

Bay Beach Restoration... Past, Present, and Future

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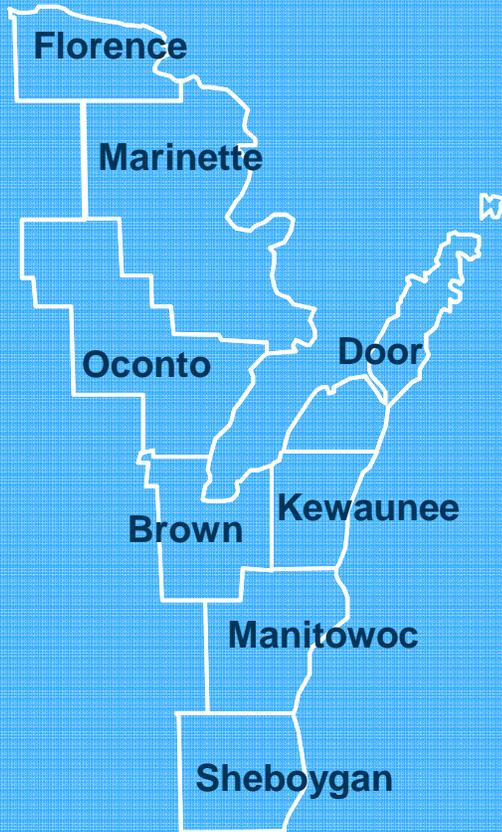
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BAY-LAKE
REGIONAL PLANNING COMMISSION

Bay-Lake Regional Planning Commission • Manitowish • Marinette • Oconto • Sheboygan

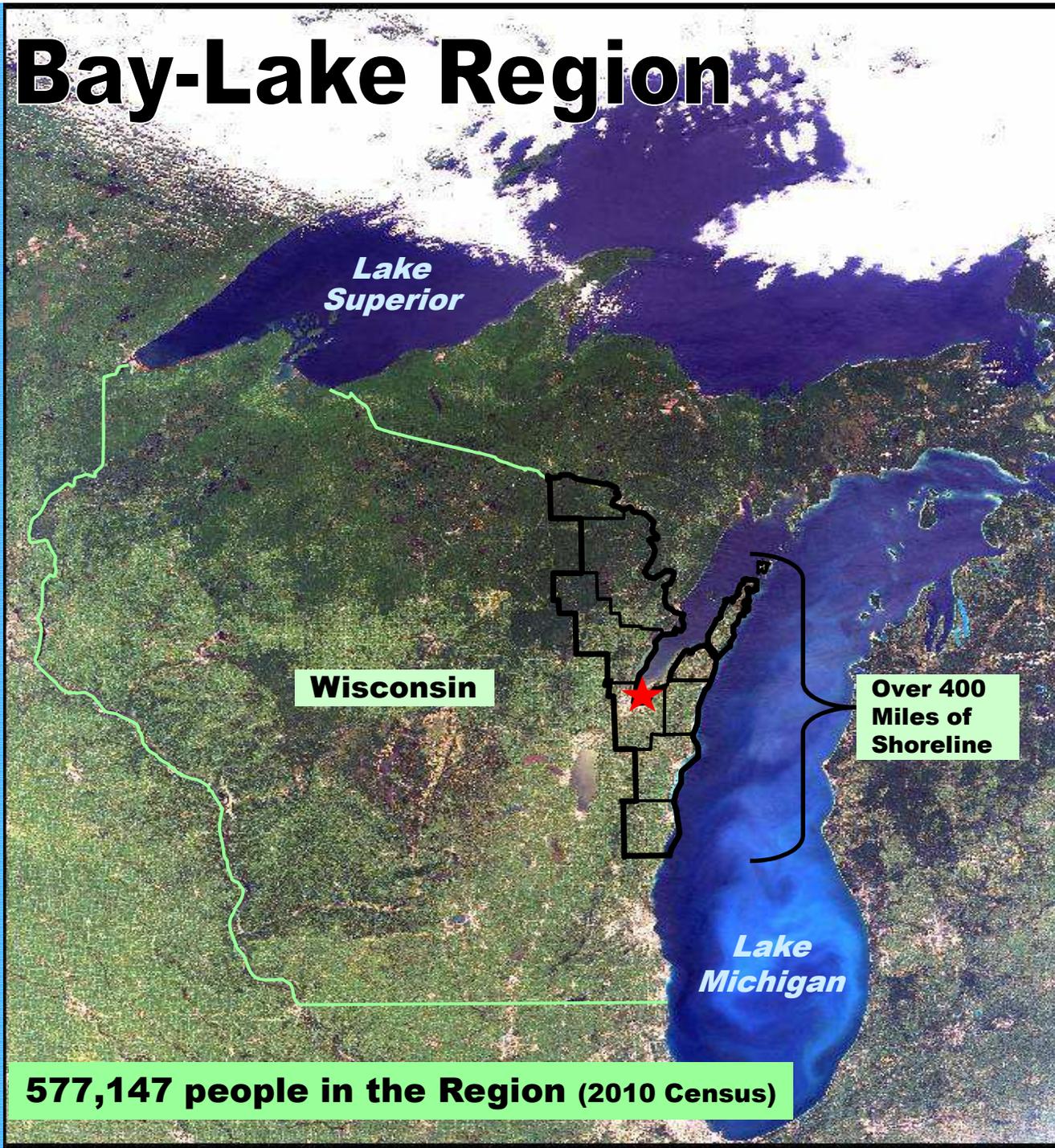


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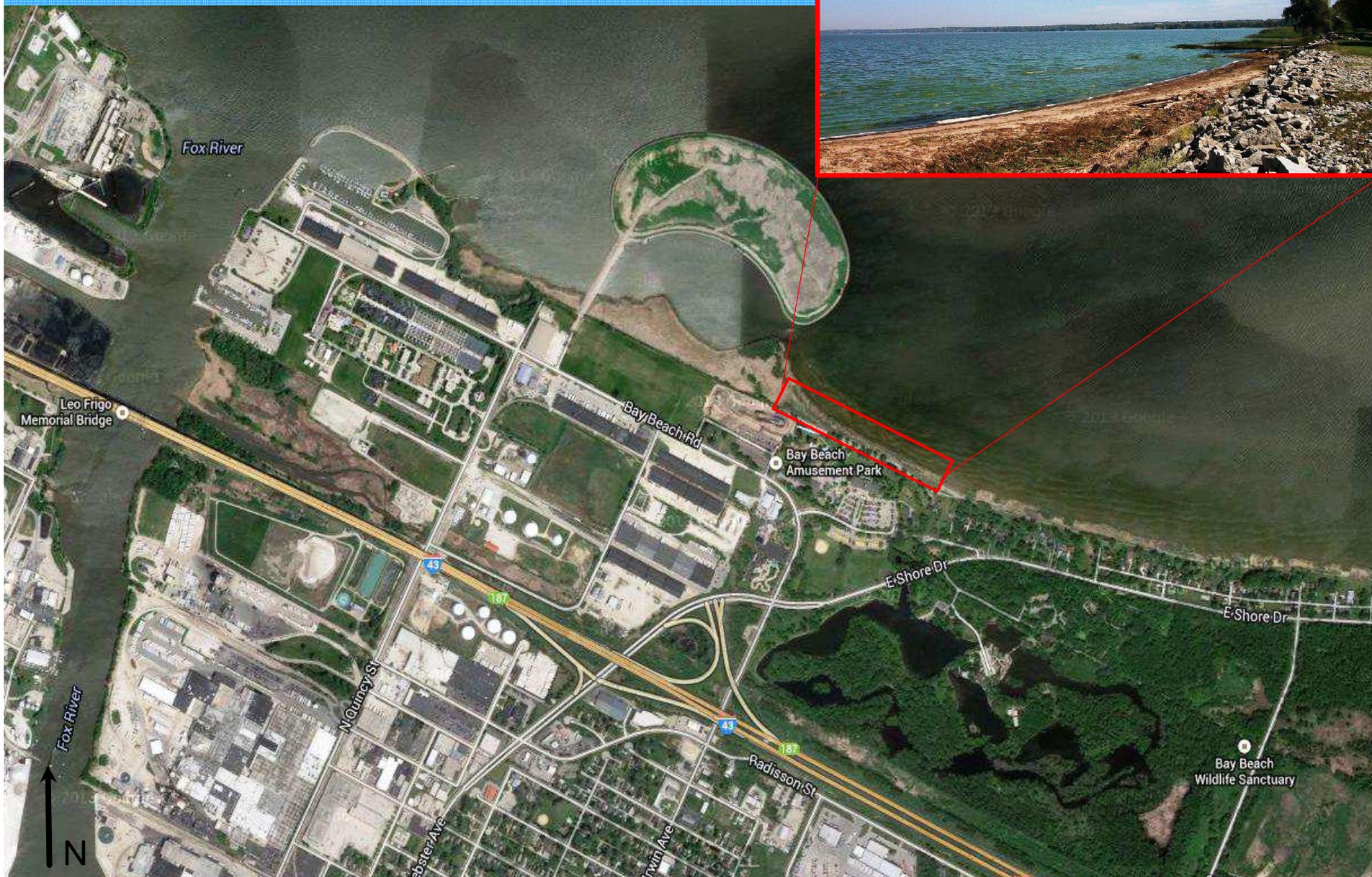


- **Established in 1972**
- **Eight Counties**
 - **185 Units of Government (Counties, Cities, Villages, and Towns ~ includes the Oneida Nation)**
- **Areas of Work**
 - **Local Community Planning Assistance**
 - **Natural Resources Planning**
 - **Economic Development**
 - **Transportation Planning**
 - **Geographic Information Systems (GIS)**

Bay-Lake Region



Bay Beach

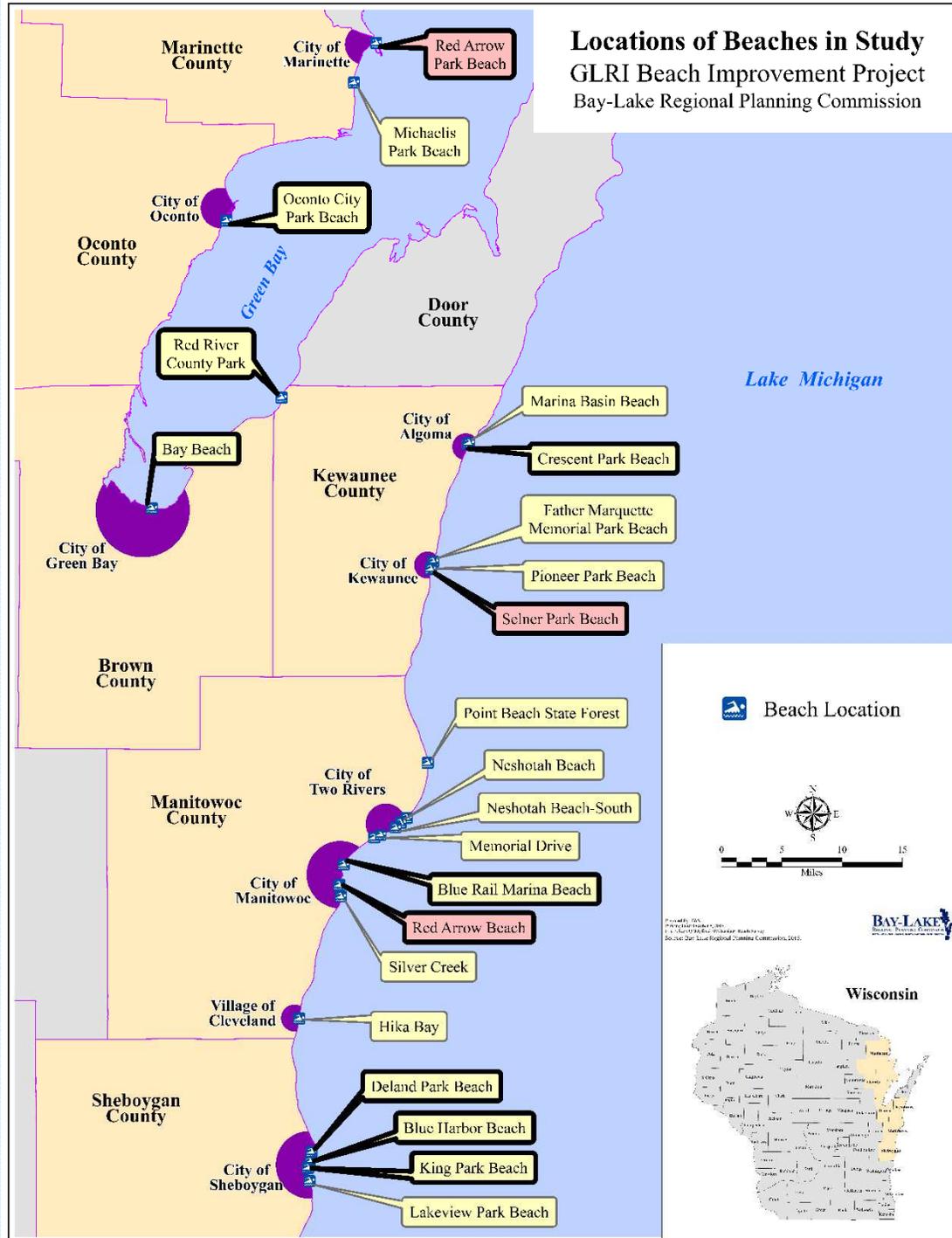


Bay Beach History



Can Bay Beach be Restored?

- **In 2011, Green Bay Mayor Jim Schmitt started the discussion with a comment to the Green Bay Press-Gazette**
- **In 2012, the EPA provided funding to study Bay Beach and develop a restoration action plan**
 - **Project partners: City of Green Bay, Clean Bay Backers (Green Bay Citizen Advisory Committee), UW-Oshkosh, Wisconsin Sea Grant Institute, Miller Engineers & Scientists, City of Racine Health Department**
 - **3-year study of recreational water quality for public health**
 - **Action plan outlined steps needed to restore the beach**



Beach Improvement Plans

- Bay Beach – Green Bay
- **Red Arrow Beach – Marinette**
- Oconto City Park Beach – Oconto
- Red River County Park Beach – Red River (town)
- Crescent Beach – Algoma
- **Selner Park Beach – Kewaunee**
- Blue Rail Marina Beach – Manitowoc
- **Red Arrow Beach – Manitowoc**
- Deland Park Beach – Sheboygan
- Blue Harbor Beach – Sheboygan
- King Park Beach – Sheboygan
- ★ **Implemented Plans**

An Action Plan for Restoring Bay Beach

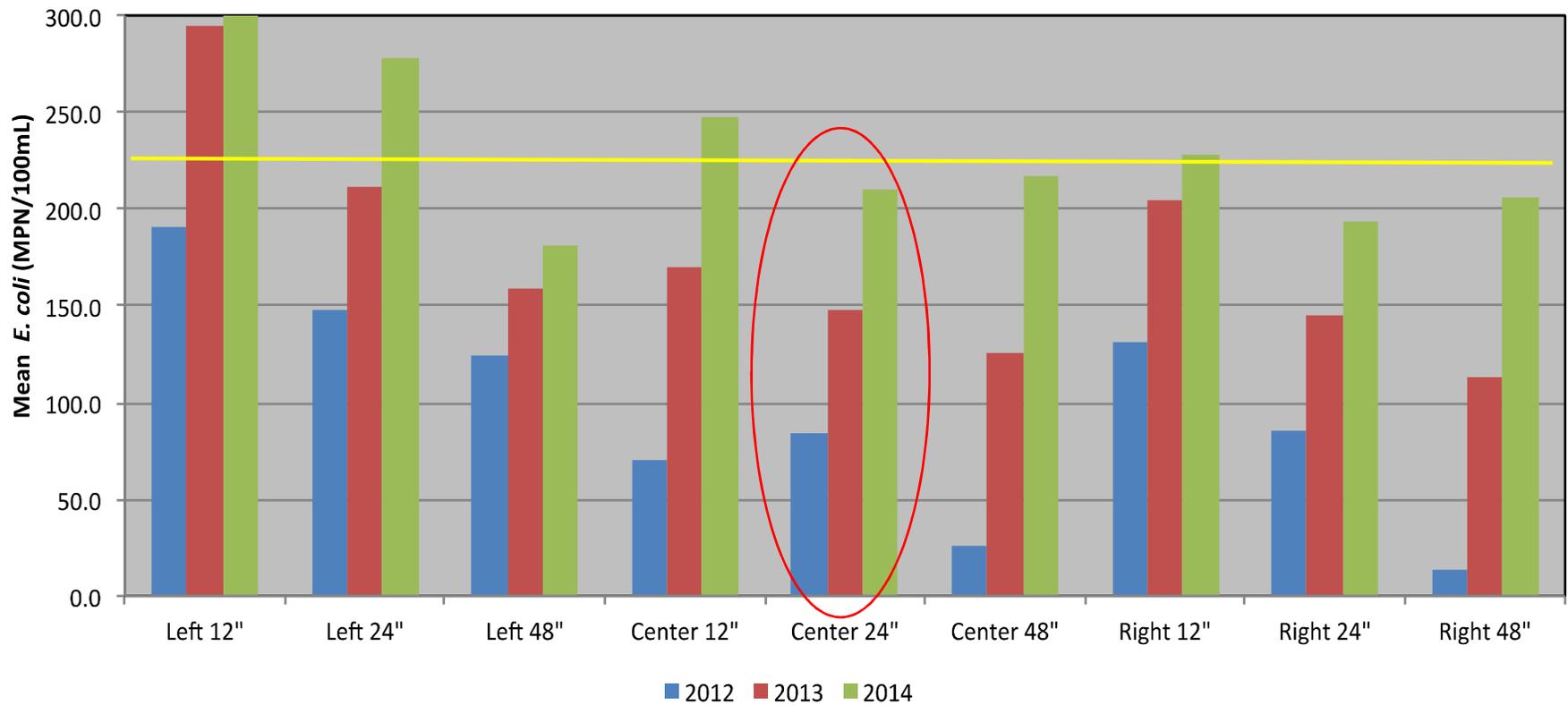
- **Water quality monitoring**
- **Summarized PCB data from sediment monitoring**
- **Beach best management practices guidance**
- **Restoration recommendations**
- **Identify action steps towards restoration**

Bay Beach Monitoring

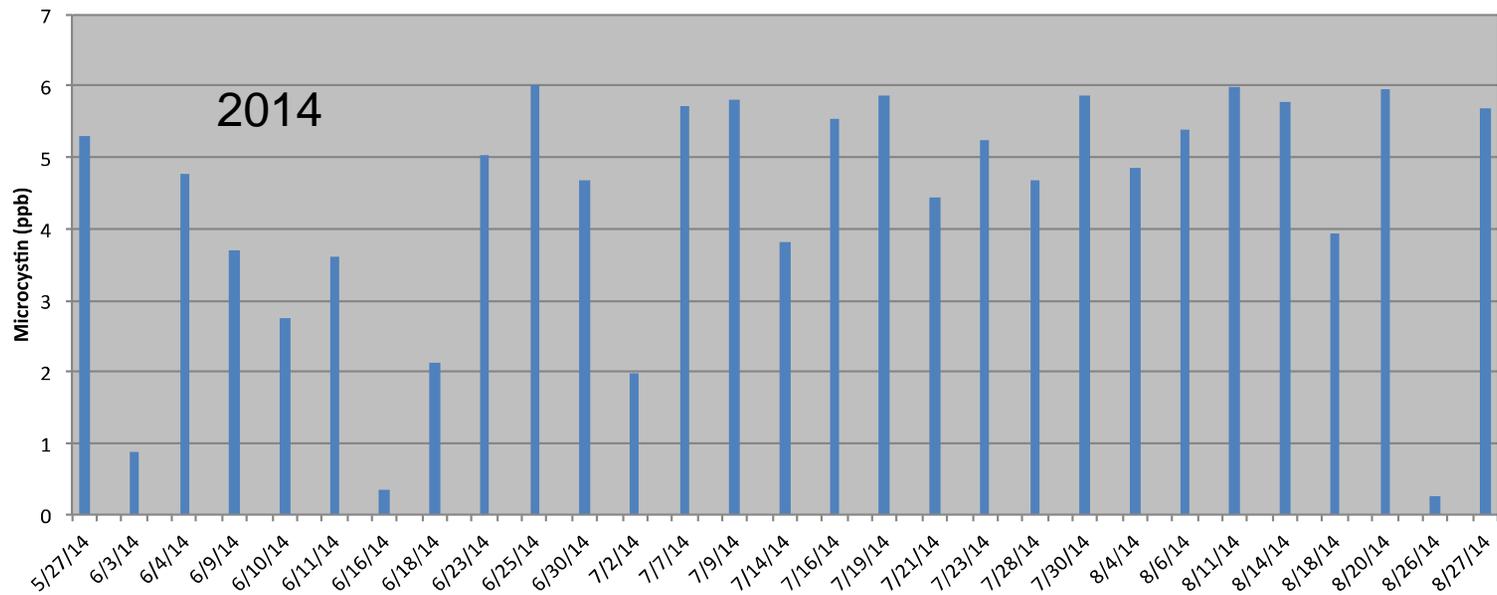
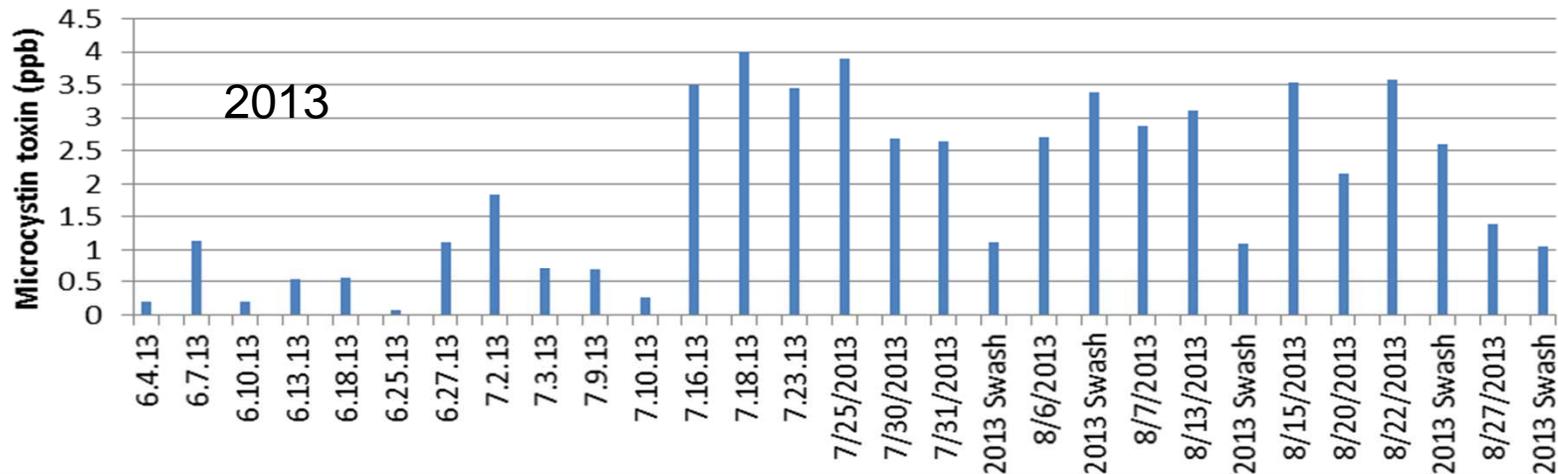
- **Collected *Escherichia coli* (*E. coli*) and microcystin data**
- ***E. coli* data was gathered during the later part of the summer of 2012 and the full season of 2013 and 2014.**
- **Microcystin data was gathered for the full season of 2013 and 2014.**

Bay Beach *E. coli* Test Results

Bay Beach Mean Spatial *E. coli* in Water 2012-2014



Microcystin Test Results



Other Potential Pollutant Concerns

- **Other potential concerns based on historic water quality in Green Bay**
 - **PCBs and Mercury**
- **Data has been collected around Renard Island and in the Bay for over a decade**
 - **US Army Corps of Engineers, WI DNR, UW-Sea Grant, and other researchers**

PCBs

- **The health risk based on skin contact or consumption of PCB-contaminated sediment at Renard Island is low**
- **PCBs concentration in sediment at Renard Island are:**
 - **Over 100 times lower than the Great Lakes Protocol Health Protection level for children**
 - **Over 400 times lower than the Agency for Toxic Substance and Drug Registry's minimum risk level for children**

Mercury

- **Methylmercury is present in such low (diluted) amounts in the Bay that it is not feasible to ingest a harmful quantity**
- **The primary mercury risk to humans is through fish consumption as it moves up the food chain and becomes concentrated in fish tissue**

Safety and Access Concerns

- **Beach redesign and Phragmites removal will provide safe access and improve the appearance**



Beach Redesign Plan Concept



Redesign Plan Concept Image



“Bring Back the Beach”

- Mayor has announced plans to get Bay Beach restoration underway within three years
- Green Bay Packers Stadium Board granted \$120,000 towards restoring Bay Beach



Phragmites Removal

- *Phragmites* treated in October 2015
- To be mowed in winter 2015
- Follow-up treatment in late summer 2016



Next Steps

- Follow-up *Phragmites* treatment
- Further studies and modeling
- Address fish and wildlife habitat concerns
- Acquire permits
- Engineering
- Secure funding



Thank you!

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