

Challenges, Shortcomings, and Opportunities for Improved Technology Transfer

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U.S. Environmental Protection Agency
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1. Insight into early-stage challenges of remediation technology development
2. What is GLNPO and the Great Lakes Legacy Act (GLLA)?
3. Potential opportunities for demonstrating innovative remediation technologies / techniques

What is the Great Lakes National Program Office (GLNPO)?

- EPA's first geographically-based program office
- Established in 1978 to oversee U.S. efforts to implement Great Lakes Water Quality Agreement (GLWQA) with Canada 🍁
 - GLNPO has statutory authority under CWA §118 to carry out U.S. GLWQA responsibilities 🦅
- Great Lakes Restoration Initiative (GLRI) is implemented through 5-year action plans, split into 5 focus areas:
 1. Toxic substances & areas of concern (AOCs)
 2. Invasive species
 3. Nonpoint source pollution impacts on nearshore health
 4. Habitats and species
 5. Foundations for future restoration actions (education & science)



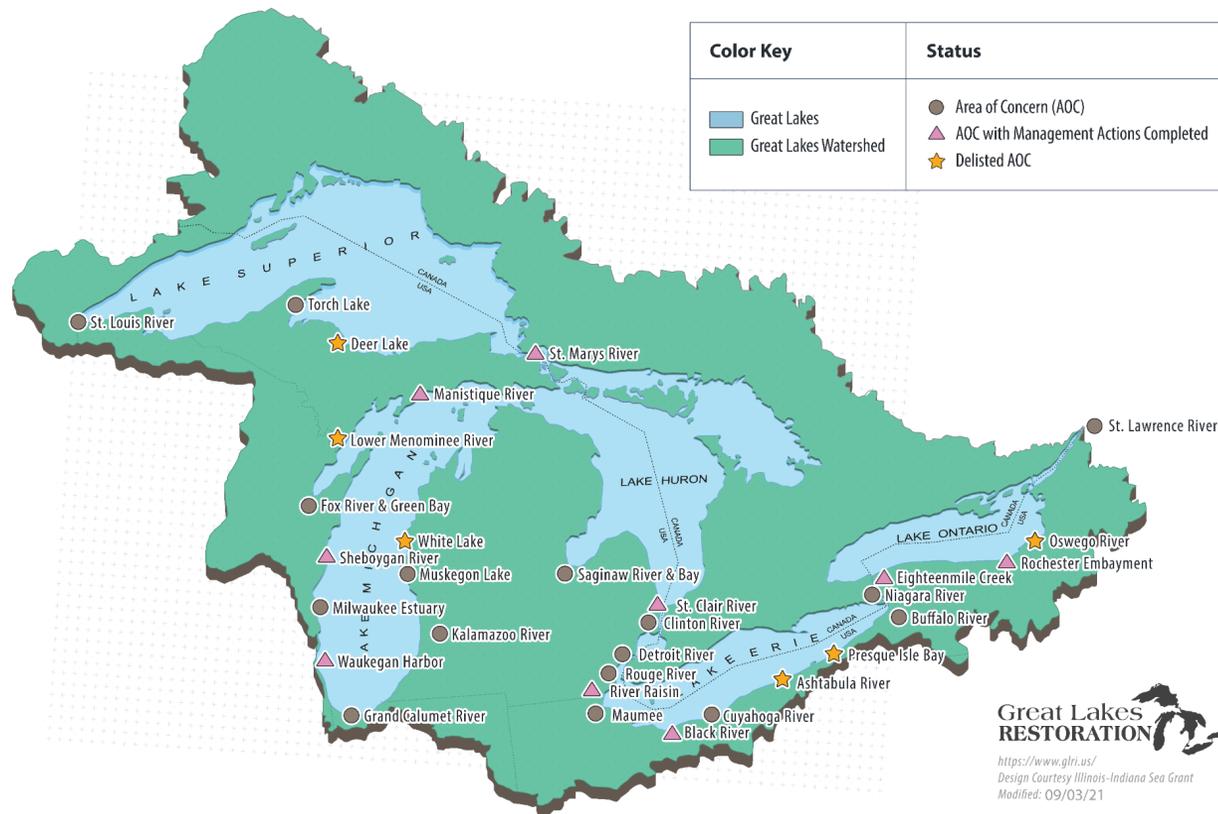
GLNPO achieves its mission by:

- Implementing the GLRI action plan
- Monitoring the health of the Great Lakes
- Providing grants for innovative projects
- Conducting contaminated sediment remediation projects under Great Lakes Legacy Act (GLLA) authority and funding

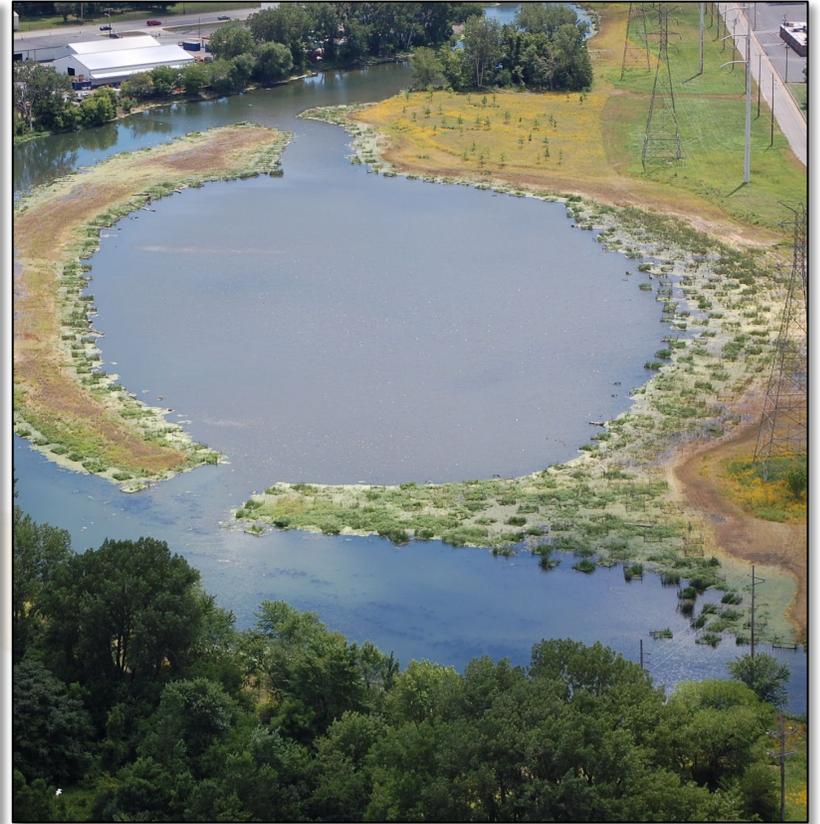


What is the Great Lakes Legacy Act (GLLA)?

U.S. Great Lakes Areas of Concern



- **Goal:** Accelerate the pace of sediment remediation at Areas of Concern (AOCs)
- **Mechanism:** Use partnerships as an innovative approach to conducting sediment remediation
- **Minimum:** 35% non-federal cost sharing requirement



GLLA projects take an R→R→R approach

Remediation → Restoration → Revitalization

GLLA projects represent opportunities for FRTR agencies & other collaborators but there are challenges

Opportunities

- Expansive areas (AOCs) where sediment remediation needs to occur
 - Potential site access for collaborators to pilot innovative remediation technologies
- GLLA project implementation structure lends itself to partnerships
- Connections with federal, state, local, and university contacts to help facilitate pilot-scale projects

Challenges

- Aligning timescale and other site-specific needs between project partners
- Scaling-up production of supplies required for implementation
- Training requirements necessary to apply innovative remedies
- Monitoring remedy effectiveness

