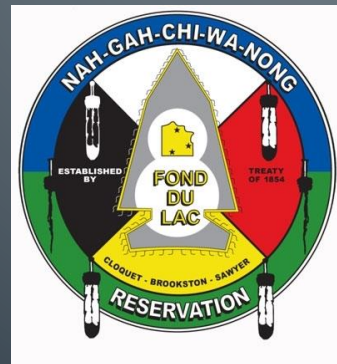


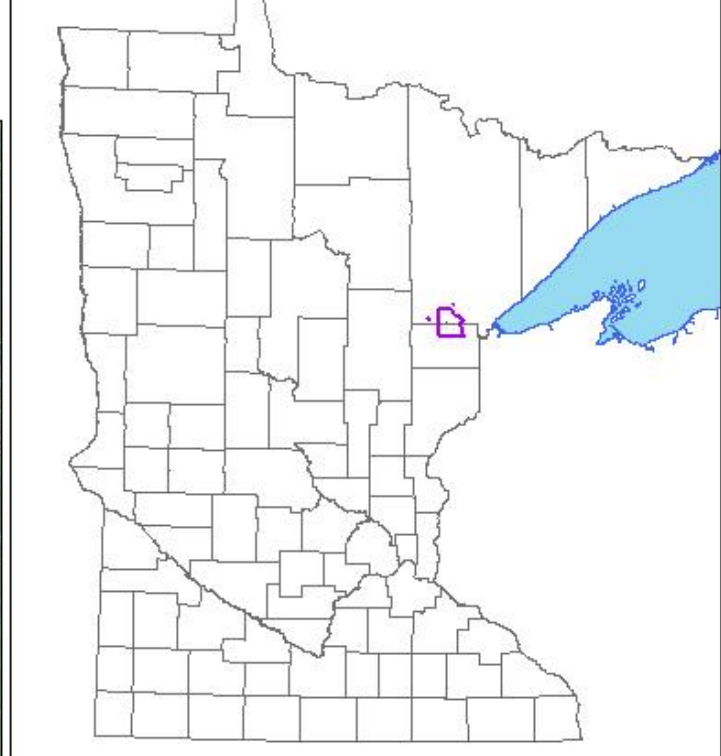
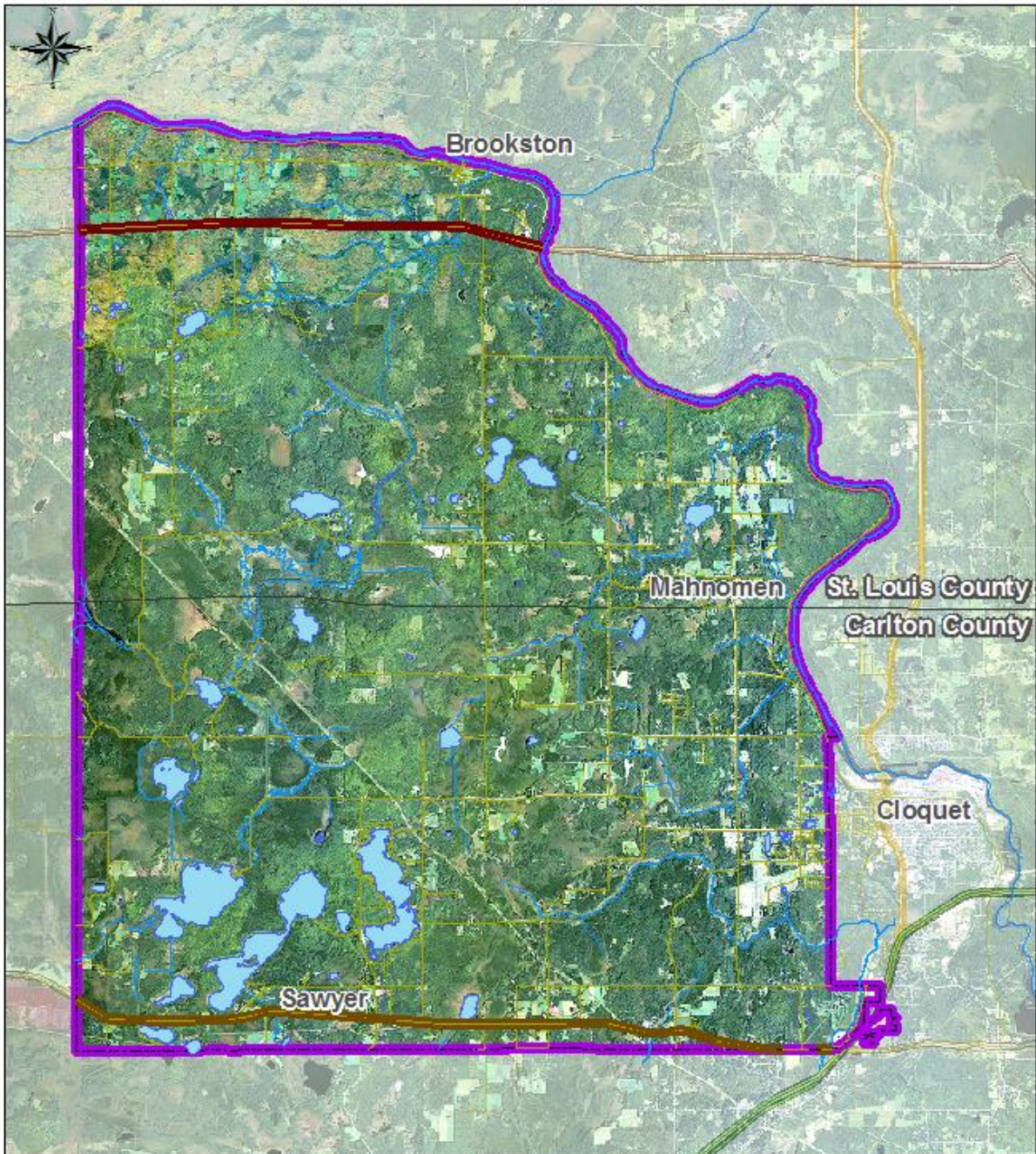
Climate Change Impacts to Ginibiiminaan (Our Water)

Energy and Climate Policy and Finance Division
Minnesota House of Representatives
February 13, 2020

Nancy Schuldt, Water Projects Coordinator

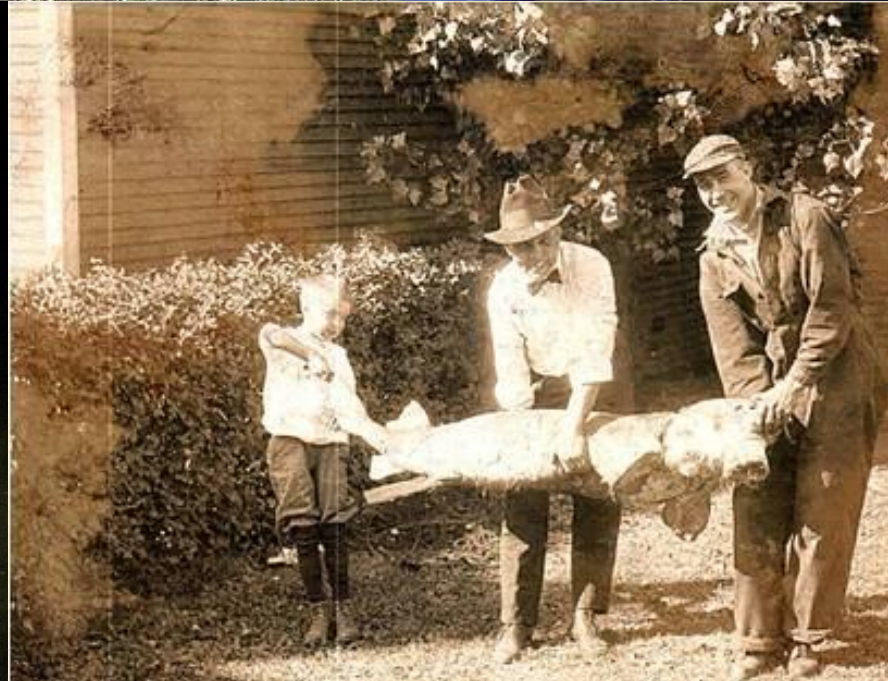


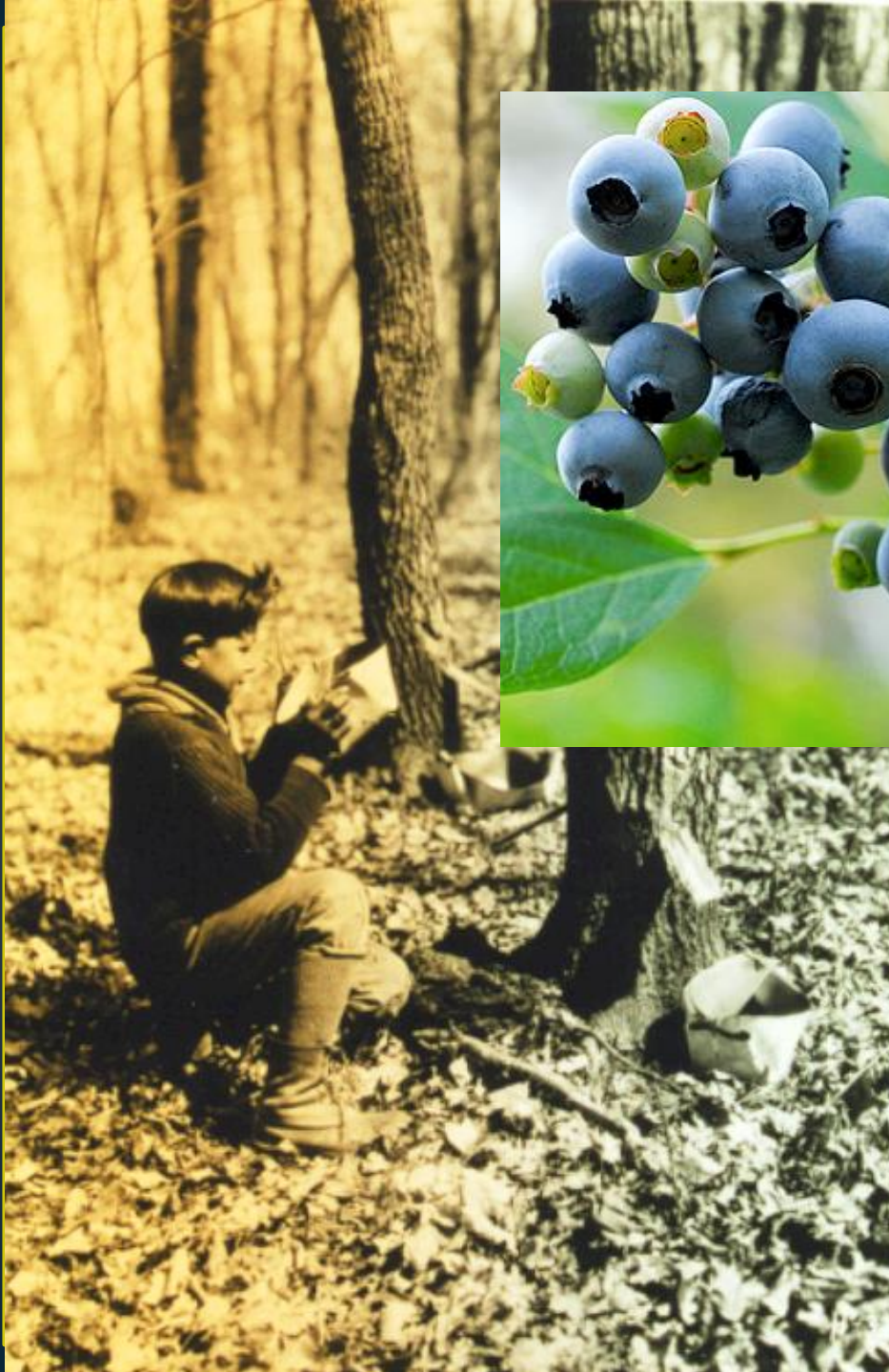
Fond du Lac Reservation Location



- Major_rivers
- Fond du Lac Boundary
- US Hwy 2
- State Hwy 210
- State Hwy 33
- Interstate 35
- Lakes
- Rivers and Streams







Climate Change Impacts to Water Resources

- Loss of biodiversity
- Erosion and siltation in waterbodies
- Loss of headwater streams
- Loss of wetlands, especially peatlands and forested wetlands
- Groundwater drawdown
- Surface water pollution
- Introduction, spread of invasive species



Water quality monitoring:
long-term trends,
climate change impacts

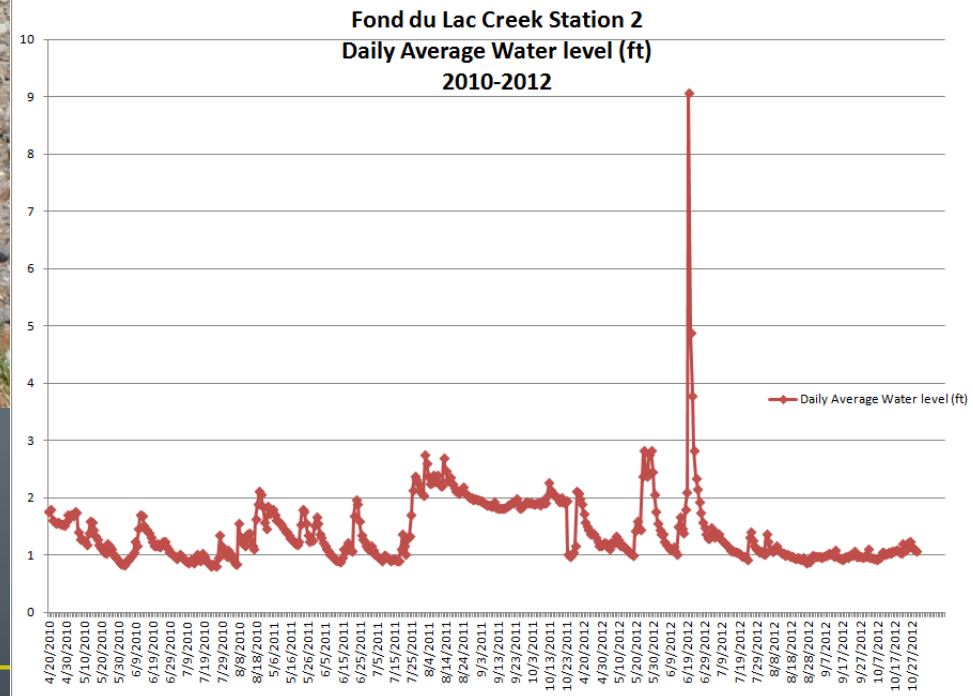


Ice-up; ice-out data



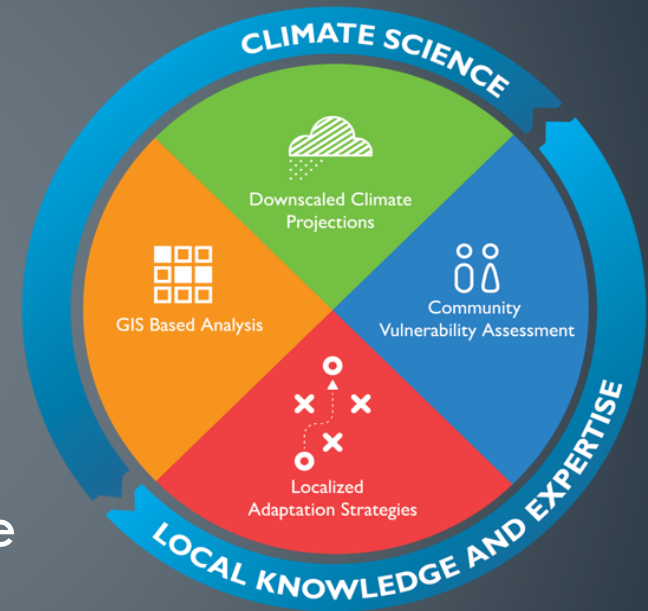


Stream gage captured catastrophic 2012 flood



Climate Change Vulnerability Assessment and Adaptation Plan: 1854 Ceded Territory Including the Bois Forte, Fond du Lac, and Grand Portage Reservations

- Evaluated key cultural/natural resources according to their vulnerability to climate change and their ability to adapt
- Informed extensive series of actions and policies to protect and mitigate



42

FISH ADVISORY

FISH IN THIS SECTION
OF THE ST. LOUIS RIVER
ARE CONTAMINATED.

MN. DEPT. OF HEALTH
RECOMMENDS LIMITING
MEALS OF THESE FISH.

CALL MN. DEPT. OF
HEALTH FOR MORE INFO.

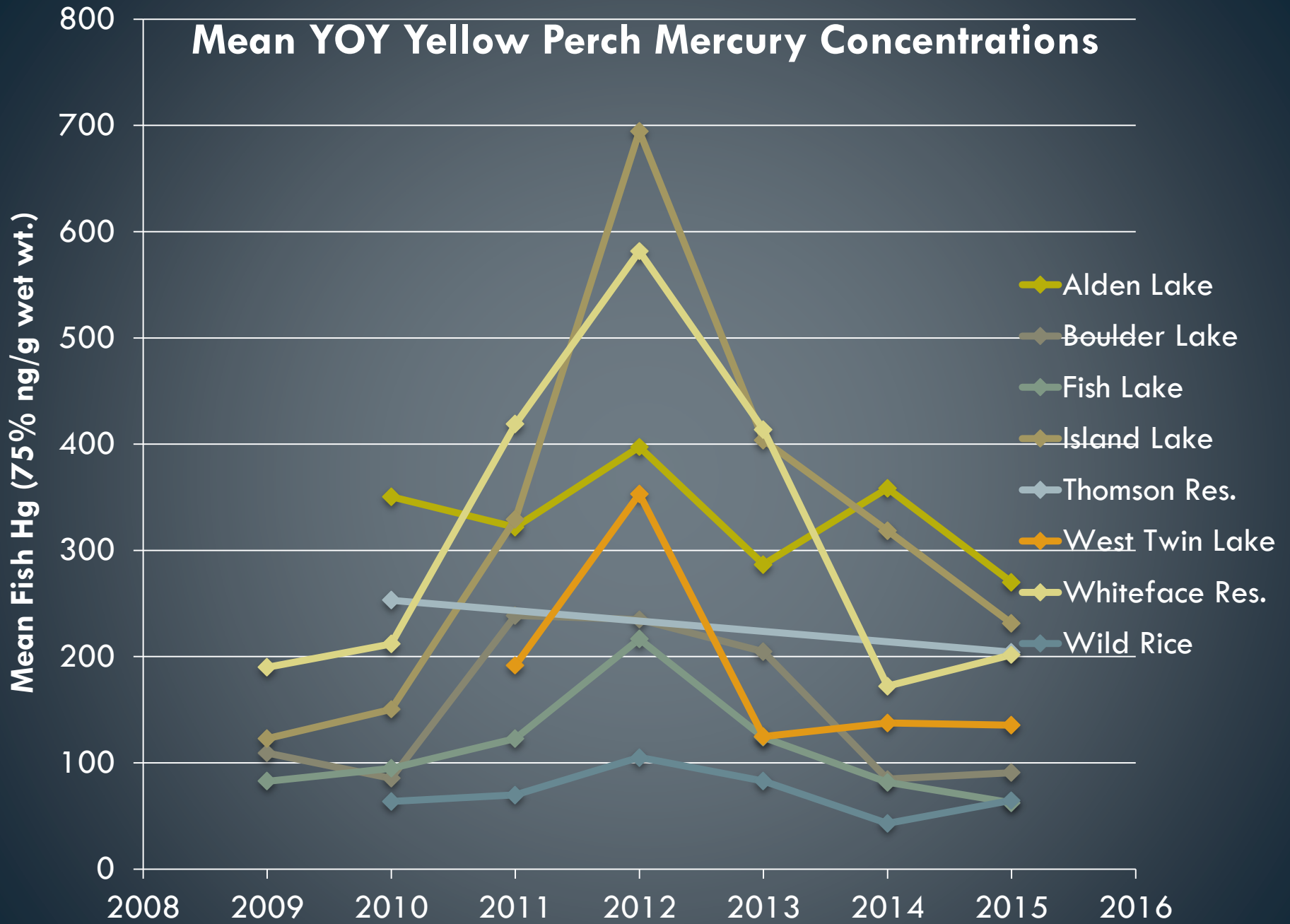
612-627-5047

Mercury Concerns

- ▣ Boreal forest/wetland ecoregion is especially sensitive to mercury deposition and methylation.
- ▣ Some tribal members consume fish at a greater rate than the general population.
- ▣ Existing industrial sources in our watershed can enhance mercury methylation rates; warming climate can accelerate further
- ▣ The statewide TMDL for mercury does not include the St. Louis River.



Mean YOY Yellow Perch Mercury Concentrations



Wild Rice

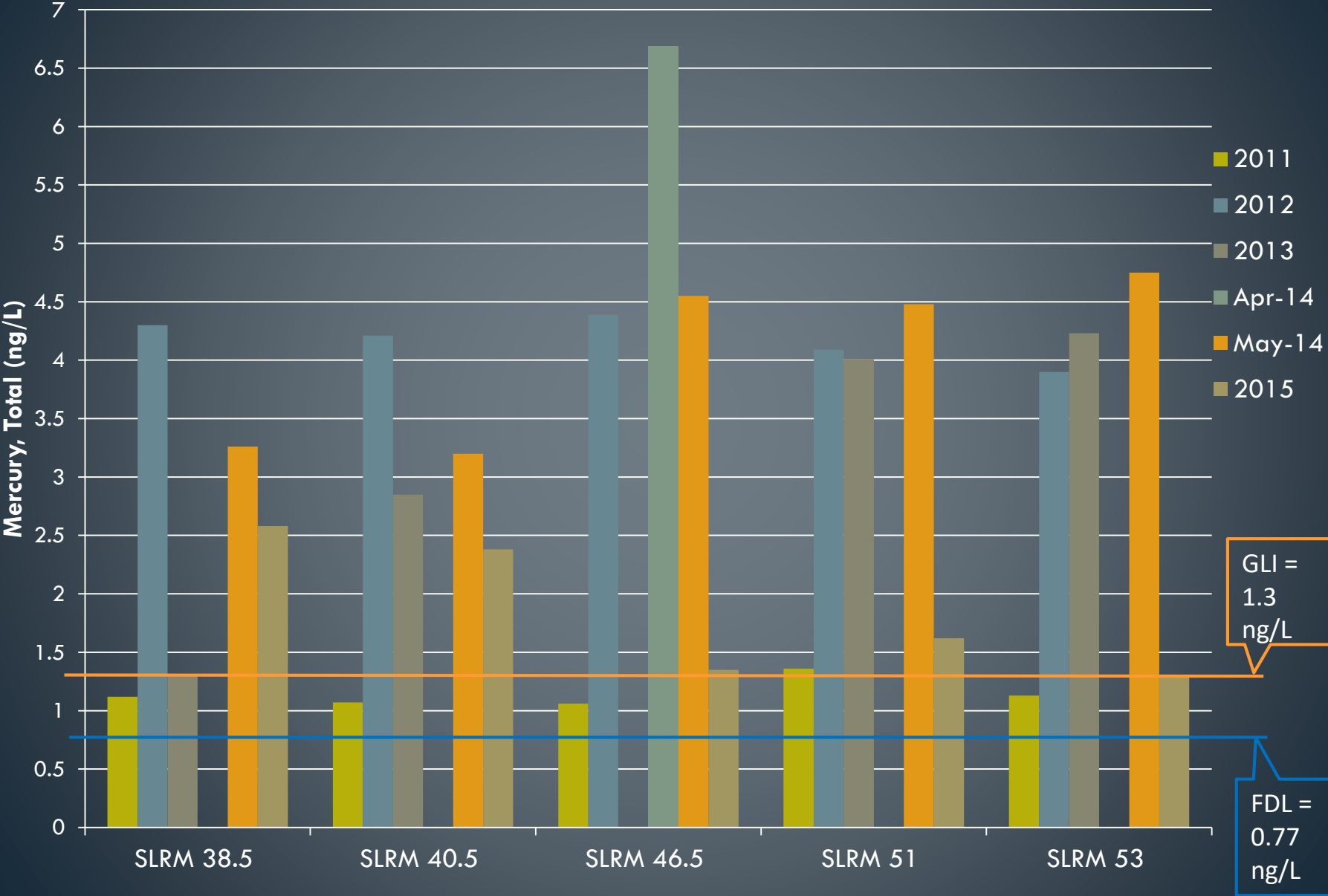
Exceptionally
sensitive to:

- hydrology
(flooding,
drought)
- water quality
(turbidity,
nutrients)





Total Mercury for St. Louis River, 2011 - 2015





Questions?