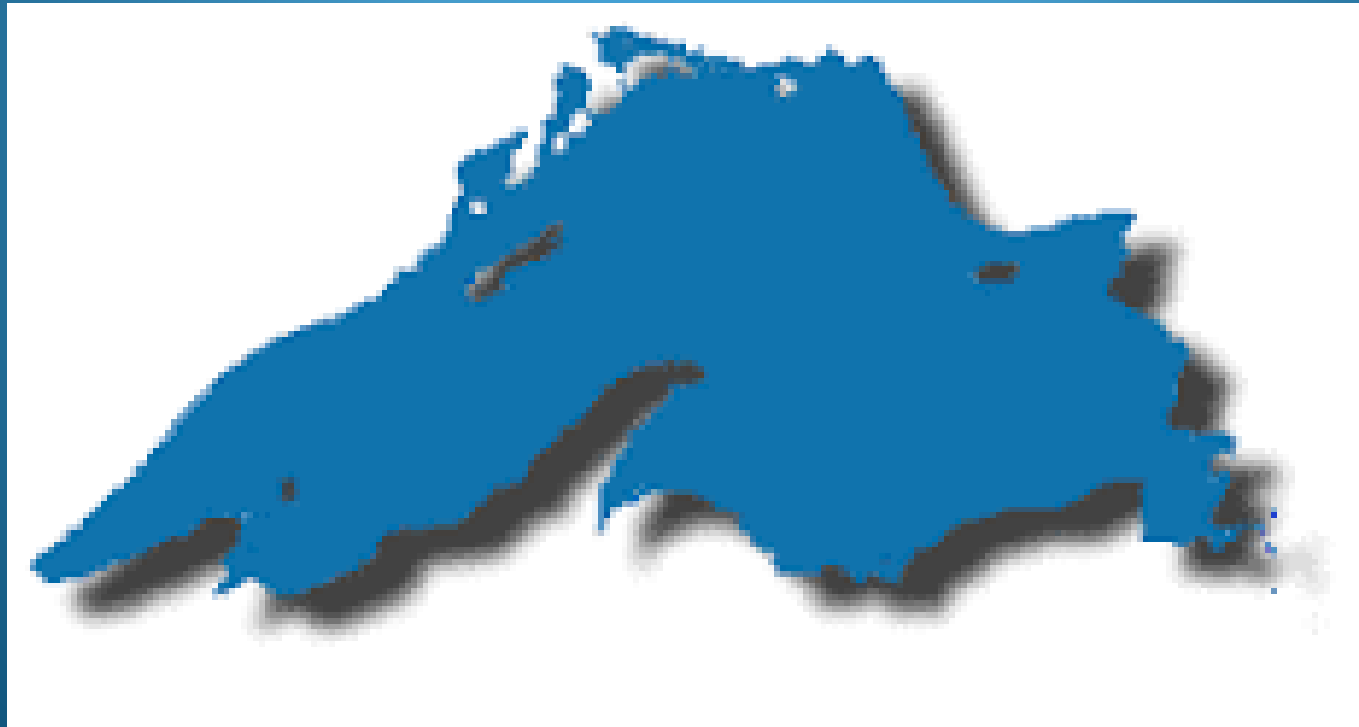
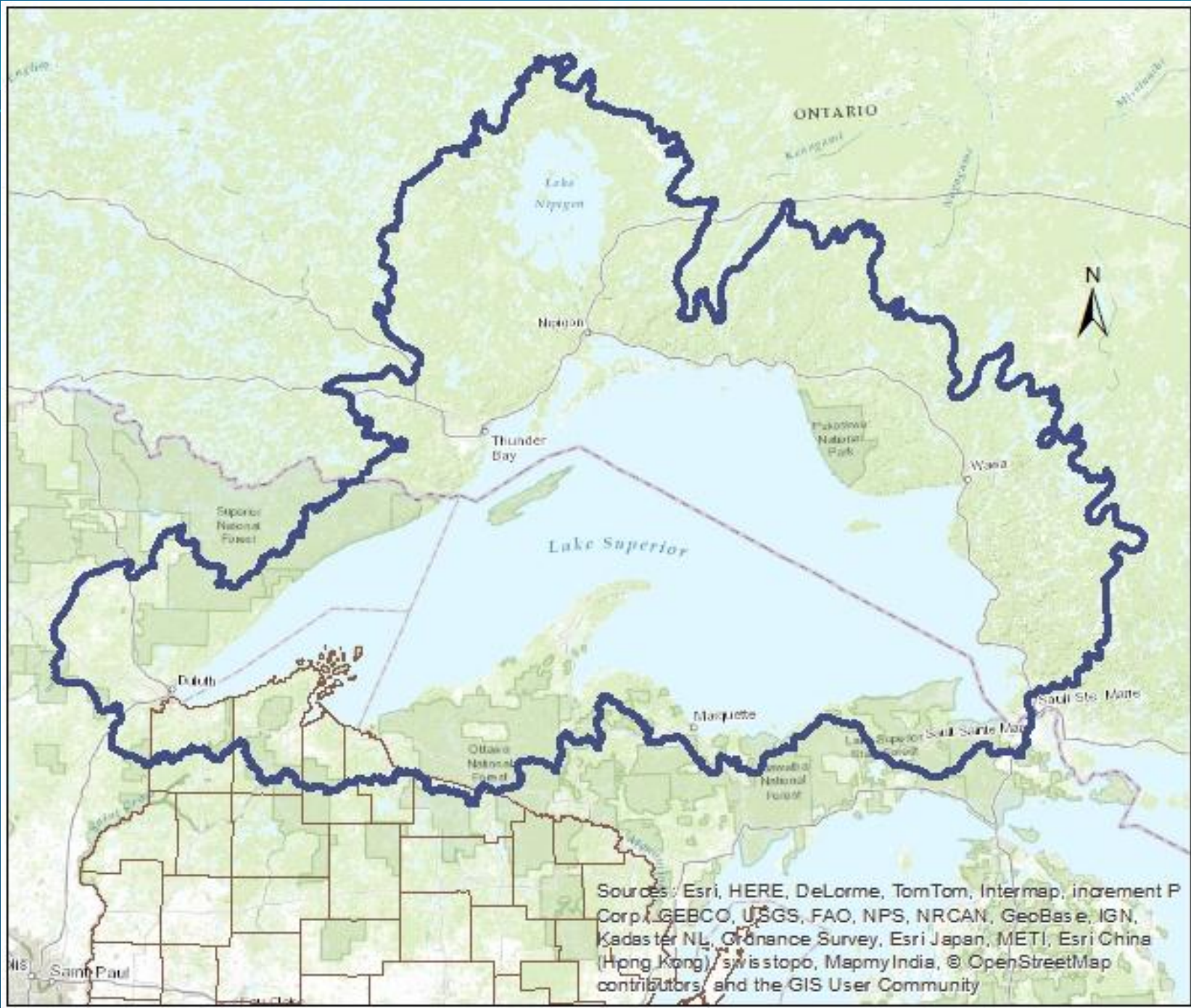


Wisconsin Environmental Monitoring Activities in Lake Superior Basin





Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Environmental Monitoring Data



WI Beach Monitoring Program

Assess beach conditions

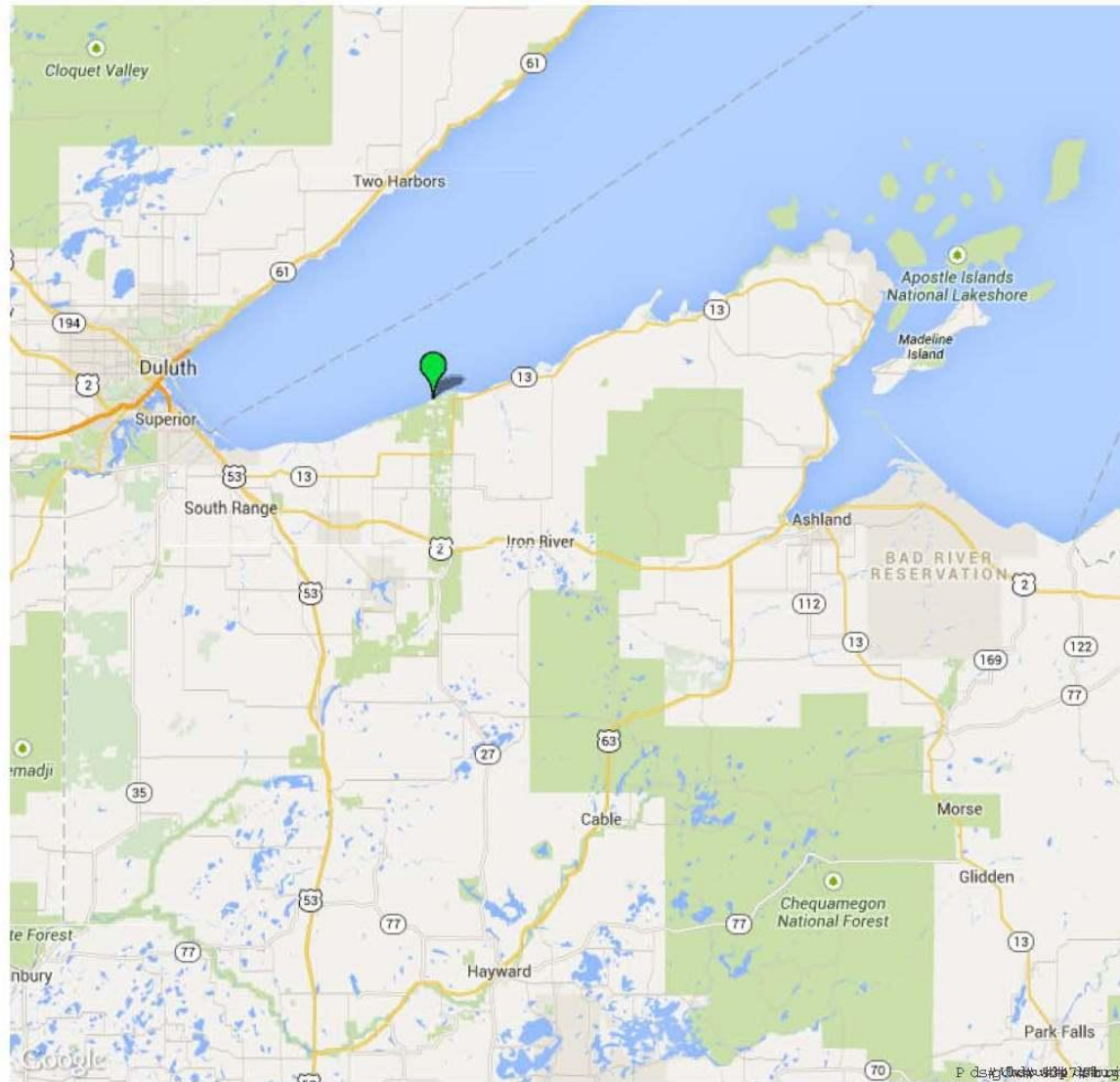
Inform beach restorations

Implement BMPs





MDN Site Information

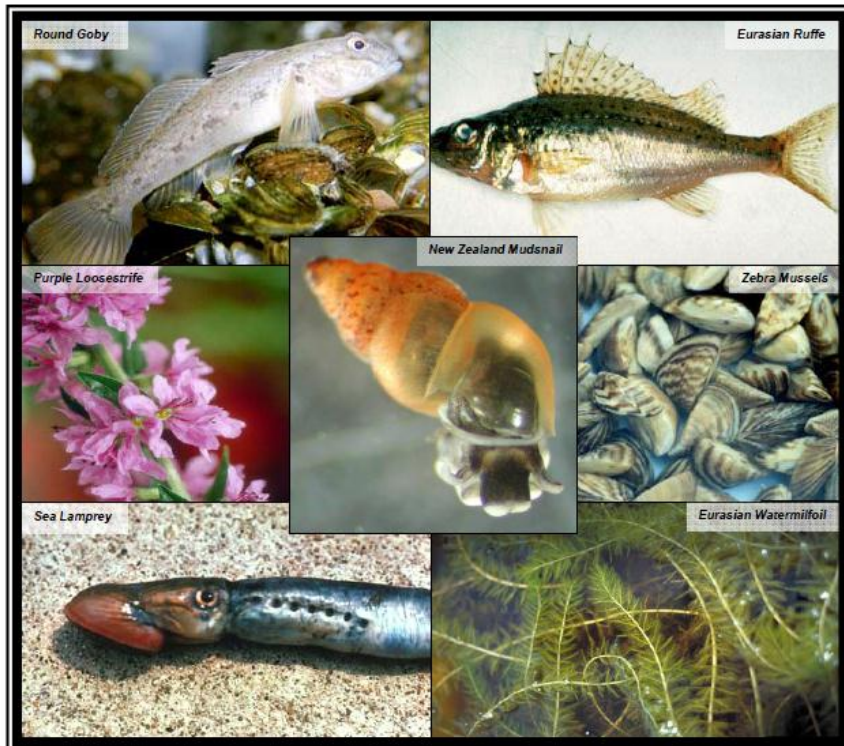


Aquatic Invasive Species



December 18, 2009 DRAFT

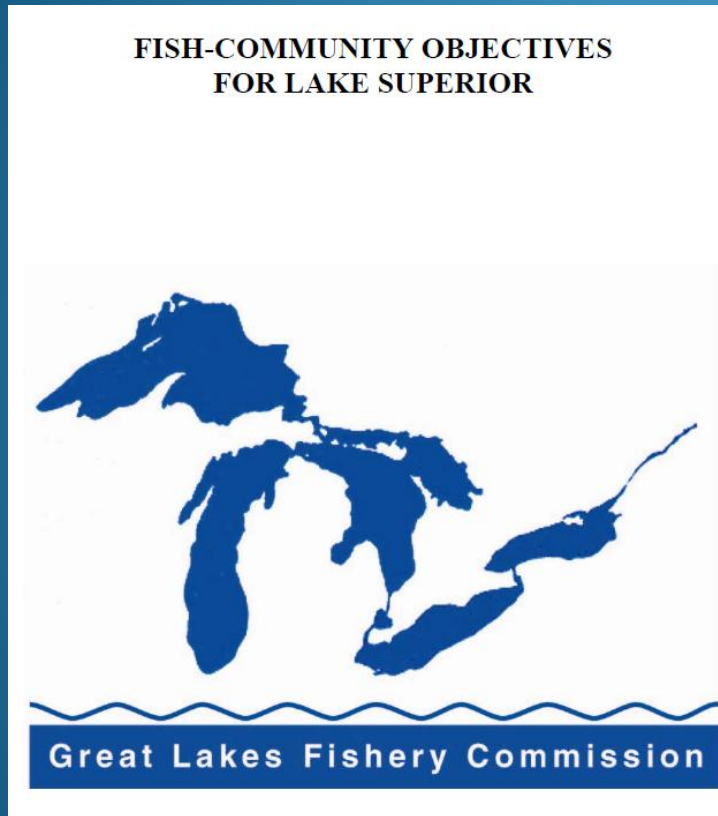
Lake Superior Aquatic Invasive Species Complete Prevention Plan



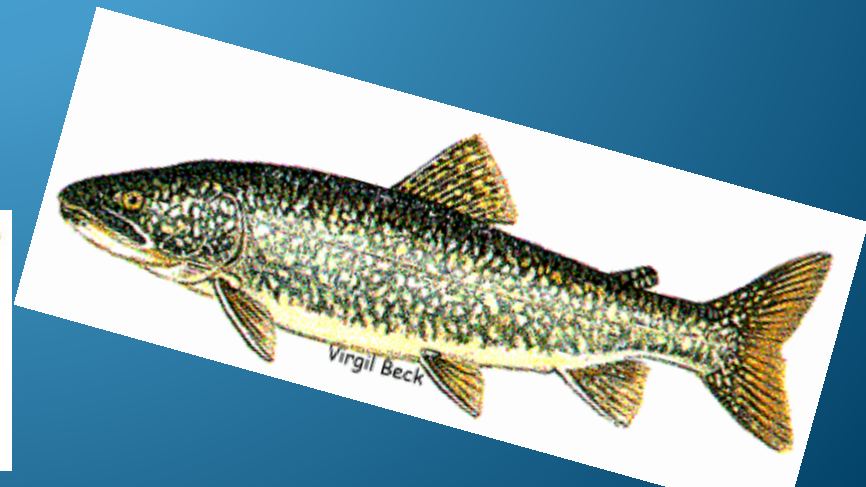
- Early detection monitoring for plants and invertebrates on inland lakes
- Work with River Alliance of Wisconsin on early detection in rivers
- Assist USFWS with juvenile fish surveys in nearshore
- Freshwater Ballast Testing Facility



Fish Community Objectives



- States, Tribes and Federal agencies implement common protocols for lake trout and lake sturgeon assessments

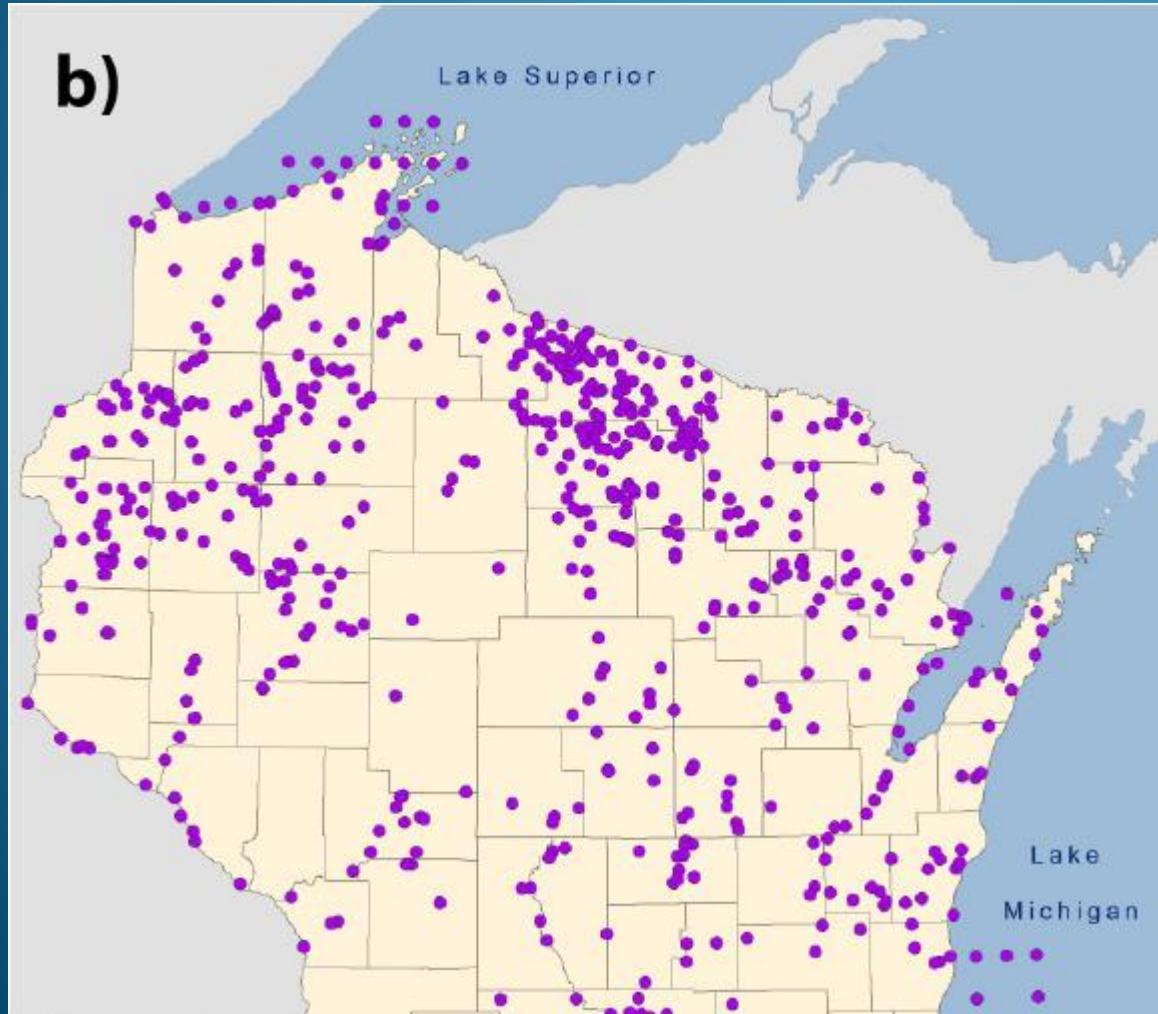


Treaty Fisheries

- 1994 MOU outlines exchange of information and communication related to shared fisheries in the ceded territory
- Coordination on spring adult walleye population estimates and fall juvenile surveys on hundreds of lakes
- Established deadlines for exchange of draft and final data – two meetings per year to discuss results and plan for upcoming surveys



Monitoring Stations



- Mercury tested in all fish
- Some fish for PCBs depending on the waterbody,
- A few fish tested for dioxin/furans and other chemicals



Wisconsin Areas of Concern (AOCs)

Areas of Concern (AOCs) are severely degraded geographic areas within the Great Lakes Basin. They are defined as "geographic areas that fail to meet the general or specific objectives of the agreement where such failure has caused or is likely to cause impairment of beneficial use of the area's ability to support aquatic life."



Focus on Great Lakes Areas of Concern

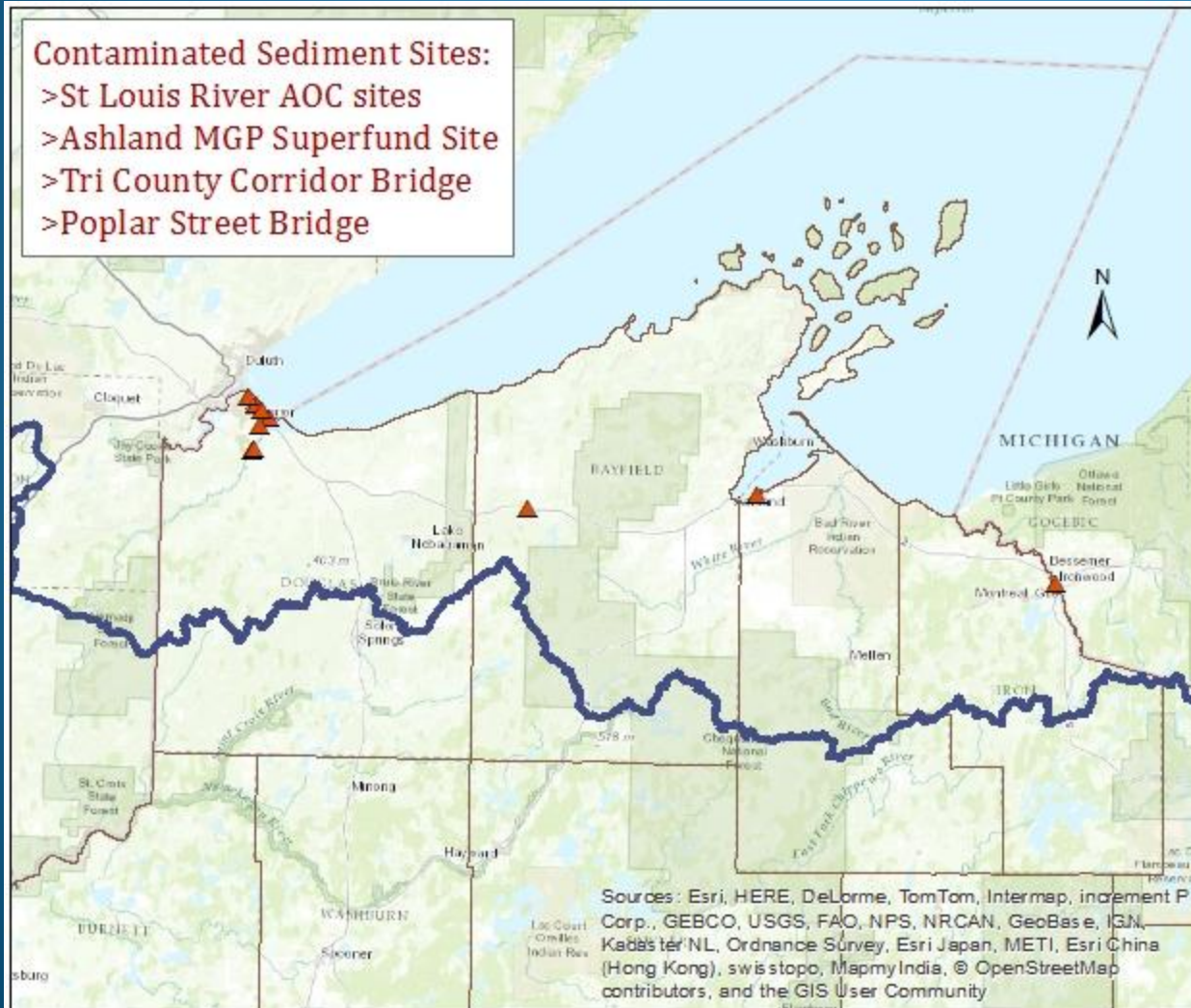
- Sediment Cleanup
- Habitat Restoration
- Assessments
- Funded largely through GLRI
- Tremendous progress over the past 4 years



Contaminated Sediment Sites

Contaminated Sediment Sites:

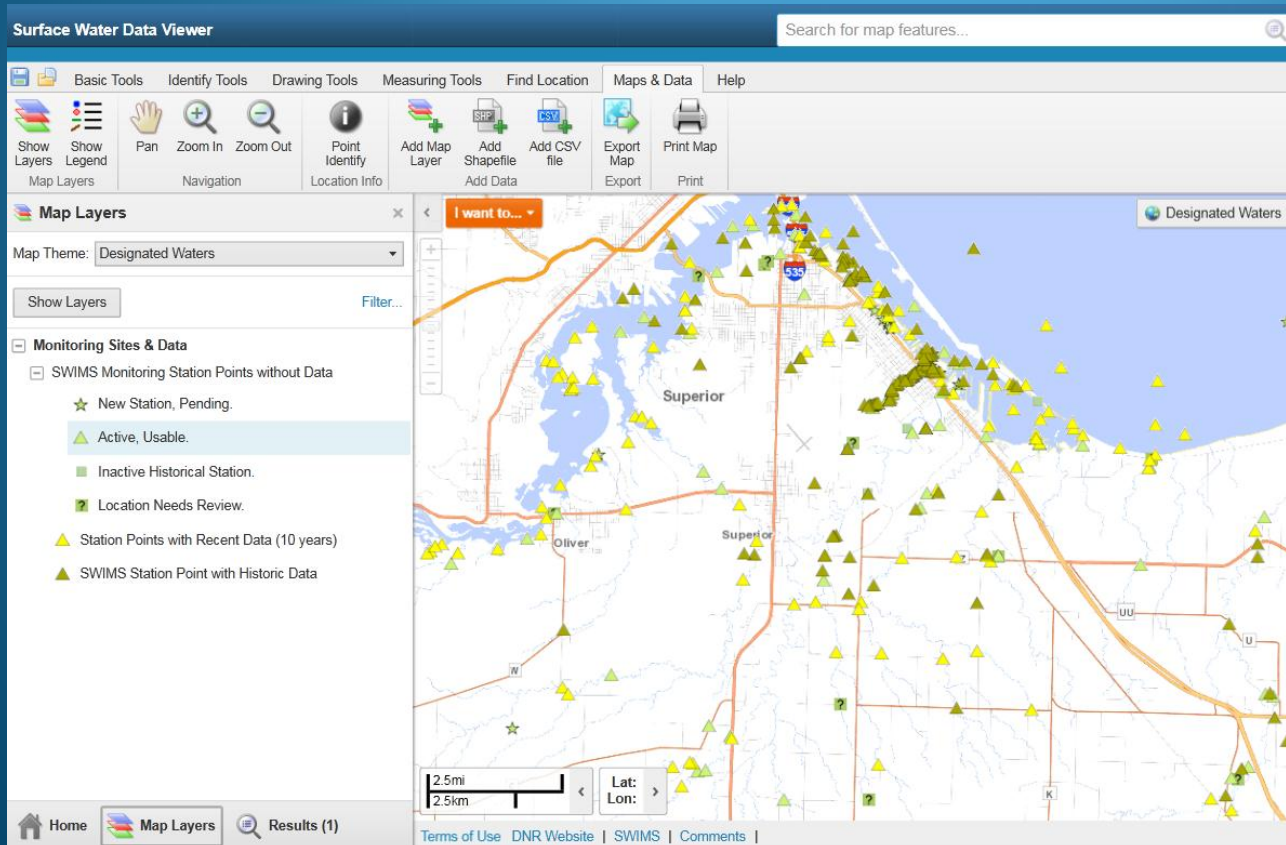
- >St Louis River AOC sites
- >Ashland MGP Superfund Site
- >Tri County Corridor Bridge
- >Poplar Street Bridge



Ongoing investigations and remediation work at known contaminated sediment sites in the Lake Superior Basin



Monitoring Streams/Rivers

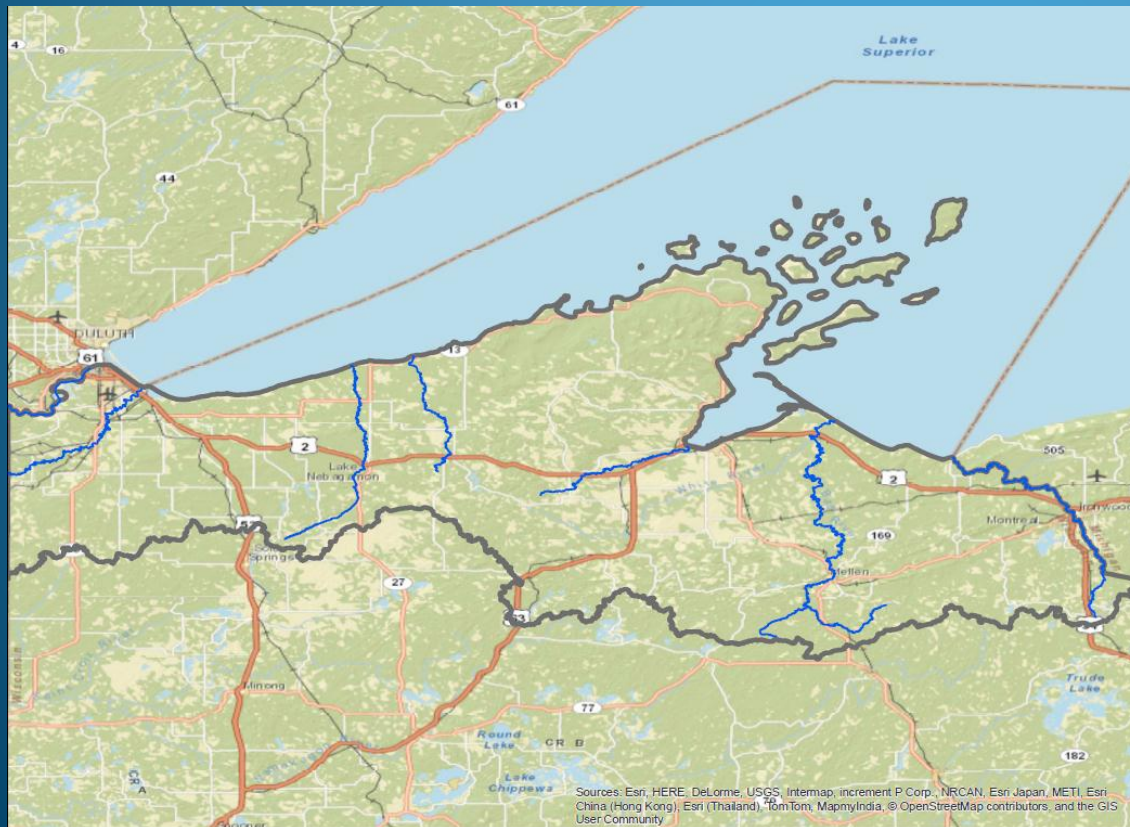


Statewide
baseline
monitoring –
fish, water
quality, habitat
macroinvertebra
tes and habitat.



Monitoring Streams/Rivers

- State of the Lake Ecosystem Conference (SOLEC) indicator “*Determine phosphorous concentrations and loadings*” – 7 rivers monitored monthly for P



Statewide baseline monitoring – fish, water quality, habitat macroinvertebrates and habitat.



Binational Program Goal

- “Develop, test, and implement standardized monitoring protocols, sampling procedures and data handling for ecological indicators to enable Binational Program agencies to report on the status of the basin's ecosystem health.”

Completed for some species/topics:

lake trout, lake sturgeon, herptile

Still need for other species/topics:

macroinvertebrates, phosphorous, etc.



Challenges

- Data Quality Objectives drive monitoring designs
- Limited funding and staff resources
- Secondary user needs may differ from primary users needs
- Data Discovery
- Data Comparability
- Emerging issues



Partnerships

- Partnerships essential - Lake Superior is a shared resource and deserves our unified commitment
- We're in this for the long haul, keep dialogue open
- Where can we build on current success and established collaborative efforts
- Harness power of technology
- Identify institutional barriers that limit agencies' ability to share data
- Lake Superior Binational Program

