

CONSERVING AND RESTORING HEALTHY GREAT LAKES BEACHES THROUGH THE COASTAL ZONE MANAGEMENT AND AREA OF CONCERN PROGRAMS



MICHIGAN'S AREAS OF CONCERN & BEACH CLOSINGS

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Office of the Great Lakes, MDEQ



Great Lakes Water Quality Agreement

- 1972 – agreement between U.S. and Canada
- 1987 – Amended GLWQA
 - Defines AOCs
 - Requires consultation with the public
 - Identifies potential impairments (14 of them)



Image - Environment Canada, www.ec.gc.ca

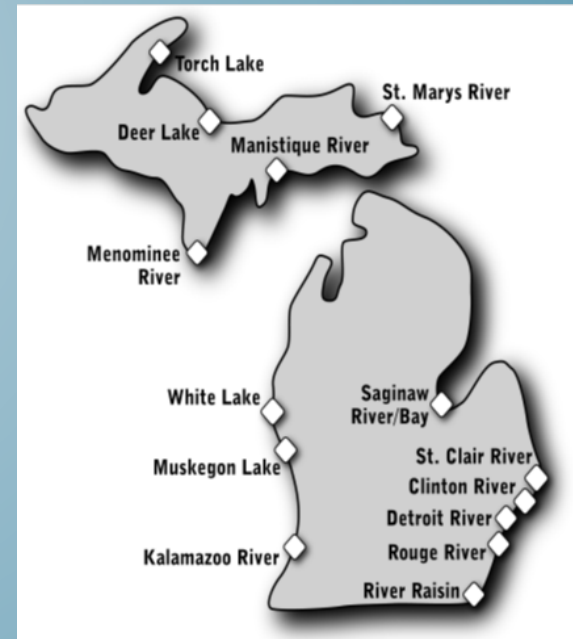


Image - Center for Environment, Commerce & Energy



Area of Concern (AOC)

“Area of Concern” means a geographic area that fails to meet the General or Specific Objectives of the Great Lakes Water Quality Agreement where such failure has caused or is likely to cause impairment of beneficial use or of the area’s ability to support aquatic life.



Beneficial Use Impairments (BUIs)

- Restrictions on fish and wildlife consumption;
- Tainting of fish and wildlife flavor;
- Degradation of fish/wildlife populations;
- Fish tumors or deformities;
- Bird or animal deformities or reproductive problems;
- Degradation of benthos;
- Restrictions on dredging;
- Eutrophication;
- Restriction on drinking water consumption;
- **Beach closings;** 
- Degradation of aesthetics;
- Added cost to agriculture or industry;
- Degradation of plankton populations; and
- Loss of fish and wildlife habitat

State Guidance

The BUI will be considered restored when:

- no waterbodies in the AOC are included on the non-attainment list for pathogens
- OR, where waterbodies are on the non-attainment list due to CSOs, information reveals they have been eliminated or are treated
- OR, monitoring during the recreation period meets Guidance outlined criteria



Working with AOCs on the Beach BUI

Management Actions

- Each AOC has them to achieve restoration goals
- Find out what they are for the Beach Closings BUI
- AOCs are receiving GLRI money from EPA and other federal agencies to achieve their management actions



Working with AOCs on the Beach BUI

Planning-Project Development

- Help the local public advisory councils develop management actions

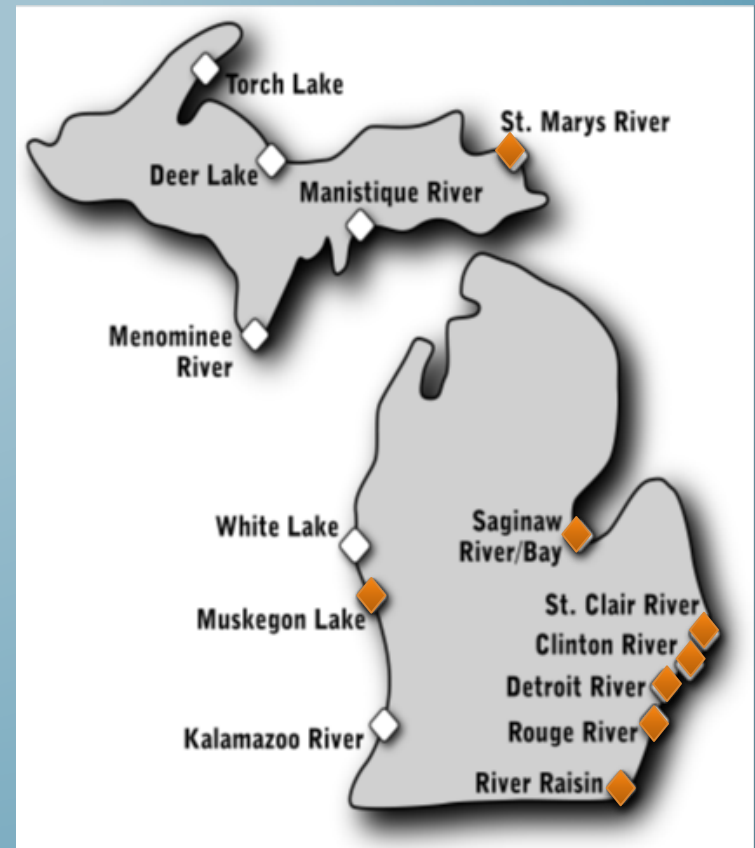
Sampling

- Determining sources of *E. coli*
- Design sampling efforts to work with the local health departments, cities, and public advisory councils
- Develop and implement the best BMPs to reduce *E. coli*
- Monitoring support for each AOC through the state, the money can be matched locally



Beach Closings BUI Summary

- Clinton River – 44 sites listed in the Integrated Report (IR); CSOs
- Detroit River – 5 sites listed in the IR; CSOs
- Muskegon Lake – 3 sites listed in the IR
- River Raisin – 1 site listed in the IR; CSOs
- Rouge River – 31 sites listed in the IR; CSOs
- Saginaw River/Bay – 1 site listed in the IR; CSOs
- St. Clair River – 4 sites listed in the IR; CSOs
- St. Marys River – 3 sites listed in the IR; CSOs



COASTAL ZONE MANAGEMENT PROGRAM & BEACH HEALTH

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MICHIGAN CZM PROGRAM BACKGROUND

- *National coastal program authorized by the federal Coastal Zone Management Act in 1972*
- *State-federal partnership with NOAA to **protect Great Lakes coastal resources** and foster environmentally, economically, and socially **vibrant coastal communities***
- *Support activities within approved CZM Boundary (maps at www.michigan.gov/coastalmanagment)*
- *Michigan's appropriation \$2.5 million*



Coastal Zone Management Focus Areas



Planning - Coastal Communities and Water
Dependent Uses



Coastal Public Access



Coastal Habitat



Coastal Water Quality



Coastal Hazards



Great Lakes Research and Stewardship



Chocolay Twp..



Agate Beach, Burt Twp.

Coastal Zone Management Focus Areas



**Planning - Coastal Communities and Water
Dependent Uses**



Coastal Public Access



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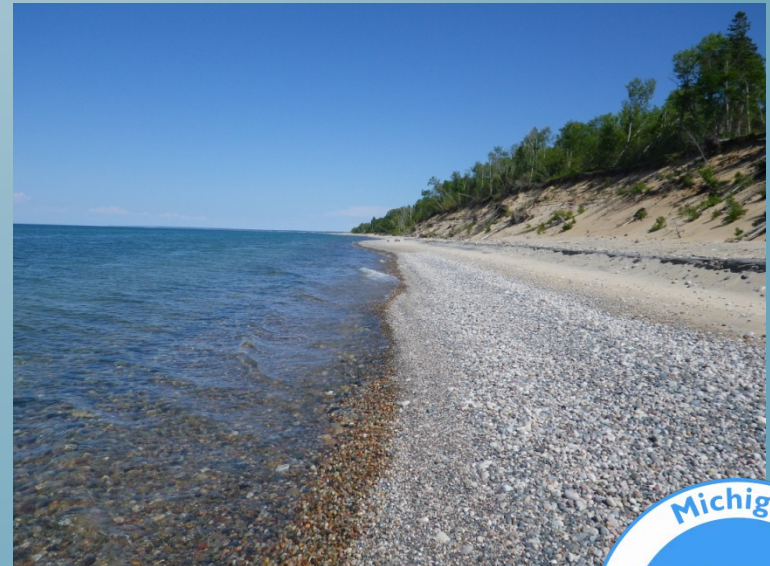
Coastal Hazards



Great Lakes Research and Stewardship

UPCOMING GRANT OPPORTUNITY

- *FY 14 CZM Grants - Approximately one million dollars available*
- *Request for Proposals – January 2013 release; due late March*
 - *Watch for post at www.michigan.gov/coastalmanagement*
- *Grant Period: January 1, 2014 – March 31, 2015*
- *1:1 non-federal match required*
- *Eligible entities:*
 - *local governments*
 - *regional planning agencies*
 - *conservation districts*
 - *state agencies*
 - *universities*
 - *tribal governments*
 - *non-profit organizations*
- *\$75,000 max grant (FY 13)*



CZM Approach toward improving Beach Health

- *Significant flexibility BUT relatively small \$!!!*
- *Encourage local level efforts:*
 - *Land use plans & ordinances toward beach health & water quality protection*
 - *Products that inform and guide local officials*
- *On-the-ground implementation and demonstration activities that protect or restore beach health & water quality*
- *Educational activities & training*
 - *Best Management Practice guides*
 - *Innovative stewardship initiatives*





HURON CREEK STREAM BANK RESTORATION 2010

In 2009, the Michigan Technological University Center for Water and Society completed a Watershed Management Plan for the Huron Creek. The Management Plan focused on water quality issues within 3.4 square miles of the Huron Creek watershed. One of the critical areas of concern in the plan was stream bank erosion and general aesthetic concerns for Huron Creek at the Ray Kestner Waterfront Park.

With a grant from the Michigan DNRE Coastal Management Program, the City of Houghton was able to restore the stream banks using coir logs and 934 plantings. The Michigan DNRE Coastal Management Program provided \$21,000 in grant funding. The City of Houghton matched it with \$21,000 for a total project cost of \$42,000.

Go beyond implementation -
Demonstrate and Educate!

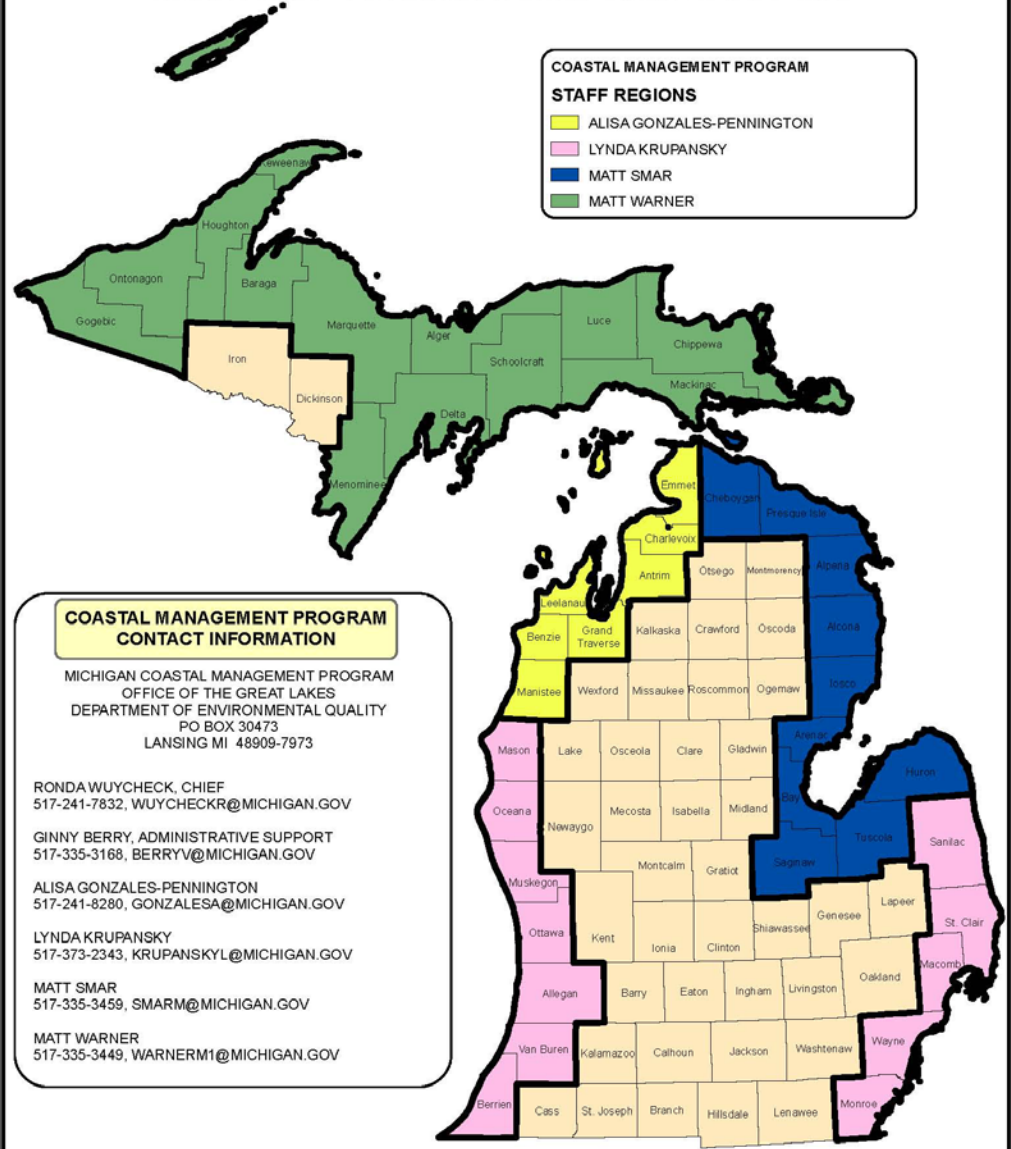


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MICHIGAN COASTAL MANAGEMENT PROGRAM GRANT AND TECHNICAL ASSISTANCE STAFF MAP



** PLEASE NOTE THE SHADING INDICATES THOSE COUNTIES THAT CONTAIN LANDS WITHIN MICHIGAN'S COASTAL ZONE MANAGEMENT (CZM) BOUNDARY, AND IDENTIFIES STAFF COVERAGE AREAS. PROJECTS MUST BE LOCATED WITHIN THE CZM BOUNDARY TO BE ELIGIBLE FOR GRANT FUNDS. MAPS SHOWING THE DETAILED CZM BOUNDARY ARE AVAILABLE AT: <http://www.michigan.gov/coastalmanagement>



QUESTIONS?

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