

# Update on the U.S. Status of Beneficial Use Impairments in the St. Clair River Area of Concern

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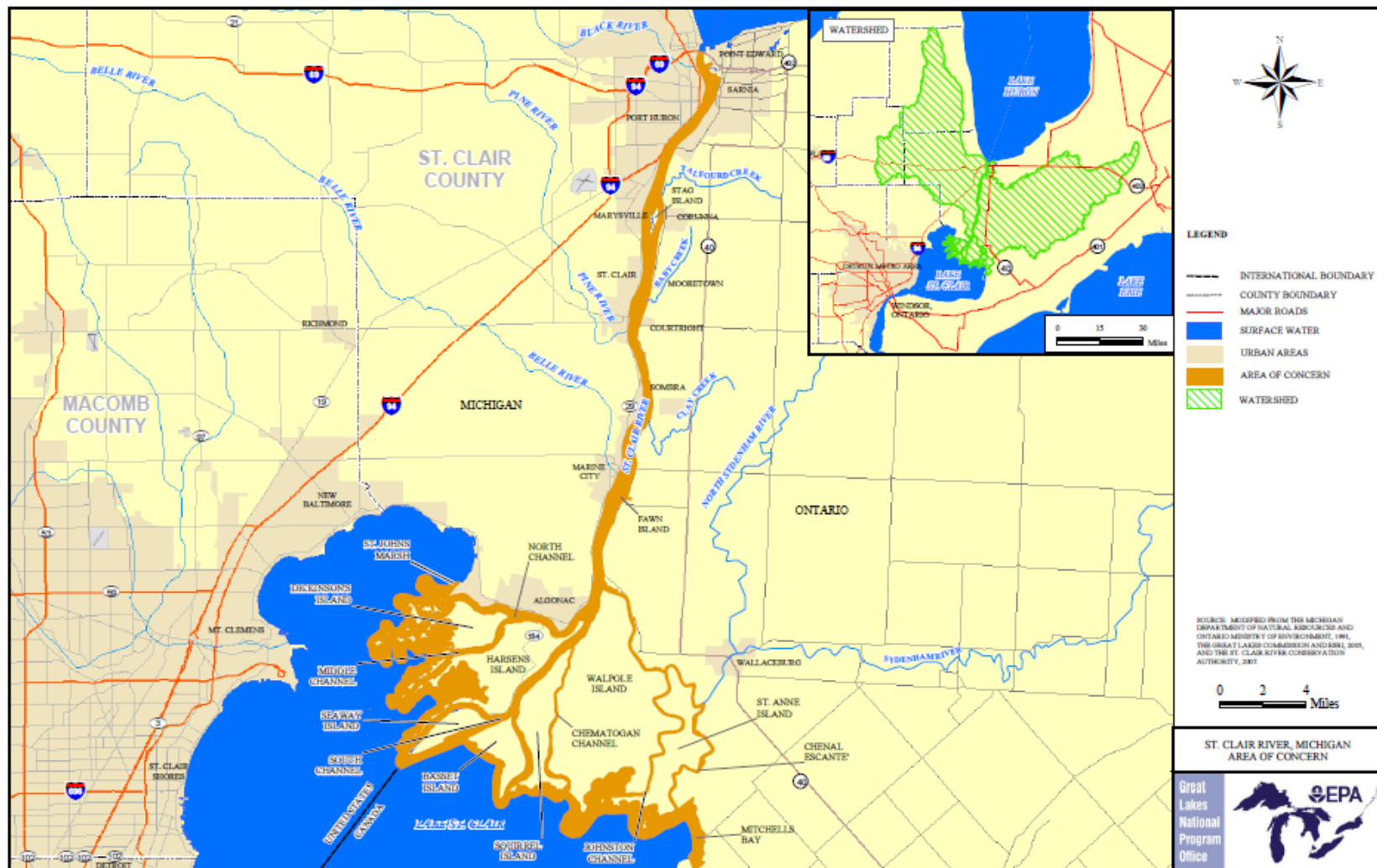
# Area of Concern (AOC)

An “AOC” is a specific geographical area where severe water quality degradation has resulted in the impairment of one or more of the 14 Beneficial Use Impairments (BUIs) identified in the Great Lakes Water Quality Agreement.

- 43 AOCs throughout the U.S. and Canada
- The St. Clair River is one of five binational AOCs



# St. Clair AOC Boundary



# St. Clair AOC

## Beneficial Use Impairments

- Tainting of fish and wildlife flavor – REMOVED 2009
  - Restriction on dredging activities – REMOVED 2011
  - Degradation of aesthetics – REMOVED 2012
  - Added costs to agriculture or industry – REMOVED 2012
  - Degradation of benthos – REMOVAL Recommendation Drafted
- 
- Restrictions on fish and wildlife consumption
  - Restrictions on drinking water consumption, or taste and odor problems
  - Beach closings
  - Bird or animal deformities or reproduction problems
  - Loss of fish and wildlife habitat

# Restrictions on Fish and Wildlife Consumption

- Report Issued Spring 2014
- Control sites: Little Bay de Noc (Lake Michigan) and Les Cheneaux Islands (Lake Huron)
- The St Clair River still demonstrates greater PCB contamination levels in Smallmouth Bass compared to the control sites.
- There are no significant differences between the St Clair River and the reference sites in mercury concentrations measured in Smallmouth Bass.
- Mercury levels in St Clair River Rock Bass are greater statistically than Little Bay de Noc.



Photo: Michigan  
Department of  
Community Health

# Restrictions on Drinking Water Consumption, or Taste and Odor Problems

- Spills – Primary reason for impairment
- Local delisting criteria in development
  - Prevention
  - Notification
  - Response

# Beach Closings

- Combined Sewer Overflows (CSOs)
- Chrysler Beach – Public Beach
  - City of Marysville – Illicit Connection Corrections
  - City of Marysville – Green Infrastructure Project



Photo: St. Clair County Health Department

# Bird or Animal Deformities or Reproduction Problems

- Statewide assessment completed 2012
- Mink livers sampled 2013
- Forage fish sampled 2013
- Report expected Fall/Winter 2014



# Degradation of Benthos

- BUI assessment included review of all available benthic data on the US side
- BUI removal recommendation drafted
- BPAC has provided support for BUI removal
- Public comment period ended September 8, 2014

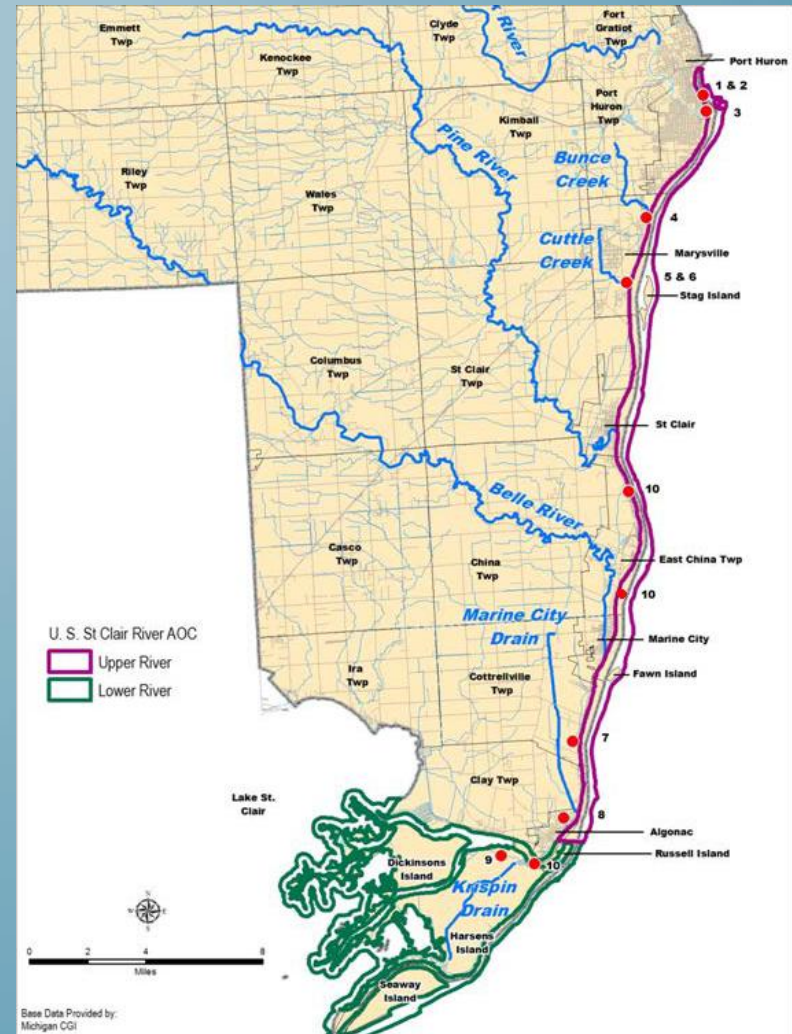
*“There continues to be no evidence of sediment contamination significant enough to degrade the benthos and thus requiring further sediment characterization or sediment remediation on the U.S. side of the St. Clair River. “*



<http://www.biopix.dk>

# Loss of Fish and Wildlife BUI Habitat Plan

- Ten habitat restoration projects on the plan
- Goal to have all projects completed by 2014
- Habitat projects span the entire river



# Port Huron St. Clair River Shoreline Restoration - North

- Project completed in the Fall of 2012
- 4,800 square feet of shallow water habitat created
- Project Sponsor: City of Port Huron





# Marysville Living Shoreline Completed in 2013



After

- Project Funded by NOAA
- Project Sponsor: City of Marysville

Before

05/03/2011



# Upper St. Clair River Shoreline Restoration

## Two Phases

- Shoreline Restoration
  - Completed Summer 2014
  - 0.8 mile
  - Project Sponsor: Community Foundation of St. Clair County
  - Funded by NOAA
- Wetland Creation - 2.75 Acres
  - Construction 2014/2015
  - Project Sponsor: St. Clair County Parks
  - Funded by Sustain Our Great Lakes (SOGL)





# Upper St. Clair River Shoreline Restoration

After



Before



# Fish Spawning Reefs

- Project Partners – USGS/USFWS/University of Michigan
- Point aux Chenes
- Hart's Light
- Middle Channel - Completed

Photo: Adam Lintz



# Remaining Habitat Restoration Projects

Five projects direct funded by EPA

Designs completed – Construction expected to begin October 2014

- Port Huron South – EPA Led Project  
Local Partner– City of Port Huron
- Cottrellville Township – EPA Led Project  
Local Partner – Cottrellville Township
- Cuttle Creek – DEQ Led Project  
Local Partner/Grantee – City of Marysville
- Marine City Drain – DEQ Led Project  
Local Partner/Grantee – St. Clair County Drain Commission
- Krispin Drain – Harsens Island – DEQ Led Project  
Local Partner/Grantee – Clay Township



# Thank You!



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Upper St. Clair River Shoreline Restoration  
“Blue River Walk”