GLAB as the lone state representative. He has been asked to serve again by WI and has been nominated by the Conference of Great Lakes-St. Lawrence Governors and Premiers (GSGP). He also expressed his personal interest in serving and suggested that additional state representatives might be nominated to the GLAB. Galarneau recommended Zelazny or Bruno as possible nominees representing the eastern end of the basin. Zelazny noted that no state water quality managers were on the previous GLAB. Zelazny is willing to serve but his ability to travel is limited. Bruno said he is also open to serving. Stine suggested sending a letter to EPA about nominating Bruno and Galarneau to the GLAB. Galarneau noted that he was recently appointed to the IJC water quality board. Bruno will defer to Galarneau if only one member can be nominated. Staff will work on the nomination and report out at the next Board meeting.
5) **Vessel Incidental Discharge Act (VIDA) Appropriation Request:** Nichols noted that the Board has three documents: the first is a proposed approach for the GLC to pursue its work outlined under VIDA; the second is a draft letter from the GLC Board to the EPA Office of Water regarding coordinating this work; and the third is a select portion of the VIDA legislative text. The proposed approach involves selecting a neutral third-party to assess key elements of VIDA that affect the Great Lakes Basin. The Board briefly discussed the challenges of identifying a third party neutral, the need for the person/group to understand the issue and the need to address binational issues. Nichols noted that this approach will require additional funding; existing authorization for the GLC under VIDA could help serve that purpose but is unlikely to be available immediately. He noted staff has discussed potential funding with EPA Region 5, which would involve states redirecting EPA state and tribal assistance grant (STAG) funding to this project. A portion of an appropriation could potentially be redirected to states to support their participation in the process. Stine suggested pursuing a variety of options for funding. Nichols asked the Board for support to send a letter to the EPA regarding grant support; Stine requested Board support for the executive committee to draft a send a letter to that effect and suggested that the letter should reflect that not all jurisdictions are supportive of redirecting STAG grants. Stine wrapped up the discussion stating the Board’s support for drafting and sending a request to EPA.

6) **May 21-24 Commission Meeting: Draft Agenda/Outline:** Nichols noted the meeting agenda framework sent to the Board. The focus of the semi-annual meeting is primarily internal, with some time for external partners to join. Nichols noted that the Great Lakes St. Lawrence Legislative Caucus will also be meeting the following weekend in Ann Arbor and indicated an interest in possibly extending the GLC meeting to allow for interaction between the two groups. Stine offered the core days for Commissioners be May 22 and May 23, and for partners May 22. Nichols noted that he sees three main areas of for the meeting: 1) the role of the GLC, 2) the assessment of the Great Lakes Basin Compact, including an assessment of roles for Board members, Commissioners, staff and partners, and 3) policy discussions around certain topics TBD. The Board agreed with this approach.

7) **University of Michigan’s “Great Lakes Theme Semester 2020”:** The University of Michigan is holding a Great Lakes Theme Semester during the winter semester 2020 focusing on the Great Lakes Basin. Nichols noted that UMich has invited other institutions across the Basin to participate and asked Board members for any suggestions. Hould noted Quebec’s interest in participating.

8) **Executive Director Update:** Nichols noted that work on the assessment committee has moved forward and are looking at organizations that may be interested in working with the GLC.

With no further business, the call was adjourned at 11:20 a.m.

Respectfully submitted,
Darren Nichols
Executive Director
/bw
Action/Information Items

- **Resolution – Reform of the Harbor Maintenance Tax and Harbor Maintenance Trust Fund:**
  There are currently 140 federally authorized navigation projects in the U.S. Great Lakes navigation system, and 3.3 million cubic yards of sediment that requires dredging each year in U.S. Great Lakes ports, harbors, and navigation channels. Current configuration of U.S Army Corps of Engineers (USACE) Operations & Maintenance (O&M) budget insufficiently prioritizes critical Great Lakes navigation system assets. Reforming the Harbor Maintenance Tax (HMT) and the Harbor Maintenance Trust Fund (HMTF), enacted to fund USACE O&M, to require full appropriation of HMTF revenues would allow the USACE O&M budget to more appropriately address the half-billion-dollar backlog in maintenance needs to the system.

- **Action Item – Recommended actions for sunsetting previous GLC Policy Resolutions:**
  The Resolutions Review Committee met via conference call on April 18, 2019 to discuss four resolutions passed at the 2009 Semiannual Meeting and a fifth resolution passed in 2013. The resolutions were discussed, and three were recommended to be sunset, including:
  - Resolution – Coastal Zone Management Act Reauthorization: An Opportunity to Fund and Implement the Great Lakes Regional Collaboration Strategy and Address Climate Change (2009)
  - Resolution – Support for the 2009 Annual AWEA Windpower Conference in Chicago (2009)

- **Information Item – Consultation on recommended FY2020 GLC Budget:**
  The GLC Board of Directors is responsible for approving the annual budget of the GLC. Article VII Section 8 of the bylaws requires the budget to be received by the Board of Directors at least 45 days prior to the start of the fiscal year and approved by the Board following an opportunity for consultation with the full GLC. Recent practice has been for the Board to receive the budget in mid-April and approve it in mid-May, 45 days prior to the beginning of the fiscal year on July 1.

  Each year, the Board appoints a Finance Committee comprised of 3-4 Board members to work with staff on the development of the Commission’s annual budget. The Finance Committee met via conference call on April 10, 2019 to review and discuss the proposed FY2020 budget. Following the committee meeting, the Finance Committee presented a report and recommendations to the GLC Board at the Board’s April 18, 2019 conference call. The Board discussed the budget proposal on that call and now seeks input from the full Commission prior to approval by the Board.
RESOLUTION - DRAFT

Reform of the Harbor Maintenance Tax and Harbor Maintenance Trust Fund

Whereas, there are 140 federally authorized navigation projects in the U.S. portion of the Great Lakes navigation system, with 60 classified as deep-draft commercial ports and 80 as shallow-draft recreational harbors, along with associated channels and other infrastructure; and

Whereas, some 3.3 million cubic yards of sediment accumulate in U.S. Great Lakes ports, harbors and navigation channels annually that, if not dredged, can impede commercial and recreational navigation, cause economic hardship, and increase risks to human health and safety; and

Whereas, with limited exceptions, the U.S. Army Corps of Engineers (USACE) has generally required a minimum annual cargo tonnage throughput of 1 million tons for commercial deep-draft ports to be included in its Great Lakes Navigation Operations and Maintenance (O&M) budget; and

Whereas, all shallow draft, exclusively recreational harbors are considered not consistent with O&M funding under current Administration policy and therefore are not included in the President’s O&M budget; and

Whereas, the above criteria effectively make the majority of U.S. federally authorized ports and harbors on the Great Lakes a low priority for USACE O&M funding; and

Whereas, an accumulated backlog of some 13.5 million cubic yards of sediment resulting from over a decade of Great Lakes O&M underfunding has negatively affected operations at Great Lakes ports and harbors; and

Whereas, there is more than a half-billion-dollar backlog in maintenance needs in the system, including $160 million needed for dredging to restore Great Lakes harbors and navigation channels to their authorized dimensions; $320 million for repairs to breakwater structures; and $75 million to complete the Soo Locks Asset Renewal Program; and

Whereas, the Harbor Maintenance Tax (HMT) and Harbor Maintenance Trust Fund (HMTF) were enacted in 1986 for the express purpose of funding the USACE O&M of federally authorized commercial ports and navigation channels, including those in the Great Lakes navigation system, through a tax on the value of imports and domestic cargo arriving at U.S. ports; and

Whereas, the HMTF currently generates about $1.7 billion a year, but only about $1.55 billion is spent annually on harbor maintenance, resulting in a current surplus of $9.3 billion in the fund while ports suffer from inadequate dredging and maintenance; and

Whereas, the 2014 Water Resources Reform and Development Act included provisions that require steady increased appropriations from the HMTF with the aim to reach 100% of annual revenues by 2025 and with an FY 2020 target of $1.59 billion, as well as a set-aside of 10% of funding above the FY 2012 level for the Great Lakes navigation system; and

Whereas, despite progress, further reform is needed to make full appropriation of HMTF revenues mandatory and to ensure that adequate funds are provided for the Great Lakes navigation system.

Therefore, Be It Resolved, that the Great Lakes Commission calls on the Great Lakes Congressional Delegation to support a long-term solution for harbor maintenance funding that accomplishes the following:

- Reform the Harbor Maintenance Trust Fund to require that all revenues collected are appropriated annually and directed to their intended purpose – maintaining our nation’s ports and associated infrastructure, including those in Great Lakes navigation system;
- Require that no less than 10% of annual HMTF expenditures go to projects in the Great Lakes navigation system; and
- Create a cost-share program to assist local entities in dredging recreational harbors.

Be it Finally Resolved, that the Great Lakes Commission opposes provisions that put the Great Lakes navigation system at a disadvantage, including expanding the authorized uses of HMTF revenues.
Memorandum

To: Great Lakes Commissioners, Associate Commissioners and Alternates
Fr: Tom Crane, Deputy Director
Re: Report of the Resolutions Review Committee: recommended actions from staff for the resolutions passed at the 2009 Semiannual Meeting of the GLC
Da: May 10, 2019

Since 2016, it has been the practice of the GLC to review existing resolutions upon their 10-year anniversary and recommend whether those resolutions should be retained (stand as originally passed), updated or sunsetted.

A committee of commissioners is assigned to work with staff to review the resolutions passed 10 years previously and recommend to the Commission a suggested action for each resolution being reviewed prior to the corresponding Annual or Semiannual Meeting.

The resolutions review committee met via conference call on April 18, 2019 to review and discuss the resolutions to be acted on. The commissioners participating on this call included: Loren Wobig (IL), Jennifer Schultz (MN) and Steve Galarneau (WI).

There were four resolutions passed at the 2009 Semiannual Meeting held February 22-23 in Washington D.C. There is a fifth resolution reviewed, passed in 2013, dealing with priorities for the federal navigation system in the Great Lakes. The reason for reviewing this resolution out of sequence is explained below. The resolutions reviewed by the committee on the April 18 call are:

- Support for the 2009 Annual AWEA Windpower Conference in Chicago
- Reform of the Harbor Maintenance Tax and Harbor Maintenance Trust Fund
- Priorities for the Great Lakes navigation system in the federal Water Resources Development Act (passed in 2013)
- Coastal Zone Management Act Reauthorization: An Opportunity to Fund and Implement the Great Lakes Regional Collaboration Strategy and Address Climate Change

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

Support for the 2009 Annual AWEA Windpower Conference in Chicago

**Recommendation:** Sunset resolution

**Rationale:** This resolution was passed for a specific event which has passed. It is no longer relevant.

Recommendation: Sunset resolution

Rationale: This resolution presented the GLC’s federal priorities for specific fiscal year. This resolution is updated each year when the current federal priorities are approved. This resolution is no longer relevant.

Reform of the Harbor Maintenance Tax and Harbor Maintenance Trust Fund
Priorities for the Great Lakes navigation system in the federal Water Resources Development Act (passed in 2013)

Recommendation: Sunset the resolutions and prepare a new resolution to update them and make them current

Rationale: The request to Congress in the 2009 resolution was partially addressed in the passage of the Water Resources Reform and Development Act (WRDA) of 2014. The 2013 resolution identified navigation priorities prior to WRDA 2014 being passed. However, issues surrounding the HMTF are still being worked on by the maritime community. The 2009 resolution and the 2013 resolution can be sunsetted but should be replaced with an updated single resolution.

Coastal Zone Management Act Reauthorization: An Opportunity to Fund and Implement the Great Lakes Regional Collaboration Strategy and Address Climate Change

Recommendation: Sunset resolution

Rationale: This resolution is dated and no longer fully relevant. It was crafted to address a campaign developed by the Coastal States Organization regarding the reauthorization of the Coastal Zone Management Act and the implementation of the Great Lakes Regional Collaboration Strategy. The GLRC was developed under the George W. Bush administration and was never implemented. Elements of the GLRC were used in the creation of the GLRI in 2010. One item of note is that a call for a National Ocean and Coastal Trust Fund in the resolution was accomplished in 2016 when Congress created the National Oceans and Coastal Security Fund but failed to appropriate funding or establish a source of future funding.
Adopted Feb. 24, 2009

Resolution: Coastal Zone Management Act Reauthorization: An Opportunity to Fund and Implement the Great Lakes Regional Collaboration Strategy and Address Climate Change

Whereas, the Great Lakes basin has more than 10,000 miles of coastline, a resource whose protection is essential to the region; and

Whereas, the Coastal States Organization represents the governors of the nation’s coastal states, territories, and commonwealths, including all eight of the Great Lakes states; and

Whereas, the Coastal States Organization has created a Call for Action in order to communicate a clear and consistent message to the Congress and the next Administration regarding the needs of its member states; and

Whereas, the Call for Action outlines three significant federal actions: 1) creating a National Ocean and Coastal Trust Fund, 2) supporting regional, state, and local efforts to adapt to climate change, and 3) recrafting and reauthorizing the Coastal Zone Management Act; and

Whereas, reauthorization of the Coastal Zone Management Act has been a longstanding priority of the Great Lakes Commission; and

Whereas, all of the Great Lakes states have, or are in the process of developing, coastal programs under the Coastal Zone Management Act; and

Whereas, the Coastal Zone programs are the result of an exemplary state-federal partnership that directly benefits the communities and resources of the Great Lakes and provides an institutional mechanism for implementing the goals of the Great Lakes Regional Collaboration (GLRC); and

Whereas, the Great Lakes states’ coastal program managers support the Coastal States Organization’s Call for Action; and

Whereas, more than 25 organizations have lent their support to the Coastal States Organization’s Call for Action; and

Whereas, learning to adapt to the effects of climate change will be necessary for the sustainability of the region, the states, and communities of the Great Lakes.
Therefore, Be it Resolved, that the Great Lakes Commission supports the redrafting and reauthorization of the Coastal Zone Management Act, and recognizes it as one mechanism for national investment in regional, state and local climate change adaptation efforts; and

Be it Further Resolved, that the Commission supports a National Ocean and Coastal Trust Fund insofar as the goals of such a fund are consistent with the goals of the GLRC; and

Be it Further Resolved, that state coastal programs be recognized by Congress as one potential institutional and administrative mechanism for implementing the recommendations of the GLRC Strategy; and

Be it Finally Resolved, that the Commission fully supports the Coastal States Organization’s Call for Action as a key policy option for implementing the goals of the GLRC.
Resolution: Reform of the Harbor Maintenance Tax and Harbor Maintenance Trust Fund

Whereas, the Harbor Maintenance Tax (HMT) and Harbor Maintenance Trust Fund (HMTF) were enacted in 1986 for the express purpose of funding the U.S. Army Corps of Engineers’ operation and maintenance (O&M) of federally authorized commercial ports and navigation channels, including those in the Great Lakes/St. Lawrence Seaway system, through a tax on the value of imports and domestic cargo arriving at U.S. ports; and

Whereas, the fund currently generates about $1.4 billion a year, but only about $700 million is spent on harbor maintenance resulting in a current surplus of $4.7 billion in the fund while ports suffer from inadequate maintenance, including those in the Great Lakes where there is a critical dredging backlog that will cost an estimated $230 million to eliminate; and

Whereas, the dredging backlog on the Great Lakes has caused cargo carriers on the lakes to reduce their loads by 50 to 270 tons per every inch of draft lost to inadequate dredging thus diminishing their efficiency; and

Whereas, inadequate dredging of federally authorized recreational harbors on the Great Lakes has reduced and sometimes eliminated access to these harbors causing not only severe economic loss, but also significant threat to health and human safety; and

Whereas, Congress has addressed similar situations with the Highway Trust Fund and Airports and Airways Trust Fund by taking measures to require expenditures from the funds to more closely reflect revenues; and

Whereas, the Great Lakes Commission has previously gone on record (Resolution adopted May 16, 2001) criticizing the HMT and HMTF for their injurious effect on Great Lakes maritime commerce.

Therefore, Be It Resolved, that the Great Lakes Commission calls upon Congress to reform the HMT and HMTF by acting on legislation requiring that expenditures from the HMTF in any given future year equal the amount of revenue generated by the HMT in that year, and that those expenditures be applied to the purpose for which they were originally intended: the operation and maintenance, to full authorized project specifications, through sustainable dredging techniques, of federal ports, harbors and navigation channels serving commercial and recreational traffic.
Whereas, the Great Lakes-St. Lawrence River are a national treasure and an environmental and economic asset of vital importance to the eight Great Lakes states and the nation as a whole; and

Whereas, 45 million Americans and Canadians depend on the Great Lakes-St. Lawrence River for drinking water, recreation, fish and wildlife resources, power generation and commercial navigation, among other benefits; and

Whereas, benefits from the Great Lakes-St. Lawrence River continue to be threatened by the release of untreated sewage, invasive species, toxic contaminants, deteriorating water infrastructure, inadequately maintained ports and harbors, and declining water levels due to climate change and other causes; and

Whereas, the Great Lakes region has united behind the Great Lakes Regional Collaboration Strategy to Restore and Protect the Great Lakes, a comprehensive restoration plan that is endorsed by the Great Lakes states, cities, industries, tribal governments and environmental organizations; and

Whereas, the Great Lakes states have further demonstrated their long-term commitment to the Great Lakes by adopting the Great Lakes-St. Lawrence River Basin Water Resources Compact to ensure that the quantity and quality of our waters are managed for the well-being of future generations; and

Whereas, The Brookings Institution and 25 metropolitan Chambers of Commerce in the Great Lakes region have highlighted the return on investment from restoring the Great Lakes and making them a key element for advancing a business agenda for the region; and

Whereas, Great Lakes-St. Lawrence cities and other local governments are already investing an estimated $15 billion annually to protect the Great Lakes; and

Whereas, in these tough economic times, investing in and maximizing the value of our nation’s and region’s natural assets and infrastructure – including freshwater in the Great Lakes – should be key policy goals of the federal government; and

Whereas, leveraging the potential of the Great Lakes will create jobs, stimulate economic development and invest in freshwater resources that will be central to the future of the nation and the eight-state Great Lakes region; and

Whereas, the Great Lakes Basin Compact calls on the Great Lakes Commission to advocate on behalf of the eight Great Lakes states in support of issues of common interest.

Therefore, be it resolved, that the Great Lakes Commission endorses a comprehensive suite of federal priorities for Fiscal Year 2010, which are consistent with recommendations from the Council of Great Lakes Governors; and
Be it further resolved, that the following regional priorities are of greatest concern to the Great Lakes Commission:

- Protect water quality by fully funding the Clean Water State Revolving Fund;
- Clean up contaminated sediments by fully funding the Great Lakes Legacy Act;
- Close the door on aquatic invasive species;
- Restore valuable fish and wildlife resources by fully funding the Great Lakes Fish and Wildlife Restoration Act;
- Provide sustainable funding for Great Lakes restoration; and

Be it further resolved, that these priorities are shared with the Great Lakes Fishery Commission, Great Lakes and St. Lawrence Cities Initiative, Chippewa Ottawa Resource Authority, Council of Great Lakes Industries, and the Healing Our Waters® - Great Lakes Coalition; and

Be it finally resolved, that the Great Lakes Commission calls on Congress and President Obama to be equal partners with the eight Great Lakes states in restoring the Great Lakes and making them a central component of a brighter future for our region.
Resolution: Support for the 2009 Annual AWEA Windpower Conference in Chicago

Whereas, the American Wind Energy Association (AWEA) will hold its annual Windpower Conference in Chicago, Illinois, on May 4-7 of 2009; and

Whereas, the Windpower 2009 Conference and Exhibition is the largest annual wind conference and exhibition in the world featuring more than 13,000 attendees and over 700 exhibitors; and

Whereas, each year, wind energy professionals gather at this event to learn about the latest industry developments and technologies, review new products and services, and network with leading industry decisionmakers in order to promote wind energy; and

Whereas, member states and provinces of the Great Lakes Commission are among the nation’s leaders in the production of clean renewable energy; and

Whereas, wind power contributed 68 percent of all new electric power generating capacity in the Great Lakes states in 2007; up from 24 percent in 2006, 6 percent in 2005, and 1.2 percent in 2000-2004; and

Whereas, a technical report by the U.S. Department of Energy indicates that by achieving a 20 percent wind contribution to the U.S. electrical supply by 2030, the Great Lakes states would conserve more than 616 billion gallons of water and generate $79 billion in economic output; and

Whereas, the U.S. Department of Energy report further shows by achieving a 20 percent wind contribution to U.S. electrical supply by 2030, the Great Lakes states would reduce carbon emissions by 1.2 billion tons; and

Whereas, in 2007, Illinois ranked third among all states in newly installed wind power; and

Whereas, 9 of the 10 Great Lakes jurisdictions have adopted renewable energy portfolio standards or equivalent policies that support the development of clean energy, including wind.

Therefore, Be it Resolved, that the Great Lakes Commission supports AWEA and the State of Illinois in their efforts to promote wind energy through the 2009 Windpower Conference as a clean, viable, and important economic component of the nation’s energy portfolio.
Priorities for the Great Lakes navigation system in the federal Water Resources Development Act

Whereas, there are 140 federally authorized ports and harbors in the Great Lakes-St. Lawrence River navigation system, 60 classified as deep draft commercial and 80 as shallow draft recreational; and

Whereas, some 3.3 million cubic yards of sediment accumulate in U.S. Great Lakes ports, harbors and navigation channels annually that, if not dredged, can impede commercial and recreational navigation, cause economic hardship, and increase risks to human health and safety; and

Whereas, current criteria required by the U.S. Army Corps of Engineers (USACE) for inclusion in its Great Lakes Navigation Operations and Maintenance (O&M) budget includes, for commercial deep draft ports, a minimum annual cargo tonnage throughput of 1 million tons; and

Whereas, all shallow draft, exclusively recreational harbors are considered not consistent with O&M funding under current Administration policy and therefore are not included in the President’s O&M budget; and

Whereas, the above criteria effectively make some 97 of the 140 U.S. federally authorized ports and harbors on the Great Lakes a low priority for USACE O&M funding; and

Whereas, an accumulated backlog of some 18 million cubic yards of sediment resulting from over a decade of Great Lakes O&M underfunding has negatively affected operations at nearly all Great Lakes ports and harbors, and now threatens closure of some ports and harbors that depend on safe, reliable navigation access but are unable to meet current criteria for federal maintenance dredging; and

Whereas, the dredging backlog is projected to grow to 21 million cubic yards by 2017; and

Whereas, the Army Corps of Engineers estimates that $200 million is needed to address the dredging backlog and restore Great Lakes harbors and navigation channels to their authorized width and depth; and

Whereas, the past practice of seeking congressional adds, or “earmarks,” for individual harbor maintenance projects is increasingly difficult; and

Whereas, Congress is developing Water Resources Development Act (WRDA) legislation that will significantly impact federal policies, programs and funding for commercial navigation and water infrastructure for years to come; and

Whereas, the Great Lakes governors and premiers recently called on both federal governments to authorize, manage and fund the Great Lakes-St. Lawrence River Navigation System as a single transportation system for the benefit of the entire region and the national economies of Canada and the United States.
Therefore, Be It Resolved, that the Great Lakes Commission calls on the Great Lakes Congressional Delegation to ensure new WRDA legislation includes provisions that restore, maintain and strengthen the economic vitality of the Great Lakes-St. Lawrence River Navigation System for commercial and recreational transportation and their contributions to our regional economy.

Be it Further Resolved, that the Great Lakes Commission supports provisions in WRDA that accomplish the following:

• Reform the Harbor Maintenance Trust Fund (HMTF) to ensure that all revenues collected are appropriated and directed to their intended purpose – maintaining our nation’s ports and associated infrastructure;
• Provide a dedicated funding authorization for maintaining and operating navigation infrastructure in the Great Lakes;
• Formally authorize the Great Lakes Navigation System as a single, integrated system and direct the Army Corps of Engineers to aggregate the system’s collective benefits when allocating resources for dredging and other needs; and
• Create a cost-share program for dredging recreational harbors.

Be it Finally Resolved, that the Great Lakes Commission opposes provisions that put the Great Lakes-St. Lawrence River region at a disadvantage, including expanding the authorized uses of HMTF revenues or establishing a prioritization scheme.
MEMORANDUM

To: Great Lakes Commission

Fr: Darren Nichols, Executive Director
    Tom Crane, Deputy Director
    Joe Bertram, Manager, Financial Operations

Re: Summary and presentation of the recommended GLC FY2020 Budget

Da: May 13, 2019

Overview
Each year, the GLC’s Board of Directors appoints a Finance Committee comprised of 3-4 Board members to work with staff on the development of the Commission’s annual budget. The 2019 Finance Committee members were: Loren Wobig (IL), Don Zelazny (NY), Bill Carr (ON) and Steve Galarneau (WI).

The GLC Finance Committee met via conference call on Wednesday, April 10 to review and discuss the proposed GLC FY2020 budget. Steve Galarneau and Loren Wobig joined the call; Don Zelazny and Bill Carr were unable to join. Commissioner Zelazny provided questions and comments via email in advance, which were discussed by the other commissioners on the call. GLC staff members present included Darren Nichols, Tom Crane, Laura Kaminski and Joe Bertram.

Following the committee meeting, the Finance Committee presented a report and recommendations to the GLC Board at the Board’s April 18, 2019 conference call. The Board discussed the budget proposal on that call and will approve it following consultation with the full Commission at the 2019 Semiannual Meeting.

Budget Highlights
The major points regarding the 2020 draft budget discussed by the Finance Committee and the Board include:

• The Board recommends a total FY2020 budget of $17.507 million. The proposed budget contains two main components: an operating budget of $4.196 million and a pass-through funding budget of approximately $13.311 million.

• The budget, as proposed and recommended, is unbalanced with expenses anticipated to be higher than projected revenue. There is a projected need to use GLC financial reserves of $333,000 to balance the budget. This drawdown on reserves is explained in more detail below.

• Pass through funds from contract services and grant payments, budgeted at approximately $13.3 million for FY2020, are presented on a separate page. The estimated FY2020 pass through funding represents an increase of more than $8 million from the FY2019 budget. The increase relates to the timing and completion of several large-scale restoration efforts budgeted under the NOAA-Habitat suite of projects. This budget line item has fluctuated from year to year due to the timing of commencement and completion of individual restoration projects. The
increased (or decreased) amounts passed through for contract/grant services do not place an inordinate additional administrative burden on the GLC staff in any given year.

- The General Operating contract services includes $120,000 for an organizational assessment anticipated to be completed in FY2020. This is reduced from an original estimate of $150,000. An assessment committee, consisting of Board members John Stine (MN), Tim Bruno (PA) and Jim Tierney (NY), has been working with staff and outside consultants with the National Center for Interstate Compacts and the Council of State Government to refine the initial scope and cost of the total assessment effort.

- Due to anticipated increased operating costs as well as the estimated cost of the organizational assessment, the total anticipated drawdown of reserve funds needed to balance the budget in FY2020 is estimated at $333,000 as noted in the “Revenue Projection” section (line 6) of the report. This drawdown is needed to balance the budget and to provide for basic operational services to support the agency.

- Costs associated with the “Restricted Fund” budget are covered by grants and contracts from outside funding sources. Any anticipated increases in restricted fund expenditures are covered under these grants and do not impact the general operations budget of the Commission. A few examples include:
  i. Insurance costs are projected to increase by $4,000 within restricted project funds. Insurance costs are budgeted to support the GLC’s pass through grant programs and to cover event cancellation policies that may be purchased during the year.
  ii. Printing and reproduction expenses will increase by almost $6,000 from FY2019. Like insurance costs, the increase is in the restricted portion of the budget and is related to the anticipated printing of project-related publications and final project reports that will be completed during the fiscal year. The general operating print and production will remain level from the FY2019 budget ($6,000).
  iii. Committee travel expense ($36,000) includes support to outside partners to travel to meetings and conferences and are based on the project-specific budget estimates.

- A $23,000 increase in facilities rent and maintenance costs includes increased base rent per the current lease rent schedule and an increase in anticipated common area maintenance and insurance. The GLC received several months of rent abatement in FY2019 related to the GLC office move; FY2020 expenses reflect a full year of base rent.

- The FY2020 training budget is reduced by 50%, in part due to efficiencies in access to an online library of training webinars and continuing education sessions through LinkedIn. The GLC currently does offer a formal training program to staff or commissioners.

Finance Committee members and Commission staff will be available to answer questions at the Semiannual Meeting.
## GREAT LAKES COMMISSION

### FY2020 OPERATING BUDGET - DRAFT

7/1/19-6/30/20

<table>
<thead>
<tr>
<th>Category</th>
<th>General Operating</th>
<th>Restricted</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>$ 12,000</td>
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<td>e. Accounting, Audit &amp; Legal</td>
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<td>3. Communications</td>
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<tr>
<td>a. Telephone</td>
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<td>e. Media/Annual Report</td>
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<td>8. Training</td>
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<tr>
<td>9. Grant Match</td>
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<td>$ -</td>
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<tr>
<td><strong>TOTAL</strong></td>
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<td><strong>$ 2,602,600</strong></td>
<td><strong>$ 4,196,000</strong></td>
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### GREAT LAKES COMMISSION

REVENUE PROJECTION - FY2020

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<tr>
<th>Category</th>
<th>Amount (in $)</th>
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<td>3. Meetings/Publications</td>
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<tr>
<td>4. Indirect Cost Recovery</td>
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<td>5. Grants and Contracts</td>
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<td>6. Reserves Drawdown</td>
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<td><strong>TOTAL</strong></td>
<td><strong>$ 4,196,000</strong></td>
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State Dues are assessed at $60,000 per state.
# Great Lakes Commission

## Schedule of Pass Through Grant Funds

### FY2020 Budget

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<tr>
<th>Funder/Program Title</th>
<th>Pass Through $</th>
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<tr>
<td>Great Lakes Sediment &amp; Nutrient Reduction Program - GLRI (8)</td>
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<tr>
<td>Great Lakes Sediment &amp; Nutrient Reduction Program - GLRI (9)</td>
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<td><strong>U.S. Department of Commerce</strong></td>
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<td>Habitat NOAA (AOC projects)</td>
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<tr>
<td>Habitat NOAA (non-AOC projects)</td>
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<td><strong>U.S. Geological Survey</strong></td>
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<tr>
<td>Mussel Collaborative - USGS</td>
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<tr>
<td>HABS Collaborative - USGS</td>
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<td><strong>Environmental Protection Agency</strong></td>
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<td>REAP - GLRI</td>
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<td><strong>Michigan DEQ</strong></td>
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<tr>
<td>Michigan Clean Water Corps</td>
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<tr>
<td><strong>TOTAL Grant Pass Through Funds</strong></td>
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### GREAT LAKES COMMISSION
#### FY2019 OPERATING BUDGET - FINAL
7/1/18-6/30/19

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<th>Category</th>
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<td>b. Equipment</td>
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<tr>
<td>c. Equipment Maintenance</td>
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<tr>
<td>d. Insurance</td>
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<td>$8,000</td>
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<tr>
<td>e. Accounting, Audit &amp; Legal</td>
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<td>-</td>
<td>$36,000</td>
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<tr>
<td>f. Facilities Rent and Maintenance</td>
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<td>g. Depreciation</td>
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<td>-</td>
<td>$28,000</td>
</tr>
<tr>
<td>3. Communications</td>
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</tr>
<tr>
<td>a. Telephone</td>
<td>$18,000</td>
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<td>$30,000</td>
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<td>b. Postage</td>
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<tr>
<td>c. Printing/Reproduction</td>
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<td>$2,000</td>
<td>$8,000</td>
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<tr>
<td>d. Books/Dues/Subscriptions</td>
<td>$6,000</td>
<td>-</td>
<td>$6,000</td>
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<tr>
<td>e. Media/Annual Report</td>
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<td>$9,000</td>
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<tr>
<td>5. Meetings</td>
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<td>$128,000</td>
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<td>6. Contract Services</td>
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<tr>
<td>7. Misc./Special Projects</td>
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<td>$8,000</td>
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<tr>
<td>8. Training</td>
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<td>$8,000</td>
</tr>
<tr>
<td>9. Grant Match</td>
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<td>-</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$1,414,000</strong></td>
<td><strong>3,275,985</strong></td>
<td><strong>4,689,985</strong></td>
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### GREAT LAKES COMMISSION
#### REVENUE PROJECTION - FY2019

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. State Dues</td>
<td>$480,000</td>
</tr>
<tr>
<td>2. Interest Earnings</td>
<td>$24,000</td>
</tr>
<tr>
<td>3. Meetings/Publications</td>
<td>$60,000</td>
</tr>
<tr>
<td>4. Indirect Cost Recovery</td>
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<tr>
<td>5. Grants and Contracts</td>
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<td>6. Reserves Drawdown</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$4,689,985</strong></td>
</tr>
</tbody>
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State Dues are assessed at $60,000 per state.
## GREAT LAKES COMMISSION
**FY2020 DRAFT v. FY2019 FINAL OPERATING BUDGET COMPARISON**

<table>
<thead>
<tr>
<th>Category</th>
<th>FY2020 DRAFT</th>
<th>FY2019 FINAL</th>
<th>% CHANGE</th>
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<tr>
<td><strong>1. Personnel</strong></td>
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<tr>
<td>b. Benefits</td>
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</tr>
<tr>
<td>a. Office Supplies</td>
<td>$20,000</td>
<td>$18,000</td>
<td>11.1%</td>
</tr>
<tr>
<td>b. Equipment</td>
<td>$27,000</td>
<td>$9,000</td>
<td>200.0%</td>
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<tr>
<td>c. Equipment Maintenance</td>
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<tr>
<td>d. Insurance</td>
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<td>50.0%</td>
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<td>e. Accounting, Audit &amp; Legal</td>
<td>$38,000</td>
<td>$36,000</td>
<td>5.6%</td>
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<td>0.0%</td>
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<td><strong>5. Meetings</strong></td>
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<td>$128,000</td>
<td>14.1%</td>
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<td><strong>6. Contract Services</strong></td>
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<td><strong>8. Training</strong></td>
<td>$4,000</td>
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<td>-50.0%</td>
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<td><strong>9. Grant Match</strong></td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>$4,196,000</td>
<td>$4,689,985</td>
<td>-10.5%</td>
</tr>
</tbody>
</table>
Memorandum
To: Great Lakes Commission
Fr: Darren Nichols, Executive Director
Dt: Revised – May 10, 2019
Re: Overview of Great Lakes Commission staff work for 2019-2020

Purpose
The enclosed Strategic Plan Progress Report summarizes the Commission’s staff work within each formal program area in the GLC Strategic Plan. This memo briefly summarizes staff work in areas that may not directly align with the formal Strategic Plan but are important to fulfill the agency’s mission and responsibilities under the Great Lakes Basin Compact. The report and the memo together provide an overall view of the Commission’s work within the past year and in the coming months.

GLC staff invites questions, welcomes feedback, and respectfully requests that the Commission provide its general endorsement for staff to continue working on existing projects, Strategic Plan program areas and activities generally outlined in this memo through the remainder of 2019-2020. GLC staff also invites commissioners to engage in the Commission’s work by participating on the GLC Board of Directors or through one or more of the Commission’s established program committees.

Overview of Existing Efforts
Following is a high-level outline of GLC staff work that falls outside formal Strategic Plan program areas.

Advisory Groups/Committees
The Commission’s staff serve on advisory groups and committees across the Basin. Following is a representative list of boards, committees and advisory groups currently staffed:

- Great Lakes Executive Committee (GLEC) and tri-Commission partnership
- Great Lakes Water Quality Agreement
  - Various Annex subcommittees
- Blue Ribbon Advisory Panel for the Great Lakes One Water Partnership
- Tri-Commission executive directors quarterly coordination meetings (Great Lakes Fishery Commission, International Joint Commission and Great Lakes Commission)
- Great Lakes Dredging Team – GLC staff currently facilitates the GLDT
- Areas of Concern (AOC) restoration meetings and annual conference
- Cooperative Institute for Great Lakes Research (CIGLR)
- Great Lakes Observing System (GLOS)
- Advisory Committee to Heidelberg University – National Center for Water Quality Research
- Great Lakes Sea Grant Network – historically hosting an annual fellowship candidate
- Michigan Sea Grant Advisory Board
- Great Lakes St. Lawrence Water Resources Compact Council and Regional Body Resource Group
- Asian Carp Regional Coordinating Committee (ACRCC)
• Great Lakes Aquatic Nuisance Species (ANS) Panel
• Chicago Area Waterway System (CAWS) Aquatic Invasive Species Stakeholder Group – ex officio
• Western Lake Erie Basin Partnership
• Great Lakes Ballast Water Partnership (with UW-Madison)
• The Great Waters Research Collaborative
• Executive Steering Committee, Great Lakes and Mississippi River Inter-basin Study (GLMRIS)
• Great Lakes Coastal Assembly
• Others as needed

**Briefings, interviews and presentations**
The Commission and its staff are frequently asked to speak at events ranging from community gatherings to national and occasionally international conferences. Staff frequently present policy and position briefings at:

- State and provincial executive and legislative offices as part of the Commission’s informal state/provincial relations efforts;
- Washington, D.C. and Capitol Hill in-person meetings and relations with staff, partner agencies and organizations, and with commission members;
- Relationship-building outreach to and meetings with tribes and First Nations; and
- Local governments, primarily through on-the-ground projects and as needed to secure the perspectives of local communities in GLC-led policy making efforts.

Staff also provide briefings, presentations, interviews and materials for:

- Continuous communications with the Commission, Great Lakes states and provinces (governors/premiers/legislatures/agencies), public forums, project partners, national/global outreach, Washington D.C.-area offices, funders and more.

**Events and Conferences**
GLC staff routinely attend and occasionally present at the annual events and conferences of a wide range of other Great Lakes organizations. Those events and organizations typically include:

- Great Lakes Executive Committee bi-annual meetings
- Great Lakes Fishery Commission Annual meeting
- Great Lakes Aquatic Nuisance Species (ANS) Panel bi-annual meetings
- Conference of Great Lakes and St. Lawrence Governors and Premiers – annual summit
- Great Lakes and St. Lawrence Cities Initiative – annual meeting
- US Army Corps of Engineers’ General’s Inspection Tour
- American Great Lakes Ports Association – Annual Conference
- Great Lakes Advisory Committee – Green Marine Program and GreenTech 2019 Conference
- Great Lakes Waterways Conference
- U.S. EPA Annual Conference for the Great Lakes Areas of Concern Program
- Highway H2O Conference – focused on St. Lawrence Seaway
- NOAA/NSF research and planning workshop Coastlines and People
- And others as appropriate
GLC are asked to prepared briefings and give presentations to a variety of different groups and audiences. These presentations are often part of formal conferences and symposia but sometimes are specific one-time only requests. Examples include:

- International Association of Great Lakes Research (IAGLR) Annual Conference
- Healing Our Waters (HOW) Annual Conference
- Annual Meeting of the Great Lakes Water Resources Compact and Regional Body
- Annual Great Lakes Inspection Tour organized by the USACE-Great Lakes and Ohio River Division
- University of Toledo – Great Lakes Law Conference

**Commission Administration**

GLC staff convenes, facilitates and records regularly scheduled meetings of the Commission (biannual), the Board (monthly), Program Committees (periodically as needed) and the Executive Committee (weekly). GLC staff recognizes that Commission support and communication is an area of need for the organization; staff proposes to continue the Commission’s regular meeting schedule and will seek new opportunities to communicate with the Commission as needs arise and as staff capacity permits. This is one area for consideration under an administrative assessment of the agency.

**Agency Administration and Management**

GLC staff meets regularly at three primary levels: Senior Management Team, All Staff, and individual project teams. Staff proposes to continue with its current staff coordination structure.

**Additional Areas of Need and Opportunity**

GLC staff have identified the following areas of general need within the agency. These needs could be met through a variety of arrangements including direct staffing, strategic partnering, temporary project-related staffing or potential job share/professional development.

- Communications, development and strategy – additional capacity, strategic messaging
- External and governmental relations – building and maintaining consistent relationships
- Data architecture, library science and information management – capacity and expertise
- Economic analysis – wide range of policy applications
- Land Use and Regional Planning – policy and practice
- Sustainable Economic and Community Development – policy and practice
- Transportation policy (general)
  - Maritime transportation policy (specific)
- Demographic and population forecast analysis
- Great Lakes Basin-wide policy strategy – identifying priority needs, opportunities and issues
- Training, leadership, staff and commission development
- Ethics – policy and training
- Public records – policy and archives
- Human Resources – general capacity and expertise
- Budgeting, fiscal management and state/provincial reporting – additional capacity
- Legal assessment/advice/counsel on compact provisions, revenue, contracts
- Administrative, structural and strategic assessment of the agency, mission, roles
- Strategic Planning: Goals/objectives, strategic actions, monitoring/feedback, adaptation
Introduction

The Great Lakes Commission is a public agency established by the Great Lakes Basin Compact in 1955 to help its Member states speak with a unified voice and collectively fulfill their vision for a healthy, vibrant Great Lakes-St. Lawrence River region. The Canadian provinces of Ontario and Quebec joined the Commission as associate members via a Declaration of Partnership in 1999. The Compact created the Commission to implement its terms and requirements, as noted in Article I:

1. To promote the orderly, integrated, and comprehensive development, use, and conservation of the water resources of the Great Lakes 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.

Collectively, these terms and the rest of the Compact consistently speak to the intertwining of economic uses of water resources, conservation and the creation of an organization to lead a path that strikes a balance among multiple uses.

Vision

The Great Lakes Commission is a binational leader and a trusted voice ensuring the Great Lakes and St. Lawrence River support a healthy environment, vibrant economy and high quality of life for current and future generations.

Mission

The Great Lakes Commission represents, advises and assists its member states and provinces by fostering dialogue, developing consensus, facilitating collaboration and speaking with a unified voice to advance collective interests and responsibilities to promote economic prosperity and environmental protection and to achieve the balanced and sustainable use of Great Lakes-St. Lawrence River basin water resources.
Values

The following core values guide the work of the Great Lakes Commission and set the standards that we aspire to achieve in serving our member states and provinces.

- **Member led:** We are guided by and serve the common interests of our member states and provinces.
- **Regional perspective:** We bring a regional perspective to federal, state and provincial programs, policies, projects and priorities.
- **Leadership:** We are ambassadors for the Great Lakes-St. Lawrence River region and serve as liaisons within and beyond the region.
- **Collaboration:** We advance our objectives in close coordination with the Conference of Great Lakes and St. Lawrence Governors and Premiers, the International Joint Commission, the Great Lakes Fishery Commission, and constant dialogue with other regional institutions and relevant entities.
- **Partnerships:** We respect the roles of other regional institutions and agencies and collaborate to achieve common goals and interests.
- **Transparency:** We are open and transparent in carrying out our work.
- **Integrity:** We strive for the highest levels of honesty, credibility and accuracy in the information, recommendations and perspectives that we convey.
- **Objective:** We are nonpartisan, balanced and science-based in our work, while promoting a vision of a healthy environment and vibrant economy, pursued by each of our member states and provinces.
- **Open-minded:** We are inclusive and welcome diverse views.
- **Sustainability:** We incorporate principles of sustainable development and adaptive management in our work.

Core Competencies

The Great Lakes Commission is uniquely equipped to serve its member states and provinces with the following core services, which constitute the skills, knowledge base, professional competencies and leadership attributes that are applied across all of its program areas. The core competencies are how the Commission conducts its work to achieve its goals, fulfill its mission and advance its vision.

**Communications and Outreach:** The Commission raises awareness; communicates with federal, state/provincial, and local agencies and stakeholders; and provides information technologies and outreach services to support effective decision-making and stewardship.

**Information Management and Delivery:** The Commission collects, integrates and makes accessible high quality and unbiased data and information to enable its member jurisdictions and other parties to develop sound policies, manage and adapt programs, and make informed decisions affecting the water resources of the Great Lakes-St. Lawrence River region.

**Facilitation and Consensus Building:** The Commission facilitates, convenes and participates in forums that address issues of interest to its members. By serving as a neutral broker of information and research and facilitating dialogue among diverse perspectives, it helps build consensus on solutions to challenges and opportunities facing Great Lakes and St. Lawrence River water resources.

**Policy Coordination and Advocacy:** The Commission helps its member states and provinces speak with a common voice by coordinating, analyzing, advising, communicating and advocating shared policy priorities. The Commission also collaborates with other regional, national and international organizations to advance common interests.
Regional Project Management: The Commission secures resources and coordinates activities that address common interests of its member jurisdictions and provides the capacity to manage projects and administer funding to member states, provinces and other partners to advance shared goals.

Program Areas

The Great Lakes Commission designs the work of its programs to support its goals and vision. The Goals articulate general outcomes we hope to achieve through our collective work across all Program Areas. Each of the Program Areas includes one Objective and, under each, a series of Strategic Actions that indicate what the Commission seeks to accomplish, while recognizing that the Commission’s work alone will not completely fulfill these Objectives. The strategic actions reflect what the Commission does and the projects and activities the Commission will undertake to address its goals, objectives and fulfill its mission over the next five years.

Goals

The Great Lakes Commission’s goals articulate the outcomes it seeks to advance over the five-year timeframe of its strategic plan by building on its mission and vision and working in partnership with its member states and provinces and other entities.

- Businesses, communities and agriculture leverage water resources as assets to support strong economies and a high quality of life for residents.

- Great Lakes and St. Lawrence River water resources are protected from pollution and impacts from climate change; are accessible to people; provide high quality drinking water; and are managed in a balanced and sustainable manner for the benefit of current and future generations.

- Aquatic habitats support diverse and healthy fish and wildlife populations, are protected from the negative impacts of aquatic invasive species, and provide cultural and economic benefits to local communities.

- Harbors and waterways support recreational uses and a Great Lakes-St. Lawrence River maritime transportation system that efficiently moves goods and enhances the competitiveness of the region’s economy and international trade.

1. Water Quality

Challenges and Opportunities:

The Great Lakes basin’s abundant supply of clean, fresh water is vital to the regional economy and the health of its communities. Recognizing this, federal, state and provincial laws have been designed to ensure that water quality is sufficient to allow for a safe and sustainable public water supply, water-dependent economic activities, agriculture, healthy fish and wildlife populations, and water-related tourism and recreation. Additionally, water quality is increasingly linked to water quantity, in particular as governments address the threat of climate change. With expert knowledge of water issues and strong relationships with water quality practitioners across many sectors, the Commission is well-positioned to identify and share innovative solutions to water quality challenges, and to advance regional approaches to water quality protection and improvement. The Commission will utilize its expertise and capacity to maximize its members’ collective impact to improve and protect water quality in urban and urbanizing areas; in rural and agricultural areas; and other diverse stakeholders within sub-watersheds across the basin.

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:

- 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.

- 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.

- 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 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.

- 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 fresh water 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.

- Address critical water quality challenges, such 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.

- 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.

2. Water Management and Infrastructure

Challenges and Opportunities:

Strengthening the effective management of the Great Lakes and St. Lawrence River basin water resources to meet the needs of the region’s citizens continues to be a top priority of Great Lakes governors and premiers. Due to its history, mandate and expertise the Great Lakes Commission is uniquely qualified to lead and support efforts in this area, and has already assisted the Conference of Great Lakes and St. Lawrence Governors and Premiers in implementing the regional water resources agreements. At the local level, aging and degraded water infrastructure (drinking, storm and wastewater) is increasingly threatening communities’ access to this valuable freshwater resource. Water and wastewater infrastructure challenges are exacerbated by climate change impacts, such as increased runoff caused by more severe and frequent storm events, that often lead to increased flooding, sanitary and storm sewer overflows, and risks to public health and the health of the Great Lakes. The Commission has supported innovative projects focused on maximizing investments in water conservation and green infrastructure to support water management, and is working to establish new partnerships, identify new solutions to water infrastructure challenges, develop tools to support decision-making, and better manage data and information in these areas. Additionally, the Commission’s advocacy program continues to promote federal programs, policies and funding to help states, provinces and local communities
manage water infrastructure. As water quantity and quality issues are inextricably linked, the Commission’s work in this area complements efforts under the water quality program area.

**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:**

- In partnership with the Conference of Great Lakes and St. Lawrence Governors and Premiers, support decision-making and measure progress under the Great Lakes-St. Lawrence River Basin 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.

- 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.

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

- 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 Clean Water and Drinking Water State Revolving Fund programs 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.

3. **Commercial Navigation**

**Challenges and Opportunities:**

The Great Lakes and St. Lawrence River maritime transportation system is vital to the economies of the United States and Canada. The system facilitates domestic and international trade through the movement of goods and commodities, while creating jobs in port communities and supporting industries such as manufacturing, steel production, agribusiness and power generation. Ensuring the continued viability of commercial navigation requires maintaining and investing in harbors, ports, shipping channels, locks and related infrastructure throughout the Great Lakes-St. Lawrence River system, including regular dredging. These activities require close regional and binational coordination, given the interdependent nature of the system and the critical role played by key infrastructure like the Soo Locks and the St. Lawrence Seaway. The Conference of Great Lakes and St. Lawrence Governors and Premiers recently completed a comprehensive strategy for the navigation system that aims to double maritime trade, improve environmental performance and support the region’s industrial core. The strategy recommends actions to maintain and expand the maritime transportation system and establishes a Regional Maritime Entity to coordinate state and provincial actions. With its dual mandate for both economic development and environmental protection, and its longstanding role as an advocate for Great Lakes-St. Lawrence River maritime transportation, the Great Lakes Commission is uniquely qualified to support the objectives of the governors’ and premiers’ new maritime strategy.

**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:

- 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.

- 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.

- 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.

4. Economic Development and Waterfront Community Revitalization

Challenges and Opportunities:

The unique freshwater resources of the Great Lakes fueled the region’s early development, with waterfront areas historically serving as centers of economic activity. Currently, many Great Lakes coastal communities are working to restore and reclaim degraded or under-utilized waterfronts and leverage them to support economic development, recreation and other purposes. The GLRI is accelerating this process, particularly in the Areas of Concern. Recreational boating and other water-based activities drive a vibrant tourism and outdoor recreation sector centered on the Great Lakes and their tributaries. Regional leaders have recognized the potential of fresh water and the “Blue Economy” to promote economic growth, attract and retain talent, support water-dependent industries, and sustain a high quality of life in the Great Lakes region. The Great Lakes Commission is well suited to develop tools and support strategies to advance waterfront community revitalization through research, policy development, information exchange and technology transfer, and stakeholder collaboration. The Commission is also uniquely positioned to advocate for federal, state and provincial policies, programs and funding to support efforts to restore and revitalize waterfront areas, ensure resiliency to impacts from climate change, and balance environmental and economic benefits from water resources. Finally, the Commission can collaborate with regional leaders to strengthen the economy and promote the Great Lakes region as a global center for research and development of technologies to utilize and manage freshwater resources.

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:

- 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.”

- 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.

- 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.

- 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.

- 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.

5. Coastal Conservation and Habitat Restoration

Challenges and Opportunities:

The Great Lakes and St. Lawrence River basin includes more than 10,000 miles of coastline, with the majority of the region’s population and economic activities located in coastal areas. These areas support both rich and diverse ecosystems and valuable industrial, recreational and tourism economies. However, in some areas extensive human activity has led to the loss of habitat for fish and wildlife and impacts to key ecosystem functions and values. The Commission is well positioned to assist the states, provinces and local partners in balancing the use and conservation of natural resources by restoring and protecting habitat for fish and wildlife; supporting the remediation of degraded areas; and ensuring resiliency to changing lake levels and impacts from climate change. The Commission is also developing and managing several collaborative partnerships to coordinate regional engagement, improve management, advance research, and facilitate communication and outreach to address coastal conservation challenges.

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:

- 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, and in coordination with U.S. EPA, NOAA, states and provinces, and local organizations.

- 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.

- 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.

- Communicate with partners including U.S. EPA, NOAA, USGS, NRCS, Great Lakes Fishery Commission, Great Lakes Landscape Conservation Cooperative and the Great Lakes Water Quality Agreement Annex 7 Subcommittee, to ensure effective coordination and collaboration with state and provincial agencies,
agriculture producers, conservation groups and local partners in support of sound land management practices and strategically targeted fish and wildlife restoration and conservation actions.

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

6. Aquatic Invasive Species Prevention and Control

Challenges and Opportunities:

Aquatic invasive species (AIS) are recognized as one of the most significant threats to the environmental and economic health of the Great Lakes and St. Lawrence River region. Progress is being made to reduce threats of new invasions and the damage from those species already introduced. Yet, the region remains vulnerable to AIS introduction and spread from various pathways and AIS threats are likely to evolve under a changing climate. AIS do not respect political boundaries and states and provinces vary in their approaches and capacity for prevention and management. Preventing new AIS introductions and controlling those already present is a priority for regional leaders. The Commission is well-positioned to coordinate multijurisdictional approaches to AIS prevention and control. Commission staff is equipped with an in-depth knowledge of AIS issues and strong relationships with AIS practitioners from both the public and private sector. The Commission’s AIS expertise is founded in its historic relationship with the Great Lakes Panel on Aquatic Nuisance Species. The Commission will utilize its expertise and capacity to advance effective, regional solutions for AIS prevention and control.

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

Strategic Actions:

- 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.

- 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.

- 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.

- 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.

- 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.

- 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.
7. Information Management and Blue Accounting

Challenges and Opportunities:

The Great Lakes Basin Compact charged the Commission to “collect, correlate, interpret, and report on data relating to the water resources and the use thereof in the Basin or any portion thereof.” Since its inception, the Commission has been a trusted source of information through many programs including the Great Lakes Information Network. Through this program area, the Commission develop the foundation for supporting all other program areas outlined in the Compact, and continue to assemble, curate, manage and deliver information to support the conservation and balanced use of the Great Lakes. A core component of this program area is the Blue Accounting initiative (http://BlueAccounting.org), a partnership between the Commission and The Nature Conservancy. Blue Accounting will provide Great Lakes leaders with information services that measure the progress being made across the region toward shared desired outcomes for the Great Lakes.

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

Strategic Actions:

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

- Establish Blue Accounting as a leading information service to track the region’s progress towards 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 and ErieStat, described in the Water Quality Program Area, as a Blue Accounting pilot projects.

- 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 Commission for use by its members.

- 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.

- 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.

- Provide facilitation and information management services to support development of strategies and policies to assure 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.

Conclusion

The Commission is committed to constantly improving its organizational processes and using the best metrics available to evaluate projects and services to its member jurisdictions. More specific plans to implement these actions and metrics to measure progress and allocate financial resources will be developed following completion of the plan. We will provide reports on progress to GLC Commissioners twice a year. We will assess progress and address emerging issues annually.
**Water Quality**

**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.

More information can be found at [www.glc.org/work/water-quality](http://www.glc.org/work/water-quality).

**Strategic Actions:**

- 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 percent by 2025 and begin a drinking water supply pilot as part of the Blue Accounting initiative.

- 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.

- 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 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.

- 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 fresh water 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.

- Address critical water quality challenges, such 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.

- 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.

**Projects**

**Michigan Clean Water Corps (MiCorps)**

**Overview:** MiCorps is a network of volunteer water quality monitoring programs in Michigan. It was created through an executive order to assist the Michigan Department of Environment, Great Lakes, and Energy (EGLE) in collecting and sharing water quality data for use in water resources management and protection programs. The program seeks to support and expand the number of volunteer water quality monitoring organizations statewide for the purpose of collecting, sharing, and using reliable data for surface water bodies
(inland lakes and streams); educating and informing the public about water quality issues; and fostering water resources stewardship to facilitate the preservation and protection of Michigan’s water resources. The GLC has served as the administrative lead for MiCorps since its creation in 2004, and is responsible for program and grants administration, program promotion, planning and facilitating the program’s annual volunteer monitoring conference, and information technology and delivery, including the online MiCorps Data Exchange platform for sharing volunteer water quality monitoring data for Michigan’s inland lakes and streams.

**Funder(s):** Michigan Department of Environment, Great Lakes, and Energy


**Schedule:** October 2014 through June 2020.

**Recent and Upcoming Activities:**
- Supported volunteer water quality sampling at 312 inland lakes during the 2018 spring and summer monitoring season under the Cooperative Lakes Monitoring Program.
- Awarded 11 small grants totaling more than $21,000 to local units of government for river and stream cleanup events.
- Will be collaborating with the Michigan Inland Lakes Partnership in October to convene the *2018 Michigan Inland Lakes Convention: Working Together for Healthy Lakes*, which will feature presentations on monitoring and citizen science initiatives.

**Lead Staff:** Laura Kaminski, laurak@glc.org.

**Researching the Effectiveness of Agricultural Programs (REAP)**

**Overview:** Agricultural producers in the Great Lakes basin have received over $100 million in incentives from the Great Lakes Restoration Initiative (GLRI) since it began in 2010. To date, these targeted investments have not been comprehensively evaluated to assess their effectiveness and inform future investments in water quality. The REAP project examines the socio-economic impact of investments from GLRI-funded programs and projects aimed at increased adoption of conservation practices that improve water quality in the GLRI Priority Watersheds: Lower Fox River, WI; Saginaw River, MI; Maumee River, OH/IN/MI; and Genesee River, NY.

**Funder(s):** U.S. EPA-Great Lakes Restoration Initiative.

**Partners:** U.S. EPA, USDA Natural Resources Conservation Service, Ohio State University, Michigan State University Institute of Water Resources; county conservation offices, NGOs, and stakeholders in GLRI priority watersheds.

**Schedule:** August 2017-August 2019.

**Recent and Upcoming Activities:**
- Completed review and data-mining of all available documents (work plans, progress reports, final summary reports, etc.) for GLRI Focus Area 3 projects in priority watersheds from 2010-2016.
- Completed 15 interviews with managers of GLRI-funded projects related to agricultural incentives across the four priority watersheds.
- Convened two focus groups of farmers who have enrolled in qualifying GLRI-funded programs in the Saginaw watershed.
- Conducting up to six additional focus groups and 15 additional interviews with producers and project managers, respectively, in priority watersheds.
• Creating and releasing an RFP to complete an analysis of the impact of GLRI investments in priority watersheds using GLRI project document data, data acquired from interviews and focus groups, and other publicly available demographic and land use/characterization data.

Lead Staff: Victoria Pebbles, vpebbles@glc.org

Blue Accounting’s ErieStat

Overview: ErieStat is a project within the Blue Accounting initiative that will provide Lake Erie jurisdictions (Indiana, Michigan, Ohio, Ontario, Pennsylvania, and New York, plus both federal governments) with information services to track progress toward phosphorus reduction goals for the lake. Through an initial work group of state and federal agency representatives and leading academic institutions, the project identified initial metrics and data for tracking progress toward the 40 percent reduction goals for Lake Erie’s western and central basins. ErieStat is also supporting the efforts 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. Data supporting the selected water quality metrics has been aggregated and presented through an easy-to-understand website: www.eriestat.org. Work continues to develop protocols to track progress made by individual strategies deployed by the jurisdictions through required Domestic Action Plans.

Funder(s): Erb Family Foundation and Joyce Foundation.

Partners: Lake Erie state/provincial and federal governments.


Recent and Upcoming Activities:
• Creation of a new, nongovernmental Content Advisory Group to advise the project’s governmental Steering Committee, November 2018.
• Broad updates on www.eriestat.org, June 2019.

Lead Staff: Nicole Zacharda, nzacharda@glc.org

Blue Accounting’s Source Water Initiative

Overview: The GLC continues to make progress with Blue Accounting’s Great Lakes Source Water Initiative (SWI), which aims to use the tools and services of Blue Accounting to help leaders set priorities and measure progress to protect drinking water at its source. “Source water” is defined as surface or groundwater prior to collection and treatment as drinking water. SWI’s work group of nearly 40 water professionals from the private, public, and non-profit sectors, representing nine out of ten Great Lakes states and provinces, identified five regional source water protection goals and three metrics to track progress toward each goal. As with other Blue Accounting pilot projects, the information is being organized around: strategies, investments, and results. The project is networking water professionals around the Great Lakes and St. Lawrence River basin to showcase local innovation and craft a “common language” for tracking efforts to protect shared sources of drinking water.

Funder(s): Erb Family Foundation and Joyce Foundation.

Partners: Local, state/provincial, and federal governments, along with research institutions, nonprofits, and the private sector.


Recent and Upcoming Activities:
• Initial content launched early in 2019
Working to refine a Steering Committee to guide continued work

Lead Staff: Nicole Zacharda, nzacharda@glc.org.

Great Lakes Sediment & Nutrient Reduction Program

Overview: The GLC administers the Great Lakes Sediment and Nutrient Reduction Program (GLSNRP), which provides grants to state and local governments and nonprofit organizations to implement conservation practices to reduce sediment and phosphorus runoff into the Great Lakes. In the most recent round of funding in 2018, seven grants are being executed, focused on long-term nutrient management and conservation practice installation intended to reduce sediment and phosphorus runoff to the Great Lakes. Under the guidance of a Task Force of representatives from each Great Lakes state and our federal partner agencies, the GLC team is currently overseeing 51 active grants. GLC staff management of the program changed early in 2018, presenting an opportunity to refresh this long-standing GLC program, including planned updates to the program website.

Funder(s): USDA’s Natural Resource Conservation Service, with Great Lakes Restoration Initiative funds.

Partners: Great Lakes states and NRCS.

Schedule: Ongoing, through annual awards.

Recent and Upcoming Activities:
- A Request for Proposals for the 2019 award (under Agreement 9) was released in February with 21 proposals received from six states.
- The program website has been modernized and includes a map of active awards and pie chart of funding by state: http://www.nutrientreduction.org.

Targeting Outcome-Based Sediment Reduction in the Lower Fox Watershed

Overview: The GLC is a subcontractor to the Fox-Wolf Watershed Alliance (FWWA) to assist with certain elements of this five-year 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 is testing innovative practices and monitoring the effects of those practices to guide implementation throughout the region. The GLC has assisted the FWWA by organizing annual workshops to coordinate among GLRI grantees in Green Bay, Saginaw Bay, and Maumee River/Bay to share progress and methods for measuring ecological outcomes. Additional GLC work to support this project is being re-assessed with FWWA to meet project needs and is likely to include development of an interactive “Story Map” to share project outcomes across the region.

Funder(s): FWWA, through US-EPA’s Great Lakes Restoration Initiative.

Partners: FWWA.


Recent and Upcoming Activities:
- GLC staff are also helping to build a Story Map to showcase FWWA work to improve the waters of northeast Wisconsin.
**Lead Staff:** Nicole Zacharda, nzacharda@glc.org.

**HABs Collaboratory**

**Overview:** In partnership with the U.S. Geological Survey’s (USGS) Great Lakes Science Center, the GLC leads the Great Lakes HABs Collaboratory, which provides a forum for communication and coordination among scientists and between scientists and managers working on HABs in the Great Lakes. A Steering Committee and a Charter provide the structure and guide the operations of the group. An annual workplan is developed under this structure to guide priorities. [https://www.glc.org/work/habs-collaboratory](https://www.glc.org/work/habs-collaboratory).

**Funder(s):** USGS Great Lakes Science Center.

**Partners:** USGS Great Lakes Science Center; more than 250 scientists and practitioners from across the Great Lakes basin participate in the HABs Collaboratory.

**Schedule:** July 2015-May 2023.

**Recent and Upcoming Activities:**
- Produced a video, online at [https://youtu.be/wsDCav9ytdk](https://youtu.be/wsDCav9ytdk).
- Presence at the 2019 Association for the Sciences of Limnology and Oceanography and 2019 IAGLR conferences.
- Ongoing webinar series; check website for more information.

**Lead Staff:** Victoria Pebbles, vpebbles@glc.org.

**Great Lakes Regional Sediment Management Team**

**Overview:** The Great Lakes Regional Sediment Management Team began in 1997 as the Great Lakes Tributary Modeling program authorized under Section 516(e) of the Water Resources Development Act of 1996, as amended. The purpose of this program is to provide technical assistance to local and state agencies to reduce soil erosion and sediment and pollutant loadings to Great Lakes navigation channels and Areas of Concern. In 2018, this program was rebranded as the Great Lakes Regional Sediment Management Team. Under this program, the Great Lakes Commission (GLC) provides technical and administrative support to the U.S. Army Corps of Engineers’ Buffalo, Chicago and Detroit Districts to advance Great Lakes regional sediment management priorities. GLC staff is responsible for program research, coordinating state involvement in the program, facilitating special projects and planning and convening an annual Great Lakes sedimentation workshop.

**Funder(s):** U.S. Army Corps of Engineers (USACE) – Buffalo District (LRB) (through LimnoTech, Inc., LRB’s IDIQ Contractor).

**Partners:** USACE Buffalo, Detroit and Chicago Districts, the Great Lakes States, U.S. EPA, USDA-NRCS, USGS, and numerous academic and private sector entities.

**Schedule:** Ongoing since 1997; current period October 1, 2018 – September 30, 2019.

**Upcoming Activities:**
- Planning is underway for the 2019 regional sediment management workshop which will be held in fall 2019 in Chicago. The workshop will focus on rural, urban and coastal sedimentation issues.

**Lead Staff:** Tom Crane, tcrane@glc.org.
**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.

More information about the GLC’s water management and infrastructure work can be found at www.glc.org/work/water-management.

**Strategic Actions:**

- 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.

- 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.

- 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.

- 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 Clean Water and Drinking Water State Revolving Fund programs 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.

**Projects**

**Integrated Water Asset Management**

**Overview:** The GLC’s 2017 *Joint Action Plan for Clean Water Infrastructure and Services in the Great Lakes Region* recommends 17 actions, one of which calls for “policies and guidelines supporting water infrastructure asset inventories and asset management plans….and a regional effort to track and report on clean water infrastructure and services investments and outcomes.” The GLC is currently working on the first part of a two-phased effort to identify, test, and promote common tools that build capacity within Great Lakes states and provinces to implement Integrated Water Asset Management (IWAM – asset management that includes drinking water, wastewater and stormwater) and to track progress on IWAM across the region.

**Funder(s):** The Joyce Foundation; GLC General Operations.

**Partners:** TBD. Commissioners from PA, IL, and MI have expressed interest.

**Schedule:** Fall 2018-Spring 2020.

**Recent and Upcoming Activities:**

- Project was launched in winter 2018.
• A 4-part webinar series with presentations from experts in IWAM financing, policy, technology, and program implementation took place in early spring 2019.
• Scope and conduct two or three half-day focus groups to take place in spring and early summer 2019.
• Supplementary literature review and consultations.
• Prepare summary assessment of IWAM tools, barriers and needs.
• Establish Regional Advisory Group to scope pilot communities and draft regional IWAM goals.

Lead Staff: Victoria Pebbles, vpebbles@glc.org.

Green Infrastructure Champions

Overview: The GLC launched a green infrastructure (GI) champions pilot program in October 2016 to build green infrastructure capacity within small and mid-sized communities across the Great Lakes basin. The program has been renewed to continue for another two years and will build on the success of the pilot phase with three workshops, a competitive small grants program, and a peer-to-peer mentoring network.

Funder(s): Erb Family Foundation.

Partners: Credit Valley Conservation; a Regional Champions Advisory Team.


Recent and Upcoming Activities
• The request for proposals was released on April 3, along with the application to join the peer-to-peer mentoring network. Grants will be awarded in September 2019.
• Workshops will be held in Rochester, NY on May 30 and in Caledon, ON on June 25. An additional workshop in the western portion of the Great Lakes basin will also be scheduled.

Lead Staff: Victoria Pebbles, vpebbles@glc.org

Great Lakes-St. Lawrence River Regional Water Use Database

Overview: Through a Memorandum of Understanding (MOU) with the Great Lakes and St. Lawrence Governors and Premiers, the GLC manages the Great Lakes-St. Lawrence River Regional Water Use Database 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, working with the state and provincial water managers, has a goal to continuously improve the quality and usefulness of the database.

Funder(s): The Great Lakes and St. Lawrence Governors and Premiers.

Partners: Great Lakes and St. Lawrence Governors and Premiers; the Great Lakes and St. Lawrence states and provinces.


Recent and Upcoming Activities:
• The 2017 water use data report was completed and presented to the Water Resources Compact Council and Regional Body in December 2018.
• A conference call meeting of the state and provincial water use managers will be convened in July or August 2019 to plan for the submittal of 2018 water use data and review the 2019 workplan and data submittal schedule.
• The water use report for 2018 and data for previous years are available on the GLC website at http://glc.org/work/water-use

Lead Staff: Tom Crane, tcrane@glc.org and Margo Davis, mdavis@glc.org.

Source Water Initiative

The Source Water Initiative, under the umbrella of Blue Accounting, launched in May 2017 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.
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.

More information about the GLC’s commercial navigation work can be found at www.glc.org/work/commercial-navigation.

Strategic Actions:

- 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.

- 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.

- 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.

Projects

Blue Accounting Maritime Transportation Project

Overview: This project is using the Blue Accounting framework and web platform to collect and present data and information to track progress in achieving the goals laid out in the governors’ and premiers’ 2016 Strategy for the Great Lakes-St. Lawrence River Maritime Transportation System. In 2017 Blue Accounting updated cargo volume data and a maritime asset inventory and presented this information on the Blue Accounting Maritime Transportation platform (https://www.blueaccounting.org/issue/maritime-transportation). Moving forward, the GLC’s Blue Accounting team will work with leaders from the maritime industry to identify and track additional economic and environmental metrics that show progress toward goals established in the regional maritime strategy.

Funder(s): Herrick Foundation.

Partners: Great Lakes and St. Lawrence Governors and Premiers and multiple U.S and Canadian maritime stakeholders serving on the Maritime Transportation Work Group.

Schedule: The next phase of the project will be completed by June 2019 and formally presented at the leadership summit of the Great Lakes and St. Lawrence Governors and Premiers to be held that month.

Recent and Upcoming Activities:

- Convened a Maritime Transportation Work Group with representatives from U.S. and Canadian maritime agencies and organizations.
- Established goals and metrics.
- Contracted with the consulting firm CPCS to assist with data collection and visualization.
• Additional work group meetings to be held in fall, winter and spring.
• Coordination with the Green Marine program on environmental metrics.
• GLC presented to the Regional Maritime Entity in April in Montreal.

Lead Staff: Matt Doss, mdoss@glc.org.

Great Lakes Dredging Team (GLDT)

Overview: The GLDT serves as a forum for both governmental and non-governmental Great Lakes dredging interests to discuss the region’s dredging needs. In collaboration with its partners, the GLDT supports timely, cost-effective and environmentally sustainable dredging practices at U.S. harbors and channels throughout the Great Lakes, connecting channels and tributaries. The GLC staff, serving as secretariat to the GLDT, coordinates, plans, facilitates and organizes all aspects of the work of the GLDT including staffing of three standing committees, promoting the work of the GLDT through education and outreach and convening two full meetings of the GLDT each year.

Funder(s): U.S. Army Corps of Engineers (USACE) – Buffalo District (LRB) (through LimnoTech, Inc., LRB’s IDIQ Contractor).


Recent and Upcoming Activities:
• Convened the 2018 Semiannual GLDT Webinar Meeting on December 12, 2019.
• Developed, reviewed and finalized 2019 workplans for the GLDT Outreach and Technical Committees and distributed Volume 4 Issue 1 of the GLDT Newsletter the Great Lakes Dredging Dispatch.
• Formed a nominating committee to identify officers and committee co-chairs willing to stand for election for two-year terms of office beginning in June 2019.
• Conducted the election for new officers and committee co-chairs
• Planned the 2019 Annual Meeting to be held June 10-11 in Buffalo.

Lead Staff: Tom Crane, tcrane@glc.org.
Economic Development and Waterfront Community Revitalization

**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.

More information can be found at [www.glc.org/work/economic-development](http://www.glc.org/work/economic-development).

**Strategic Actions:**

- 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.”

- 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.

- 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.

- 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.

- 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.

**Projects**

**Determining the Economic Impact of Great Lakes Restoration**

**Overview:** The GLC and the Council of Great Lakes Industries completed a project to develop a comprehensive estimate of the economic impact of the Great Lakes Restoration Initiative (GLRI) using metrics such as regionwide economic activity triggered by GLRI project spending, growth in regional tourism, and improved quality of life as demonstrated by residential house value impacts. The project includes case study narratives to illustrate economic impacts in specific communities, including Waukegan, IL, Muskegon, MI, Detroit, MI, Duluth MN/Superior, WI, Sheboygan, WI, Ashland, OH, Erie, PA, and Buffalo, NY. The main, high-level result of the study is that every dollar spent on GLRI projects between 2010 and 2015 will generate a total of $3.35 of additional economic activity through 2036. The additional economic activity includes the direct impact of the GLRI project spend; additional economic activity from increased and enhanced tourism; and an estimate of the future impact of improving the region’s quality of life. The final study, summary report, case studies, and other materials are online at [https://www.glc.org/work/blue-economy/GLRI-economic-impact](https://www.glc.org/work/blue-economy/GLRI-economic-impact). A follow-up workshop is being planned for July 15 in Ann Arbor to convene the project team and advisory committee, together with regional thought leaders, to assess gaps and unmet needs related to the Blue Economy, and to establish a research and action agenda for future work in this area.
Funder(s): C.S. Mott, Wege, Joyce and Erb Family foundations, Fund for Lake Michigan, and Commonwealth of Pennsylvania.


Schedule: June 2017 through October 2018.

Recent and Upcoming Activities:
- Completed economic modeling and related analyses.
- Completed case studies.
- Finalized and released project summary report, including media outreach and communications with the Great Lakes Congressional delegation.
- Presented results at the GLC’s 2018 annual meeting; a Freshwater Summit in Traverse City, MI; a briefing for Congressional staff; and at the annual Healing Our Waters-Great Lakes Coalition conference.
- A workshop is being planned for July 15 in Ann Arbor, MI to convene thought leaders to establish a research and action agenda to advance the Blue Economy in the Great Lakes region.

Lead Staff: Matt Doss, mdoss@glc.org.

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

Overview: GLC staff assist the state of Michigan in supporting the Statewide Public Advisory Council (SPAC) for Michigan’s AOC Program. The SPAC includes representatives from the state’s 14 AOCs and provides advice and assistance to the state in implementing the AOC program.

Funder(s): Michigan Office of the Great Lakes.


Schedule: Ongoing.

Recent and Upcoming Activities:
- The GLC hosted the fall meeting of the SPAC at its offices on November 27-28.

Lead Staff: Matt Doss, mdoss@glc.org.

Support for the 2018 Annual Conference for the U.S. Great Lakes Areas of Concern Program

Overview: The GLC is assisting in planning and convening the 2019 Annual Conference for the U.S. Great Lakes AOC program sponsored U.S. EPA and the Ohio Lake Erie Commission, in partnership with Ohio EPA, and being held Sept. 11-12 in Cleveland, Ohio. Among other tasks, the GLC is managing registration and administering funding to support participation in the conference by local AOC leaders.

Funder(s): Ohio Lake Erie Commission.


Schedule: The conference will be held September 11-12 and all work completed shortly thereafter.

Recent and Upcoming Activities:
- Registration for the AOC conference is expected to begin by the end of May.
Study of Socio-Economic Benefits from Cleanup Efforts in the Muskegon Lake AOC

Overview: As part of the 2016 Regional Partnership with NOAA (described below in the Coastal Conservation and Habitat Restoration Program update), the GLC is coordinating a study of socio-economic benefits from restoration efforts in the Muskegon Lake AOC in Michigan. The study is being 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.

Funder(s): The 2016 NOAA-GLC Regional Partnership, which is funded through the GLRI.

Partners: NOAA, GVSU.

Schedule: All field data has been collected and a final report is under review by NOAA. Final publication of the results will occur this summer with a coordinated press release and presentation at the International Association for Great Lakes Research (IAGLR) conference.

Recent and Upcoming Activities:
- The GVSU team completed field work and produced a draft final report which is currently under review.
- The final report will be released in conjunction with a public presentation of the results during the International Association for Great Lakes Research Conference in June.

Lead Staff: Matt Doss, mdoss@glc.org.
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.

More information about the GLC’s coastal conservation and habitat restoration work can be found at www.glc.org/work/habitat.

Strategic Actions:

• 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, and in coordination with U.S. EPA, NOAA, the states and provinces, and local organizations.

• 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.

• 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.

• Communicate with partners, including U.S. EPA, NOAA, USGS, NRCS, Great Lakes Fishery Commission, Great Lakes Landscape Conservation Cooperative, and the Great Lakes Water Quality Agreement Annex 7 Subcommittee to ensure effective coordination and collaboration with state and provincial agencies, agriculture producers, conservation groups, and local partners in support of sound land management practices and strategically-targeted fish and wildlife restoration and conservation actions.

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

Projects

NOAA Regional Partnership to Support Habitat Restoration in Areas of Concern

Overview: The GLC is leading a NOAA Regional Partnership under the GLRI to support habitat restoration in Great Lakes AOCs and recently completed an additional Regional Partnership. The completion of the 2013 Regional Partnership finalized last winter provided more than $29 million for 13 habitat restoration projects in the St. Marys River and Muskegon Lake AOCs in Michigan and the Buffalo River AOC in New York. The 2016 partnership is ongoing and has provided $10.2 million to support habitat restoration in the Muskegon Lake and Clinton River AOCs in Michigan, the Maumee and Cuyahoga river AOCs in Ohio; a socio-economic study on the impacts of restoration at Muskegon Lake; and communications videos about restoration work in Great Lakes AOCs. The GLC applied for additional support under the 2019 Regional Partnership program earlier this year and anticipates a decision from NOAA by mid-summer. 2019 Partnership awards will continue to address AOC needs and expand consideration to priority coastal areas outside of AOCs. The GLC proposal included state priority projects recommended by four states.

Funder(s): National Oceanic and Atmospheric Administration with funding from the GLRI.


Recent and Upcoming Activities:

- Results of the socio-economic study conducted by Grand Valley State University will be made public and presented at the International Association for Great Lakes Research Conference in June.
- Three restoration project videos are in production and will make their debut during regional events including the AOC Conference in Cleveland in September.
- Initiated engineering and design work for a project at the Cascade Valley Metropark on the Cuyahoga River in Ohio. The project will restore 50 acres of floodplain and 5,000 linear feet of the Cuyahoga River.
- Began five new projects in the Muskegon Lake AOC, including work on planning for long-term restoration management, engineering and design for extensive restoration at two new locations, and conducting ecological monitoring of previous activities.
- Initiated engineering and design for the Penn 7 project in the Maumee River AOC, which will ultimately result in restoration of fish habitat, restoration of open water and emergent wetland, and increased fish nursery habitat on a 59-acre parcel along the river.

Lead Staff: Eric Ellis, eellis@glc.org.

Great Lakes Coastal Assembly

Overview: The GLC was on the steering committee of the Upper Midwest and Great Lakes Landscape Conservation Cooperative (LCC) and participated in the Coastal Conservation Working Group. Funding for the LCC was eliminated in 2018 and the program has been dissolved. A group of partners, including multiple states and the U.S. Fish and Wildlife Service, explored various opportunities to retain the benefits of the program and continue with many of the program goals, which led to the creation of the Great Lakes Coastal Assembly.

Funder(s): Currently very limited funding from non-GLC sources for meetings and logistics.


Schedule: The steering committee has periodic conference calls, otherwise activities are planned on an individual basis.

Recent and Upcoming Activities:

- The Assembly created a charter with a stated purpose to 1) promote collaborations aimed at management, restoration, and conservation of coastal areas; 2) assist organizations in assessing where investments should be made and aligning investments with regional, state, and local goals; and 3) identify needs for science and decision support and enable actions that help coastal managers make effective decisions.
- GLC is actively taking part in this group and will continue to cooperate with partners on priority coastal issues and regularly scheduled meetings. GLC staff attended the first meeting of the Assembly in Marquette in April. A number of working groups have been established.
- GLC staff are co-chairing the upcoming Assembly sponsored Great Lakes Coastal Wetlands Symposium which will take place in Toledo in September. Staff are also participating with the Blue Accounting working group.
NOAA Great Lakes Habitat Restoration Grant to Support the St. Clair-Detroit River System (SCDRS) Coastal Restoration Initiative

Overview: The goal of this NOAA grant program is to provide financial and technical assistance to habitat restoration projects that meet both NOAA's mission to restore coastal habitats and support the GLRI goal to protect and restore habitats in order to sustain healthy populations of native fish species in the eight U.S. Great Lakes states. The GLC worked with a variety of partners to submit the St. Clair-Detroit River System Coastal Restoration Initiative proposal in March of 2018.

Funder(s): NOAA, with funding from GLRI.

Partners: NOAA, Chesterfield Township (Macomb County, MI), Huron-Clinton Metropolitan Authority, Michigan Office of the Great Lakes, Southeast Michigan Council of Governments.

Schedule: The grant was awarded in August 2018 and has a three-year duration, with the opportunity to add additional projects in years two and three.

Recent and Upcoming Activities:

- $1.624 million in funding was awarded for two projects in 2018, these projects are currently being implemented.
  - Lake Erie Metropark Shoreline Restoration Project with the Huron-Clinton Metropolitan Authority in Wayne County, MI; 1,183 ft of hardened shoreline and 1.7 acres of Lake Erie coastal marsh will be restored by softening the shoreline and creating a network of shallow pools and channels within the coastal wetland.
  - Brandenburg Park Shoreline Restoration Engineering and Design project with Chesterfield Township in Macomb County, Michigan. This design process will lead to the eventual restoration of 740 ft of hardened shoreline and 1.5 acres of nearshore habitat at Lake St. Clair.

- GLC staff are in discussions with NOAA to identify and prioritize year 2 and year 3 projects and provide updated budget needs. These projects will be selected from the state prioritized list of projects submitted with the original application.

Additional Program Activities

- GLC staff helped lead a multi-day federal and state partners tour of priority coastal restoration sites along the SCDRS geography in March. This tour aligned with the initiation of a reef/nearshore habitat working group that was organized to develop and share information related to coastal restoration practices in the Great Lakes.
- GLC staff participated in the Coastlines and People planning workshop in Chicago, which is part of a University Cooperation for Atmospheric Research initiative funded by the National Science Foundation. The aim is to better understand research needs related to impacts of coastal environmental variability and natural hazards on populated coastal regions. An initial request from NSF for research and projects related to this effort was released in late April. More information is online at https://coastlinesandpeople.org/.
- GLC staff presented on the Little Rapids Restoration Project as part of NOAA's national restoration webinar series.
Aquatic Invasive Species Prevention and Control

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

More information can be found at https://www.glc.org/work/invasive-species.

Strategic Actions:

- 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.

- 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.

- 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.

- 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 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.

- 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.

- 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.

Projects

Great Lakes Panel on Aquatic Nuisance Species

Overview: The federal Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 called on the GLC to convene a panel of Great Lakes agencies and private, environmental, tribal and commercial interests to identify priorities for the Great Lakes region (including the eight Great Lakes states) with respect to nonindigenous aquatic invasive species (AIS); make recommendations to the national Aquatic Nuisance Species Task Force (ANSTF) regarding its own program initiatives; assist the ANSTF in coordinating federal aquatic nuisance species program activities in the Great Lakes; coordinate non-federal programs within the region; provide advice to public and private individuals and entities concerning methods of controlling AIS; and report to the ANSTF on activities within the Great Lakes related to AIS prevention, research and control.

Funder(s): U.S. Fish and Wildlife Service.

Partners: Great Lakes Panel (GLP) members: https://www.glc.org/work/glpans/members

Schedule: Ongoing.
Recent and Upcoming Activities:

- Convened a GLP meeting in November 2018 in Ann Arbor.
- Planning the next GLP meeting for May 2019 in Cleveland.
- Supporting two ad-hoc committees focused on coordinating and advancing regional risk assessment and grass carp activities.
- Providing input to NOAA GLERL on the updates to the Great Lakes Aquatic Nonindigenous Species Information System, including development of an AIS risk assessment clearinghouse.
- Working with the GLP Research Coordination Committee to conduct an analysis of regional AIS funding, with a focus on GLRI investments.
- Participated in the December 2018 ANSTF meeting and provided input to the ANSTF on development of the next ANSTF Strategic Plan.

Lead Staff: Erika Jensen, ejensen@glc.org

Analysis of Great Lakes Aquatic Invasive Species Funding

Overview: The GLC is conducting an analysis of invasive species funding since the implementation of the GLRI to summarize progress, identify trends and gaps, and develop a strategy to target remaining priority needs and help direct invasive species work over the next decade. This effort will complement and enhance current GLRI reporting systems through the collection of additional project information and by providing a more detailed analysis of how funding from the GLRI and other sources has invested in invasive species prevention and control. The result will be a repository of information that includes detailed project data and metrics.

Funder(s): U.S. Army Corps of Engineers through Ecology & Environment.

Partners: Great Lakes Panel on Aquatic Nuisance Species (GLP).

Schedule: May 2016-September 2018.

Recent and Upcoming Activities:

- Developing a series of factsheets to communicate findings to GLP membership.
- Presented and distributed final fact sheets to the GLP membership at the May 2019 GLP meeting.
- All project tasks are completed.

Lead Staff: Erika Jensen, ejensen@glc.org

Invasive Mussel Collaborative

Overview: The Invasive Mussel Collaborative (IMC) is working to advance scientifically sound technology for invasive mussel control to produce measurable ecological and economic benefits. The IMC provides a framework for communication and coordination and is identifying the needs and objectives of resource managers; prioritizing the supporting science; implementing communication strategies; and aligning science and management goals into a common agenda for invasive mussel control.


Schedule: Ongoing (Five-year agreement with USGS through 2023; current funding through May 31, 2020).

Recent and Upcoming Activities:
• Finalized and released a *Strategy to Advance Management of Invasive Zebra and Quagga Mussels* that is intended to drive investments, policy, and research around invasive mussels across the Great Lakes region and beyond. The strategy identifies research and management objectives to guide the development of effective control methods that can be used to restore impacted ecosystems.

• Completed a communications video highlighting the work of the IMC and the Strategy in late 2018.

• Completed an overhaul of the IMC website ([www.invasivemusselcollaborative.net](http://www.invasivemusselcollaborative.net)) to improve usability, functionality, and appearance.

• Developed a request for proposals for the control method demonstration and evaluation project in Sleeping Bear Dunes National Lakeshore to begin implementation of the Strategy and selected a contractor to complete work.

• Continued to develop and improve a summary document of available control methods and associated literature, case studies and permitting information.

• Hosted two webinars to showcase and discuss management strategies with a focus on genomic methods.

• Developed and populating a Research Program and Project map explorer tool that collates current and ongoing invasive mussel research activities into an easy-to-navigate map that provides information about projects across North America and provides geographic context for each program.

• Regularly convening the IMC Core Team, Steering Committee, and Science Team to provide guidance and input on IMC activities.

**Lead Staff:** Erika Jensen, ejensen@glc.org.

**Great Lakes Phragmites Collaborative**

**Overview:** The GLC and USGS are jointly leading a regional partnership – the Great Lakes Phragmites Collaborative (GLPC) – to improve communication and collaboration leading to more coordinated, efficient and strategic approaches to non-native *Phragmites* across the Great Lakes basin. The GLPC provides educational resources tailored to diverse interest groups, connects invasive species managers with the latest research and technology, encourages the use of adaptive management, and facilitates alignment of partner efforts across jurisdictional barriers.

**Funder(s):** U.S. Geological Survey via the Great Lakes Restoration Initiative.

**Partners:** U.S. Geological Survey.

**Schedule:** Ongoing (Five-year agreement with USGS through 2023; current funding through May 31, 2019).

**Recent and Upcoming Activities:**

• Advanced a Common Agenda to guide the work of the GLPC based on the principles of collective impact.

• Refined a measurement system to evaluate the progress of the GLPC on the Common Agenda.

• Shared the work of the GLPC as a novel application of collective impact to the natural resources field at prominent events including the Stewardship Network conference, the Midwest Fish and Wildlife conference, and the Canada Council on Invasive Species annual meeting.

• Regularly convened an Advisory Committee to guide the work of the GLPC and foster inter-jurisdictional partnerships.

• Hosted an ongoing webinar series where guest speakers shared successful models for *Phragmites* management, public outreach, and collaborative governance.

• Convened the Phragmites Symbiosis Collaborative, a forum for researchers to share and collaborate on their microbial or genetic research.

• Re-structured the GLPC website ([www.greatlakesphragmites.net](http://www.greatlakesphragmites.net)) to better direct visitors to resources specific to their needs.

• Developed audience-specific outreach materials across various multi-media formats.
**Phragmites Adaptive Management Framework (PAMF)**

**Overview:** The GLC and USGS are working to promote effective *Phragmites* management across the Great Lakes basin and track the effectiveness and resource efficiency of those management activities through the PAMF model. PAMF requires working with a variety of *Phragmites* managers across the basin, from state and federal employees to private citizens, in a strategic attempt to engage, learn from, and assist all levels of *Phragmites* managers.

**Funder(s):** U.S. Geological Survey via the Great Lakes Restoration Initiative.

**Partners:** U.S. Geological Survey and University of Georgia.

**Schedule:** Ongoing (Five-year agreement with USGS through 2023; current funding through May 31, 2019).

**Recent and Upcoming Activities:**
- Conducted 10 training sessions across the Great Lakes basin to educate *Phragmites* managers about PAMF and encourage their participation; reached 74 individuals from a wide variety of organizations.
- Traveled to new management units and worked with managers to enroll their units into PAMF and assist with the initial monitoring.
- Provided management guidance for 88 enrolled management units.
- Working daily with USGS and University of Georgia partners to effectively coordinate efforts.
- Developed a system to house and store PAMF data that is used for each year’s model run.
- Attended six conferences and 2 CISMA meetings; gave five oral presentations and one poster presentation. Additional conference, booths, and presentations are planned for the upcoming funding year.
- Drafting and executed a formal plan for outreach activities for the 2019/20 PAMF cycle.
- Scheduled four training sessions to be hosting in areas across the basin with poor participation (mid-Wisconsin, Pennsylvania, Chicago area, and west Michigan).
- In-field assistance (i.e., help enrolling and monitoring) will be offered to new and existing participants that wish to enroll new management units into PAMF from May-July 2019.
- Currently enrolling new management units for the 2019/2020 PAMF cycle year — contact the PAMF Coordinator at pamf@glc.org.

**Lead Staff:** Erika Jensen, ejensen@glc.org.

**Interstate Aquatic Invasive Species Prevention, Early Detection, and Response**

**Overview:** The GLC is supporting the eight Great Lakes states in their efforts to plan and coordinate interstate aquatic invasive species (AIS) prevention, early detection, and response activities. The GLC is conducting a pathway risk assessment focused on high priority aquatic invasive plants. Aquatic plants are introduced into the Great Lakes Basin via a number of pathways and the results of this effort will help the states and regional partners understand pathway activity for invasive aquatic plants; determine which pathways are associated with high-risk plant species; and identify gaps in management, compliance and law enforcement, and education for each pathway.

**Funder(s):** U.S. Fish and Wildlife Service through Michigan EGLE under the GLRI.

**Partners:** Michigan EGLE, The Nature Conservancy, and other state, provincial and federal agencies.

**Schedule:** May 2016 through December 2018.
Recent and Upcoming Activities:

- Completed a comprehensive and extensive risk assessment report with in-depth findings for eight priority pathways.
- Convened one meeting to review the findings of the risk assessment report and finalize contents.
- All project activities are completed; the GLC is working with the state partners to initiate a follow-on project focused on communications to support detection and response activities.

Lead Staff: Erika Jensen, ejensen@glc.org.

Great Lakes Detector of Invasive Aquatics in Trade

Overview: The GLC developed the web-based software tool Great Lakes Detector of Invasive Aquatics in Trade (GLDIATR), which collects, analyzes and allows users to access information about how many and what types of Great Lakes AIS are available for sale on the Internet. This information is being used by invasive species managers to inform and help target a variety of activities, including outreach and education, risk assessment, monitoring and surveillance, and enforcement.

Funder(s): U.S. EPA under the GLRI, Michigan DNR, Wisconsin DNR.

Partners: State, provincial and federal AIS managers.

Schedule: May 2016 through April 2019.

Recent and Upcoming Activities:

- Working with a multi-stakeholder advisory board to oversee implementation of GLDIATR.
- Working with a contractor to complete upgrades to the GLDIATR system, including a case management system to facilitate coordination and cooperation in enforcement between state agencies.
- Providing information and user accounts to managers and other interested parties.

Lead Staff: Erika Jensen, ejensen@glc.org.

Blue Accounting Aquatic Invasive Species Pilot

Overview: The GLC is working with The Nature Conservancy to develop and implement an AIS pilot project under the Blue Accounting program. The AIS pilot is focused on surveillance and rapid response to new species introductions; the organisms in trade pathway of spread; and control and management of invasive species. The GLC and TNC are working with a group of regional AIS experts and managers to provide input and guide implementation of the AIS pilot.

Funder(s): The Nature Conservancy (with funding from the Mott Foundation and other private foundations).

Partners: The Nature Conservancy.

Schedule: Ongoing.

Recent and Upcoming Activities:

- Transitioned leadership of the pilot from TNC to GLC.
- Released new content for the AIS pilot webpage (https://www.blueaccounting.org/issue/aquatic-invasive-species) focused on early detection of AIS.
- Convened an in-person meeting of the pilot work group in March 2019 to review existing web content and develop additional metrics.

Lead Staff: Erika Jensen, ejensen@glc.org.
Invasive Species and the Chicago Area Waterway System

Overview: The GLC engages with a 30-member Chicago Area Waterway System Aquatic Invasive Species Stakeholder Group (formerly referred to as the 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.

Funder(s): U.S. Fish and Wildlife Service and the Joyce Foundation

Partners: A broad array of Chicago/Northwest Indiana and regional organizations serve on the CAWS AIS Stakeholder Group, with the associated resource group including federal and state agencies.

Schedule: The GLC is transitioning out of its role supporting the group and will complete this process over the next six months.

Recent and Upcoming Activities:
- Developed a contract with the Northwest Indiana Regional Planning Committee to take over facilitation and convening of the group.
- Worked with NIRPC staff to transition facilitation and convening activities for the group.
- Participated in Steering Committee calls.

Lead Staff: Matt Doss, mdoss@glc.org

Additional Program Activities
- Participated as a member of the Great Water Research Collaborative (GWRC) Advisory Committee. The committee will meet next in May 2019 in Cleveland. Lead staff: Erika Jensen
- Supported planning and coordination of “AIS landing blitz” event that will be held in June-July 2019 to education boaters, anglers and other recreational users on steps they can take to prevent the movement of AIS. Lead staff: Erika Jensen.
- Participated on the Asian Carp Regional Coordinating Committee and the Executive Steering Committee for the Great Lakes and Mississippi River Interbasin Study. Lead staff: Matt Doss.
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.

More information on the GLC’s information management and Blue Accounting work is available at www.glc.org/work/info-management.

Strategic Actions:

- 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.

- 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 and ErieStat, described in the Water Quality Program Area, as Blue Accounting pilot projects.

- 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.

- 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.

- 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.

- 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.

Projects

Blue Accounting Initiative

Overview: A 2013 request from the Great Lakes governors and premiers called for a common approach to monitoring Great Lakes water resources and looked to the GLC for solutions. In 2014 a group of regional thought leaders, convened by GLC, responded to the governors’ and premiers’ resolution by proposing a framework for convening collaboratives around desired outcomes for the Great Lakes, and creating shared regional goals and measures of progress toward these goals. That framework is Blue Accounting. Launched in 2015, Blue Accounting uses a regional online platform—or web site—to showcase the goals, strategies, metrics, investments and results developed under the Blue Accounting framework.

Blue Accounting is currently piloting five “issues” to demonstrate the value and ability of convening regional collaboratives to set shared goals, select metrics for measuring progress toward those shared goals, and share the results (via well-vetted data and information) on a publicly accessible web site. Two pilots—focused coastal wetlands and invasive species—are being led by The Nature Conservancy (TNC). Three pilots—focused on...
phosphorus control, source water protection and maritime transportation—are being led by the GLC. (See other program area updates for details about the individual pilot projects.)

**Funder(s):** The Nature Conservancy, The Herrick Foundation; The Fred A. and Barbara M. Erb Family Foundation; The Joyce Foundation.

**Partners:** Since its launch, Blue Accounting has been implemented as a partnership that is jointly managed by the GLC and TNC through a memorandum of agreement. Since its inception, the initiative has benefited from support from David McLean, Business IT Director for Dow Chemical, who has provided business development and technical advice. In addition, an advisory committee supports the initiative with representation from state, federal and local governments, business, academia, and NGOs from the Great Lakes basin.

**Schedule:** Ongoing. Most grant funding extends through 2020.

**Recent and Upcoming Activities:**
- Steve Cole, who was hired in 2015 in large part to lead Blue Accounting, left the GLC in March 2018 at which point Victoria Pebbles assumed lead responsibility.
- Transition of the initiative from a partnership between GLC and TNC to it being governed and managed solely by GLC began in late 2018 and is expected to be completed by end of 2019. GLC Commissioners will play a much stronger role in the initiative once transition is complete.
- An updated five-year business plan for Blue Accounting is expected to be completed by second quarter 2019.
- Tawny Mata, who is jointly employed by TNC and GLC, has been working closely with Darren Nichols and Victoria Pebbles to organize briefings for new commissioners and administrations about Blue Accounting.
- The Blue Accounting Advisory Committee continues to be an important external force to champion and guide this effort.

**Lead Staff:** Victoria Pebbles, vpebbles@glc.org.

**Inland Sensitivity Atlas (Area Contingency Planning)**

**Overview:** GLC staff maintain the Inland Sensitivity Atlas (ISA) for Michigan, Ohio and Indiana under a cooperative agreement with U.S. EPA Region 5. The ISA is a set of GIS maps providing contingency planners and emergency responders with accurate and relevant sensitive information for spill preparedness and response. GLC staff work on contingency planning with U.S. EPA On-Scene Coordinators and local agencies to develop plans in three Indiana subareas: the Patoka River Planning Area supporting the Patoka River National Wildlife Refuge and Management Area; the White River sub-area planning area, which consists of five counties, including and upstream of Indianapolis; and the Northwest Indiana Planning Area, which includes the watersheds touching Lake Michigan in three Indiana Counties. A goal of this activity is to develop best practices for sub-area plans throughout the Great Lakes states. The GLC works closely with Region 5's Regional Response Team to support their website (RRT5.org), technical tools, “story maps,” mapping products, documents for emergency response plans, and field data collection.

**Funder(s):** U.S. EPA Region 5.

**Partners:** Region 5 Regional Response Team (RRT), Upper Mississippi River Basin Association (UMRBA) in Minnesota, and TetraTech.

**Schedule:** Ongoing since 2001; current period October 2018 through September 2023.

**Recent and Upcoming Activities:**
- Completed the draft of “EPA Region 5 Geographic Response Plan (R5 GRP) Response Strategy Survey User Guide.”
- Completed update of the Great Lakes GIS coastal layer for the RRT5 Jurisdictional Viewer. Working on a hybrid wetland GIS layer.
- Attended and worked on contingency planning for the White River sub-area. Delivered a network analysis to the White River On-Scene Coordinator.
- Currently updating the Ohio ISAs with a priority of incorporating a new hazardous materials dataset into the Ohio ISA.
- Attended two meetings of the Region 5 RRT in October 2018 and April 2019

Lead Staff: Tom Crane, tcrane@glc.org and David Betcher, dbetcher@glc.org.
Policy Coordination and Advocacy

Progress on the GLC’s 2019 Federal Priorities

The centerpieces of the GLC’s policy coordination and advocacy program are its annual legislative priorities statement and Great Lakes Day in Washington. The 2019 statement, *Investing in a National Asset: A Leadership Agenda for Great Lakes Restoration and Economic Revitalization*, was released in March 2019 at Great Lakes Day and is guiding the GLC’s advocacy activities. The top priorities for 2019 are:

- Fully fund the Great Lakes Restoration Initiative to help communities clean up degraded areas and create new economic opportunities along their waterfronts.
- Modernize water infrastructure and safeguard drinking water to protect public health, support business and industry, and help revitalize communities.
- Strengthen the Great Lakes navigation system to support the national economy, create jobs, and reduce traffic congestion.
- Protect against invasive species like Asian carp, zebra mussels and sea lamprey.
- Promote agricultural conservation to protect water quality and prevent harmful algal blooms.
- Coordinate federal programs to manage information and ensure regional accountability.

As in recent years, the GLC also partnered with a number of regional agencies and organization on a joint statement of common regional priorities. These priorities are consistent with those presented in the GLC’s statement and help demonstrate broad-based support for key priorities for the Great Lakes.

Final FY 2018 and 2019 Appropriations for Major Great Lakes Programs, President’s FY 2020 Budget Request, and Status of Congressional Action on FY 2020 Appropriations

The following table presents final FY 2018 and FY 2019 appropriations (in millions of dollars) for selected Great Lakes programs, the President’s budget request for FY 2020, and Congressional action to date on FY 2020 appropriations. There has been no action to date in Congress on FY 2020 appropriations bills.

*Updated May 5, 2019*

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<tr>
<th>Program</th>
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<th>FY 2019 Final Appropriations</th>
<th>FY 2020 Budget Request</th>
<th>Congressional Actions to Date on FY 2020 Appropriations</th>
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Reference

This section includes:

- Great Lakes Basin Compact
- Great Lakes Commission Bylaws
- Membership lists
  - Commissioners, Associate Commissioners and Alternates (updated list to be provided separately at the Semiannual Meeting)
  - 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 override 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.

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