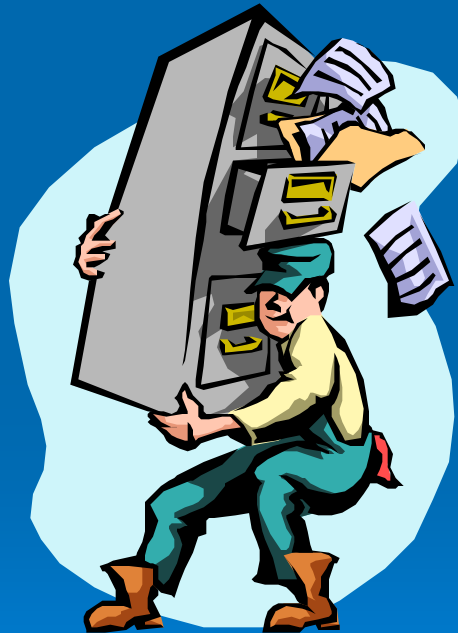


Application of Michigan's Statewide Delisting Criteria for Removing Beneficial Use Impairments



Making A Great Lake Superior 2007
October 30, 2007
Julie Sims, MDEQ

How does Michigan handle 14 Areas of Concern?

➤ *Guidance for Delisting Michigan's Great Lakes Areas of Concern*

➤ Available at:

www.michigan.gov/deq

Click on “water”, then “Great Lakes,” then “Areas of Concern”

Michigan's Great Lakes Areas of Concern






Source: Great Lakes Commission and Michigan's Statewide Public Advisory Council

Michigan AOC BUI Removal Matrix

11-08-06

Page 1

Removal progress: black **X** = not yet assessed; blue **✓** = in progress;  = removed

Area of Concern	1 - Restrictions on fish and wildlife consumption	2 - Tainting of fish and wildlife flavor	3 - Fish tumors or other deformities	4 - Bird or animal deformities or reproductive problems	5 - Degradation of benthos	6 - Restrictions on dredging activities	7 - Eutrophication or undesirable algae
Clinton River	X				X	X	X
Deer Lake	✓			✓			✓
Detroit River	X	X	X	X	X	X	
Kalamazoo River	X			X	X	X	
Manistique River	✓					✓	
Menominee River	X				X	X	
Muskegon Lake	X				X	X	X
River Raisin	X			X	X	X	X
Rouge River	X		X		X	X	X
Saginaw Bay/River	X	✓		X	X	X	X
St. Clair River	X	X		X	X	X	
St. Marys River	X		X	X	X	X	X
Torch Lake	✓				✓		
White Lake	X				X	X	X

Michigan AOC BUI Removal Matrix

11-07-06

Page 2

Removal progress: black X = not yet assessed; blue ✓ = in progress; green ✓ = removed

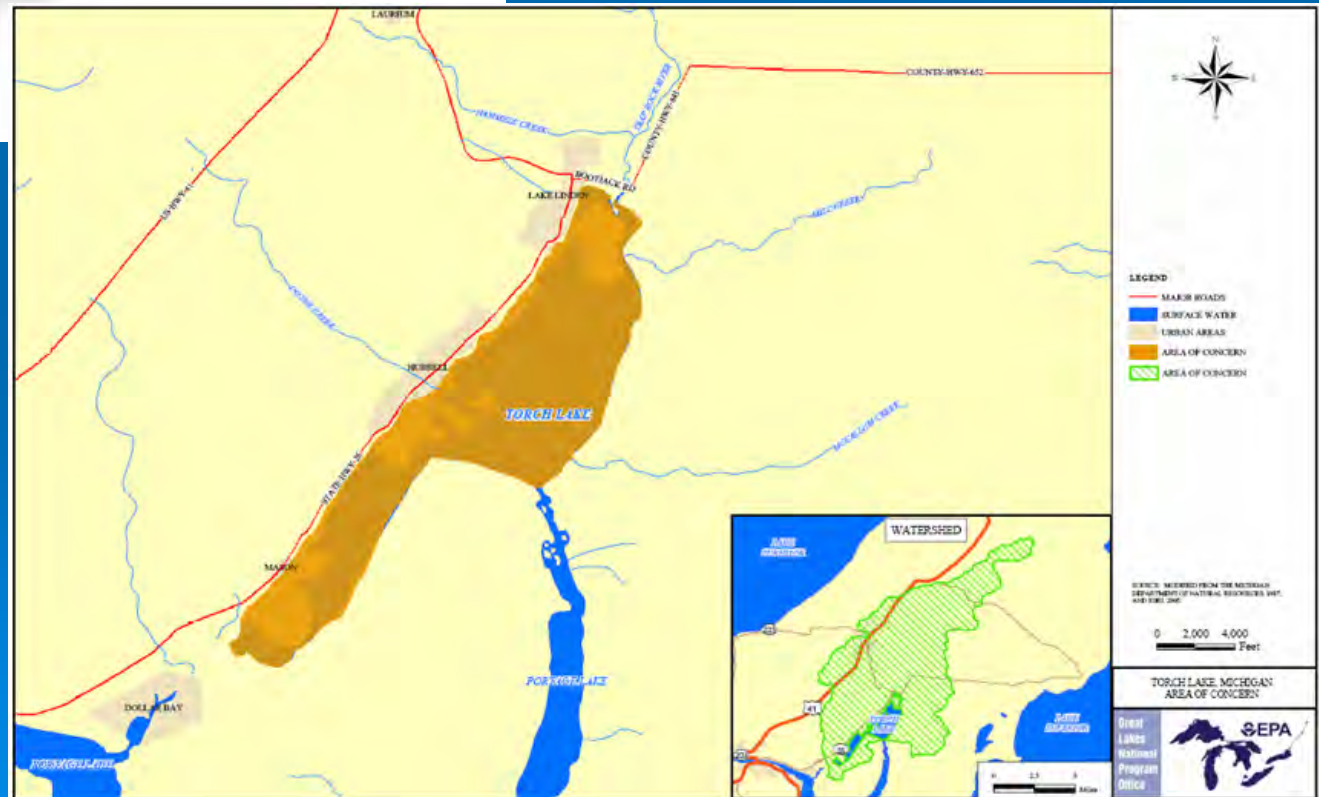
Area of Concern	8= Restrictions on drinking water consumption or taste and odor problems	9 = Beach closings	10= Degradation of aesthetics	11= Added costs to agriculture or industry	12= Degradation of phyto- or zooplankton populations	13= Degradation of fish and wildlife populations	14= Loss of fish and wildlife habitat
Clinton River		X	X			X	X
Deer Lake							
Detroit River	X	X	X			X	X
Kalamazoo River		X	X			X	X
Manistique River		✓					✓
Menominee River		X				X	X
Muskegon Lake	X	X	X			X	X
River Raisin		X	X			X	X
Rouge River		X	X			X	X
Saginaw Bay/River	✓	X	X		X	X	X
St. Clair River	X	X	X	X			X
St. Marys River		X	X			X	X
Torch Lake							
White Lake	X		X			X	X

Areas of Concern in the Great Lakes Basin



Source: <http://www.bsc-eoc.org/mmptell.html>

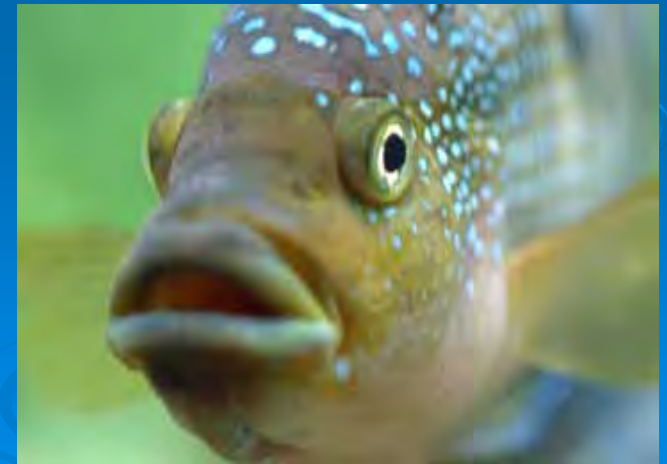
Torch Lake AOC





Torch Lake Removing the Fish Tumors and Other Deformities BUI

- Criterion – no reports of fish tumors or deformities for a period of 5 years
- Remediation – copper production ceased, industrial discharges controlled, dredging, etc.
- Assessment – review of MDNR reports and community observations indicated tumors have not been identified or reported since before 1993



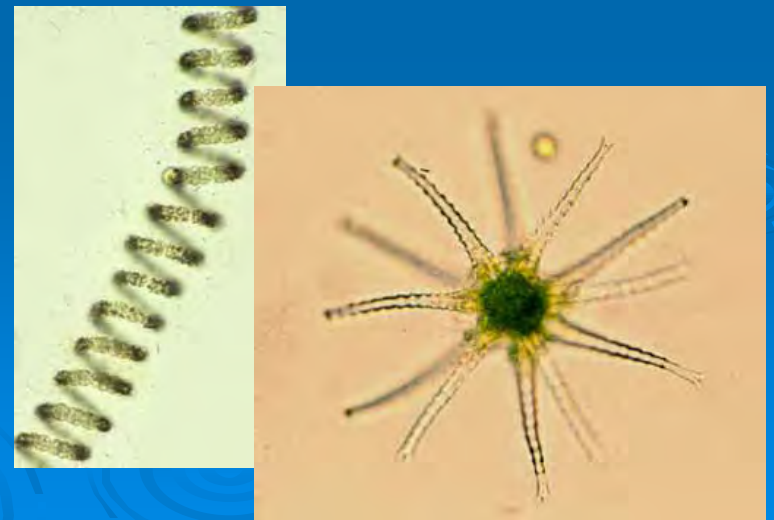
Deer Lake AOC



Deer Lake

Assessment of the Eutrophication or Undesirable Algae BUI

- Criterion – No waterbodies on the MDEQ list of impaired waters due to nutrients or excessive algal growths
- Remediation – sewer separation projects, stormwater system upgrades, phosphate regulations, etc.
- Assessment – review of water quality reports confirmed that Deer Lake is not on the list of impaired waters



Deer Lake

Assessment of the Bird and Animal Deformities or Reproduction Problems BUI

- Criterion – observational data of affected species for 2 successive monitoring cycles
- Remediation – sources controlled and environmental protection
- Assessment – review of USFWS reports and observations indicated successful reproduction and no deformities since 1997



St. Marys River AOC



St. Marys River Developing Fish and Wildlife Restoration Criteria

- BPAC grant to establish local criteria
- Technical team convened
- Protect and restore fishery
- Stakeholder input
- Will develop site specific restoration plans
- Teamwork

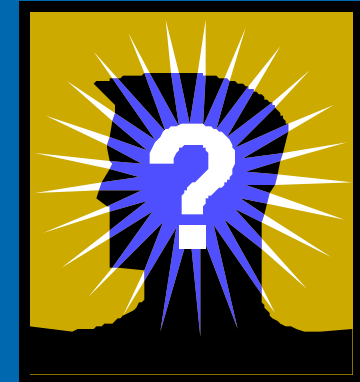
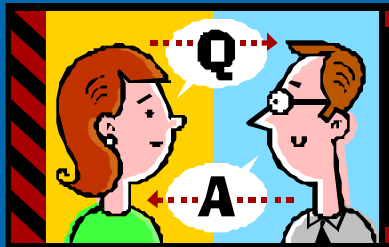


Assessing and Removing BUIs

- Possibly looking at assessing one BUI across all AOCs at one time
 - Aesthetics
 - Dredging
- The process works!
- 2 down, 109 to go
- Several ready for removal



Questions and Comments



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