

# **Joint Action Plan for Clean Water Infrastructure and Services in the Great Lakes Region**

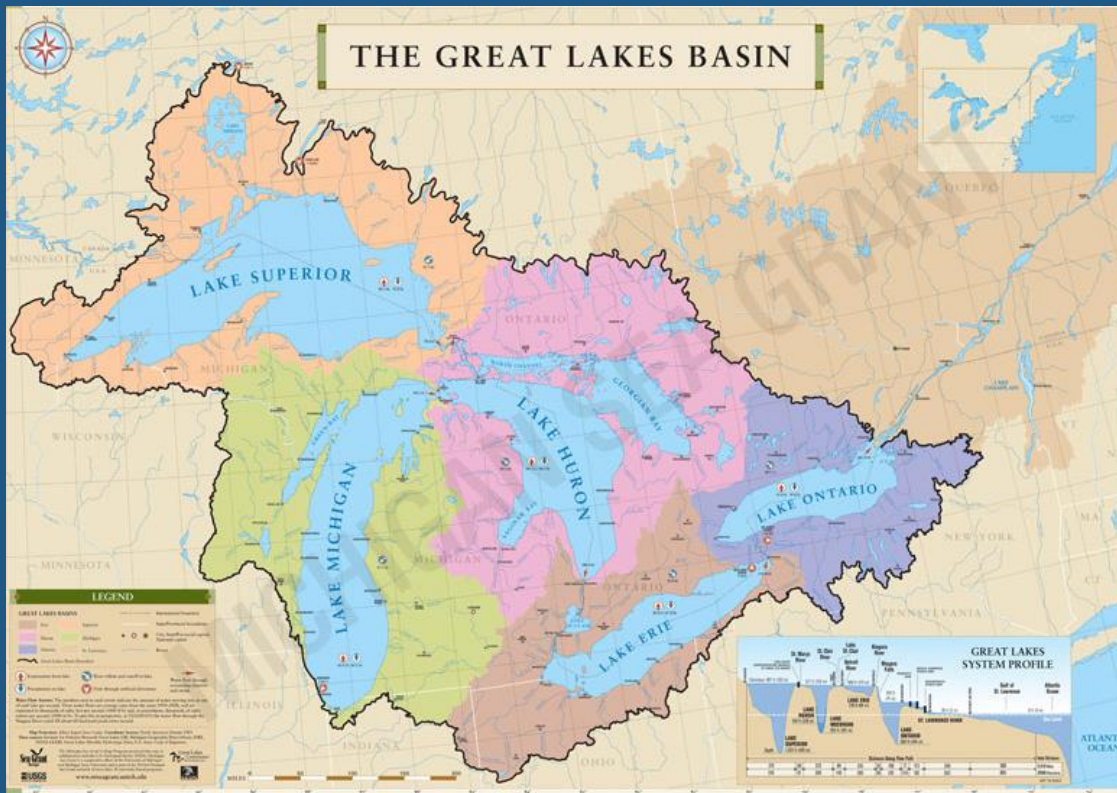
*A product of the Great Lakes Commission  
Clean Water Infrastructure and Services Working Group*

*Presented by*  
**Victoria Pebbles**  
**Program Director**

Pennsylvania Lake Erie Environmental Forum – March 27, 2018

# The Great Lakes Commission

## *Who we are & What we do*



- Interstate Compact Agency established in 1955 by the Great Lakes Basin Compact
- Members include 8 Great Lakes states, with associate member status of Ontario & Quebec
- Represent, advise & assists member states & provinces by speaking with a unified voice to advance regional goals

# The Joint Action Plan

## Background & Process

### Joint Action Plan for Clean Water Infrastructure and Services in the Great Lakes Region

*A Product of the Great Lakes Commission Clean Water Infrastructure and  
Services Working Group*

September 2017

This Joint Action Plan was developed by the Great Lakes Commission's Clean Water Infrastructure and Services Working Group with support from Great Lakes Commission staff. Members of that Working Group include: Jerry Roudi, Assistant Chief, Office of Financial Assistance, Division of Environmental and Financial Assistance at the Ohio Environmental Protection Agency; Jay Patel, Environmental Program Manager, Bureau of Clean Water, Division of Municipal Facilities at the Pennsylvania Department of Environmental Protection; Scott Twaik, Environmental Protection Engineer, Bureau of Water at the Illinois Environmental Protection Agency; Aziz S. Ahmed, Manager (A), Licensing and Approvals Section, Safe Drinking Water Branch, Drinking Water Management Division at the Ontario Ministry of the Environment and Climate Change; and Angela Ayers, Special Advisor for the Environment, Executive Office of Governor Rick Snyder. Staff support at the Great Lakes Commission was provided by Victoria Pebbles, Program Director, Dan Gold, Senior Program Specialist, and Ned Willig, Research Associate. These individuals endeavored to reflect the programs and policies of their agencies in developing this action plan, the views expressed herein do not necessarily represent the agencies that employ these individuals.

- Responded to three previous resolutions passed by GLC calling for action to improve CWIS in the Great Lakes Basin
- Working Group: Ohio, Michigan, Illinois, Pennsylvania, Ontario
- Literature review (50+ documents)
- Iterative process with input from Working Group and Great Lakes Commission Board sub-committee
- Analyses current state of CWIS needs and provides recommendations for mitigating identified issues
- Endorsed via resolution adopted by the Great Lakes Commission, September 2017

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## Total CWIS Needs for All Great Lake States & Provinces

**Total 20-Year Binational Needs: \$271.1 Billion**

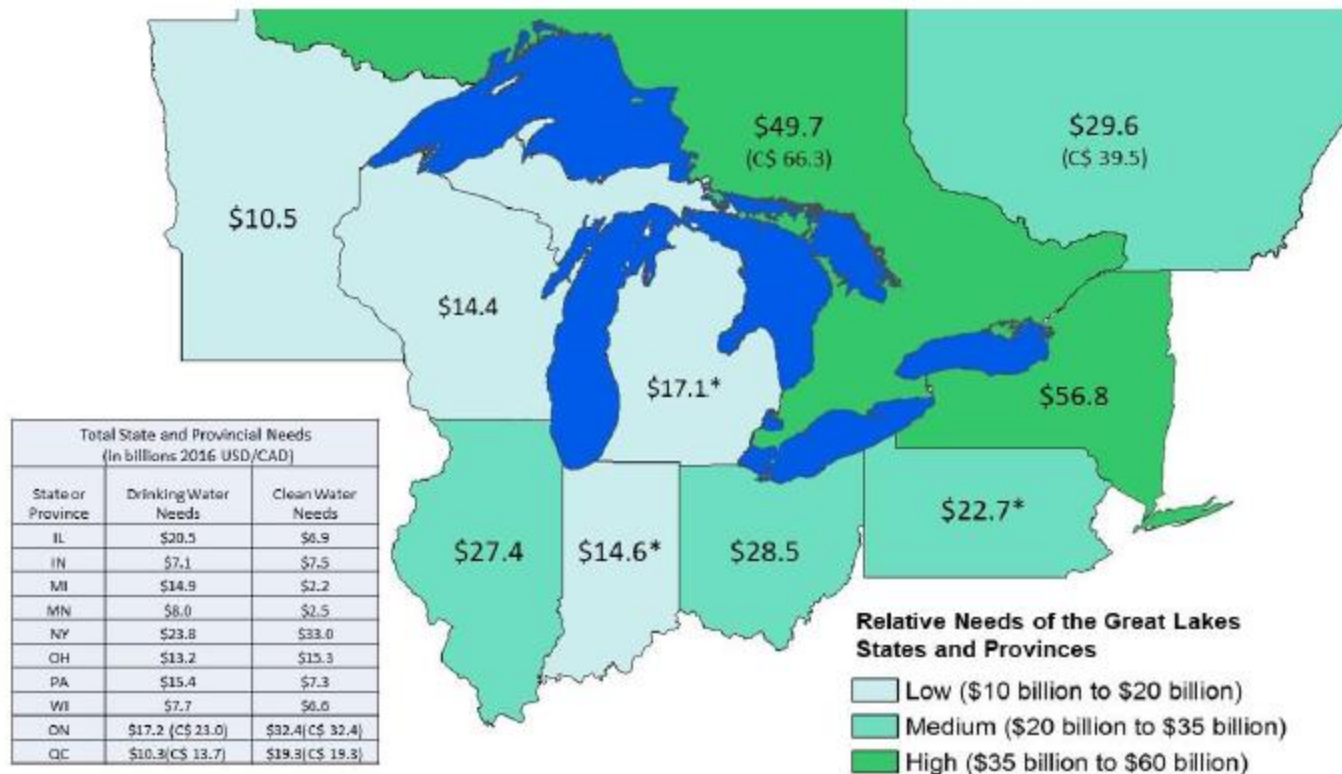
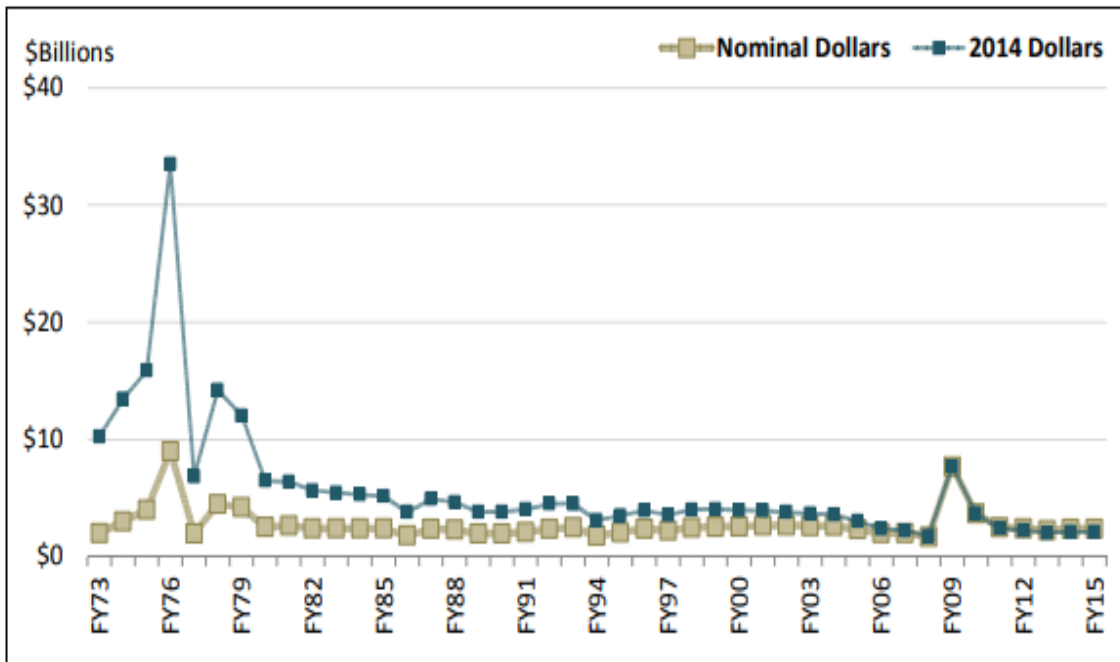


Figure 1: Total 20-Year Regional Clean Water Infrastructure and Service Needs (in Billions of USD and CAD) for the Great Lakes States and Provinces<sup>1</sup>.

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## *How did we arrive here?*

**Figure I. Total EPA Water Infrastructure Appropriations in Nominal and Constant (2014) Dollars**  
FY1973-FY2015



**Source:** Compiled by CRS. Constant dollars calculated from Bureau of Economic Analysis, National Income and Product Account Tables 5.9.4A and 5.9.4B, line 37 (Price Index for State and Local Government Investment in Sewer Systems). Constant dollar figure for FY2015 is estimated.

- Decreased federal funding w/o offset from state/provincial & local govts or other sources
- Lack of long-term planning for maintenance, system upgrades, replacement
- End of natural lifespan for some infrastructure
- Urbanization, demographic change, & changing climate increases stress on systems
- Lack of comprehensive CWIS asset & needs inventory

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## Deferred Action and the Growing Investment Gap

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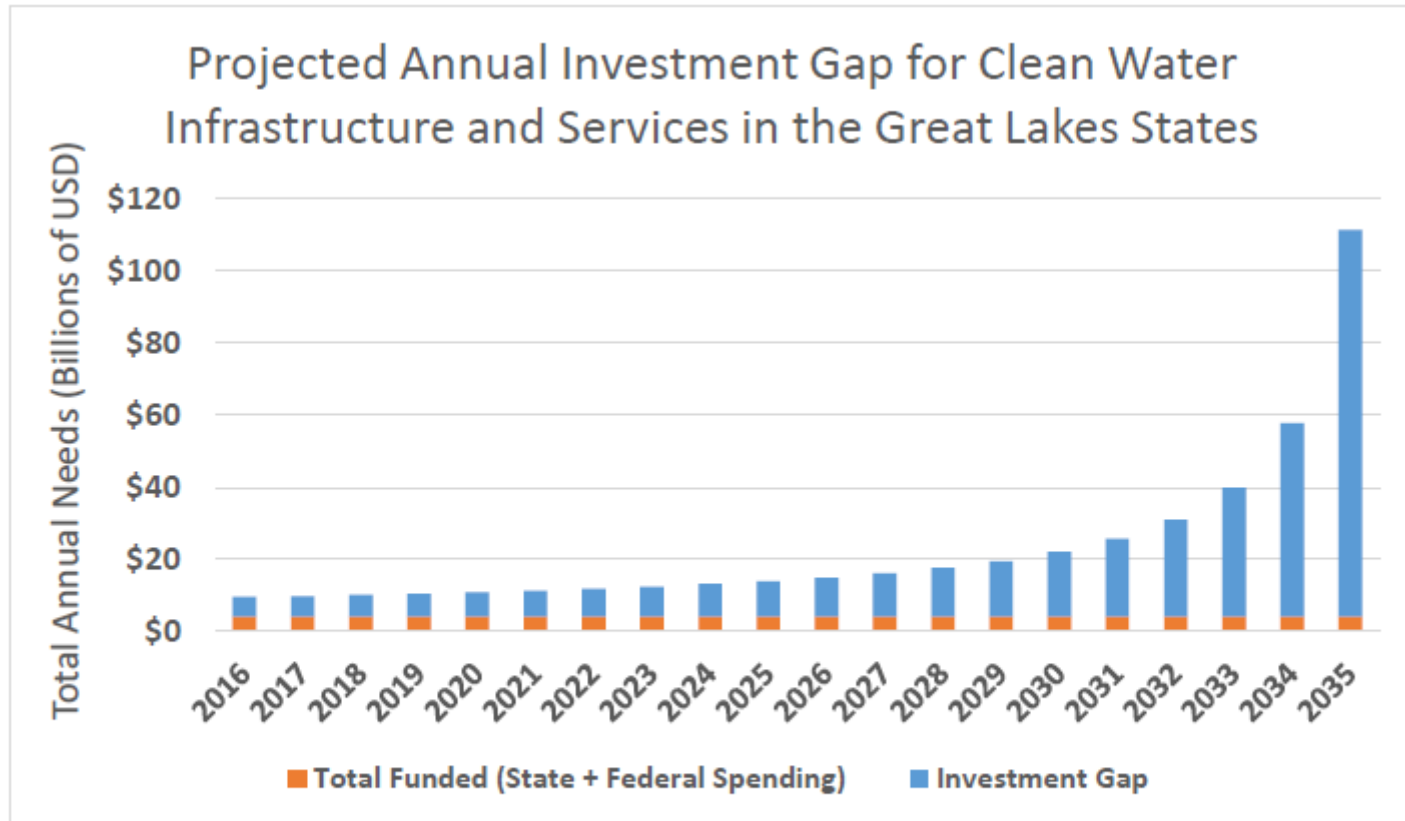


Figure 3: Projected Annual Investment Gap for Clean Water Infrastructure and Services in the Great Lakes States Based on 20-Year Needs Estimates and 2016 Funding Levels<sup>10</sup>



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## Water-Dependent Economy

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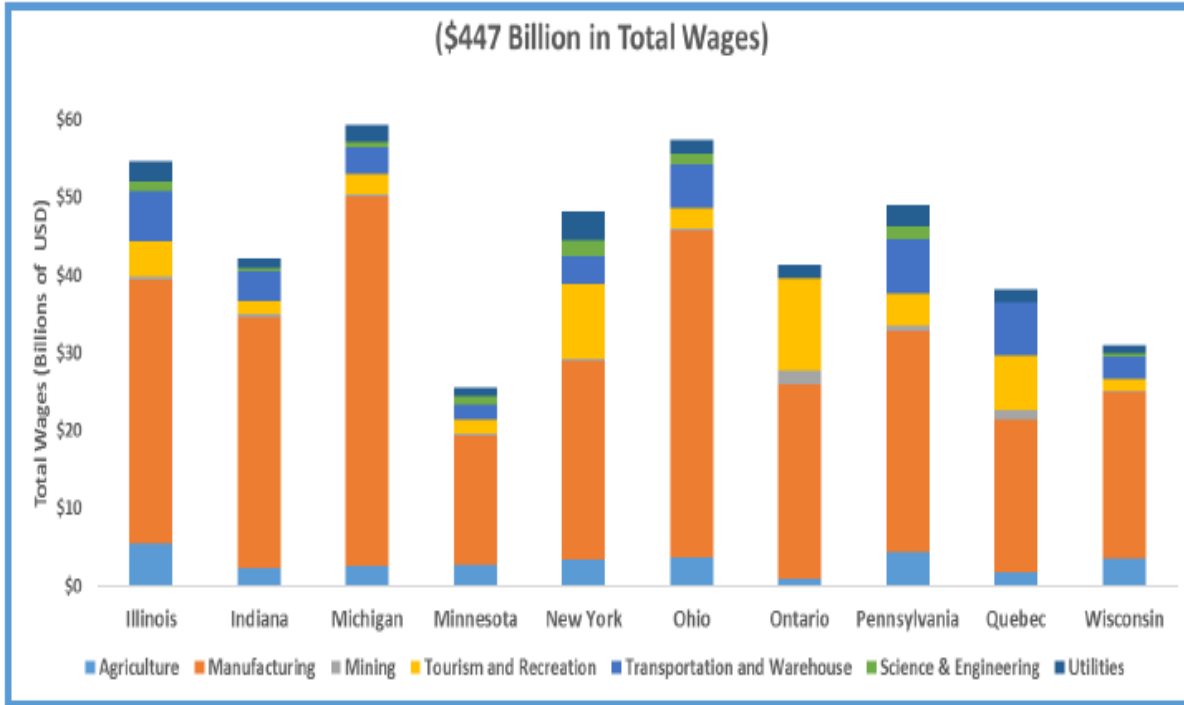


Figure 2: Annual Wages from Water Dependent Industries in the Great Lakes States and Provinces<sup>7</sup>

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Table 1: Thousands of Jobs in Water Dependent Industries and percentage of all jobs in the Great Lakes States and Provinces

Jurisdiction	Total Jobs in Water Dependent Industries	% of Total Employment
Illinois	910	15%
Indiana	769	24%
Michigan	961	21%
Minnesota	453	16%
New York	848	9%
Ohio	1,063	19%
Ontario	1,480	21%
Pennsylvania	933	15%
Quebec	1,117	27%
Wisconsin	611	20%
<b>TOTAL</b>	<b>9,144</b>	<b>18%</b>

3 & 4: Source: Great Lakes Commission, 2017: Joint Action Plan for Clean Water Infrastructure and Services in the Great Lakes Region

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## *Recommendations*

- **17 recommendations targeted at the State/Provincial, Federal, and Local levels**
- **Emphasizes State/Provincial, but maintaining and improving CWIS is the shared responsibility of all levels of government**
- **Strong overlap among recommendations at each level: improved coordination is key**
- **17 recommendations are distilled into 6 general recommendations for all levels of government**



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## *Recommendations*

- 1. Embrace an integrated planning, or “one water” approach through creating offices, positions, or other opportunities to prioritize CWIS investments, assist with evaluating CWIS needs, and better coordinate the delivery of programmatic, technical, and financial services.**
- 2. Create policies and guidelines supporting water infrastructure asset inventories and asset management plans to better inform strategic investments, and consider a regional effort to track and report on clean water infrastructure and services investments and outcomes.**

# The Joint Action Plan

## *Recommendations*

- 3. Promote the development of regional water authorities and the consolidation and integration of utilities.**
- 4. Explore the strengths and weaknesses of private-public partnerships (P3s) as a potential source of private sector investment in clean water infrastructure and services.**
- 5. Increase state and provincial-level funding allocations and economic incentives for CWIS improvement projects.**
- 6. Create enabling conditions for local utilities to implement measures that address affordability.**

# The Joint Action Plan

## *Reception & Next Steps*

- **Synergy with other organizations and state initiatives**
  - US Water Alliance  
*An Equitable Water Future: Opportunities for the Great Lakes Region (March 2018)*
  - State of Michigan office of the Governor  
*21st century Infrastructure Commission Report*
- **Asset Inventory Management**
  - GLC continues to explore funding options and partnerships to pilot a basin-wide asset management inventory tracking program.

# The Great Lakes Commission

*Joint Action Plan for Clean Water and Infrastructure Services in the Great Lakes Region*

# Thank You!

# Questions?

View and download the Joint Action Plan on GLC's website ([glc.org](http://www.glc.org)):  
<http://www.glc.org/work/water-infrastructure-action-plan>

Contact me: [vpebbles@glc.org](mailto:vpebbles@glc.org)