

# Great Lakes Coastal Wetland Monitoring in Michigan

*Great Lakes Restoration  
Initiative Project*

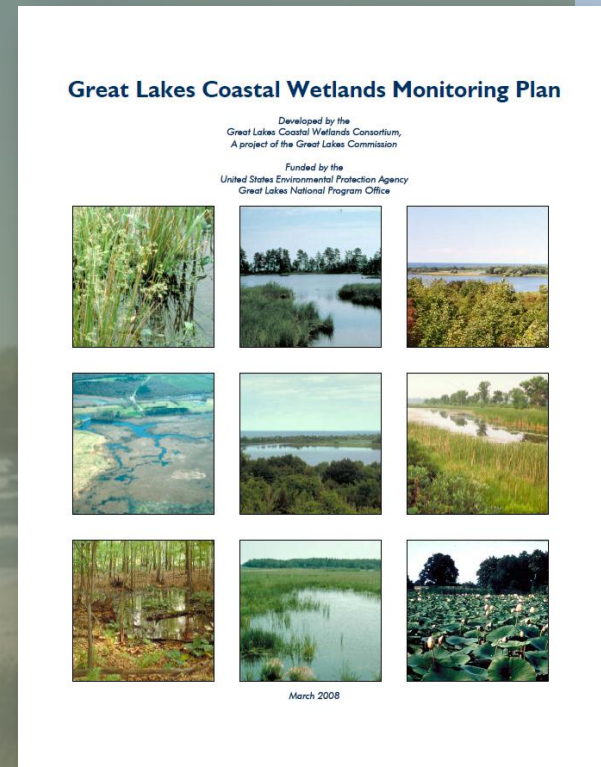
*Michigan's Intensification of the  
National Wetland Condition  
Assessment*

*Next Steps*



# Great Lakes Coastal Wetlands Monitoring Plan

- The Great Lakes Coastal Wetland Consortium consisted of approximately two-dozen scientific and policy experts from key US and Canadian federal, state, and provincial agencies, NGO's, and other interest groups with responsibility for coastal wetland monitoring.
- Goal: Design an implementable, long-term program to monitor GL Coastal Wetlands.
- *The Great Lakes Coastal Wetland Monitoring Plan* was completed in 2008.
  - Indicators were selected through the State of the Lakes Ecosystem Conference (SOLEC) process
  - Further refined based on scientific investigation and pilot studies. These protocols are specific to coastal wetlands than other protocols



# GLRI Project: Great Lakes Coastal Wetland Monitoring

- Great Lakes Coastal Wetlands Monitoring Plan (Great Lakes Coastal Wetland Consortium, 2008)
  - *Protocols:*  
*Vegetation, Invertebrates, Fish, Amphibians, Birds, Water Chemistry*
- 5 Year Project 2011-2015
- Monitor approximately 900 - 1000 coastal wetlands
- Throughout the Great Lakes basin, including Canada



Table 1. Counts, areas, and proportions of the 1014 Great Lakes coastal wetlands deemed sampleable following Great Lakes Coastal Wetland Consortium protocols. Area in hectares.

Country	Site count	Site percent	Site area	Area percent
Canada	386	38%	35,126	25%
US	628	62%	105,250	75%
Totals	1014		140,376	

# GLRI Project: Great Lakes Coastal Wetland Monitoring

**Project Funded by:** USEPA GLNPO

**Project Lead:** Central Michigan University

Natural Resources Research Institute

Oregon State University

University of Windsor

University of Wisconsin - Superior

Bird Studies Canada

University of Notre Dame

University of Wisconsin - River Falls

Lake Superior State University

Grand Valley State University

State University of New York Brockport

Environment Canada

University of Wisconsin - Green Bay

Michigan Department of Environmental Quality



# GLRI Project: Great Lakes Coastal Wetland Monitoring

Table 2. Counts, areas, and proportions of the 176 Great Lakes coastal wetlands sampled in 2011 and the 206 wetlands sampled in 2012 by the GLIC: Coastal Wetland Monitoring Project. Area in hectares.

<b>Country</b>	<b>Site count</b>	<b>Site %</b>	<b>Site area</b>	<b>Area %</b>
<b>Canada</b>				
2011	50	28%	3,303	13%
2012	82	40%	7,917	27%
<b>CA total</b>	<b>132</b>	<b>35%</b>	<b>11,220</b>	<b>20%</b>
<b>US</b>				
2011	126	72%	22,008	87%
2012	124	60%	21,845	73%
<b>US total</b>	<b>250</b>	<b>65%</b>	<b>43,853</b>	<b>80%</b>
<b>Overall Totals</b>	<b>382</b>		<b>55,073</b>	

*3 More Years of Monitoring...*

# Michigan Intensification of the National Wetland Condition Assessment: Coastal Wetland Monitoring

- USEPA Funded Intensification
- Michigan DEQ and Central Michigan University
- Protocols:
  - Vegetation, Invertebrates, Fish, Amphibians, Birds, Water Chemistry*
- ALSO, Michigan Rapid Assessment Method
- 3 Year Project 2010-2012
- Monitor approximately 75 coastal wetlands
- Michigan coastlines of Lake Michigan and Lake Huron, only

***Field Work is Done!...Final Report Summer 2013***

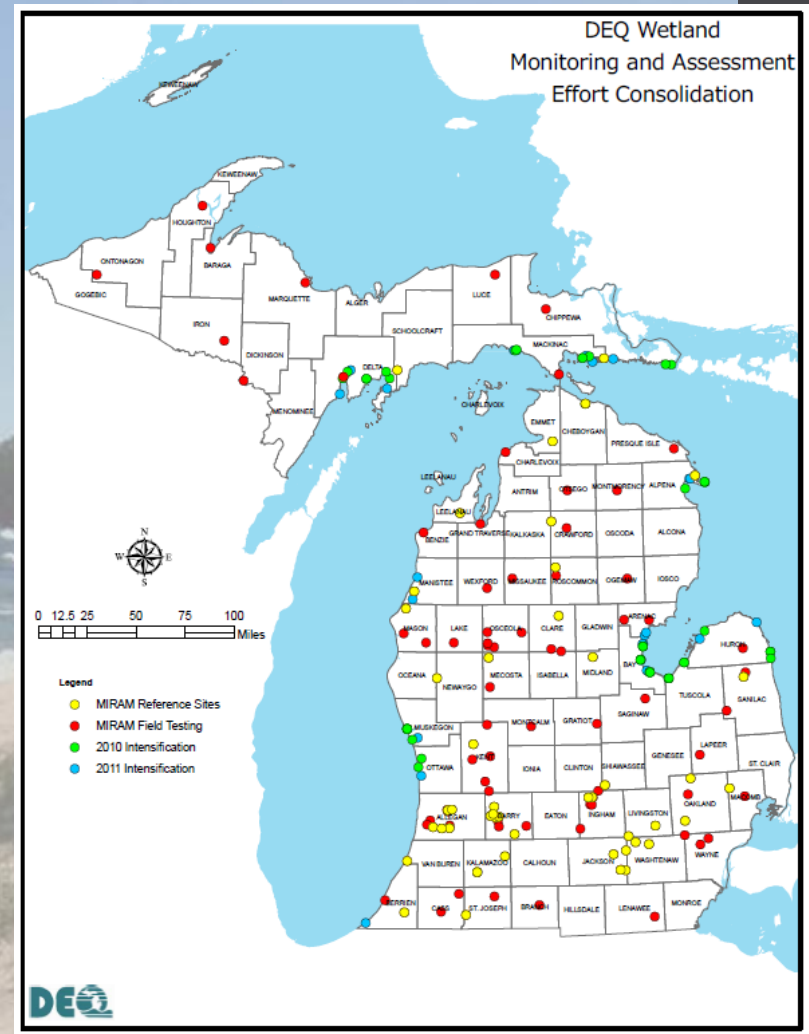


# Michigan Intensification of the National Wetland Condition Assessment:



# Next Steps for Michigan:

- Update the Michigan Wetland Monitoring and Assessment Strategy
  - Refine protocols and site selection criteria for inland wetland monitoring
  - Initiate 5-year cycle for wetland monitoring in Michigan
- Further develop interactive database and GIS mapping tool to track wetland monitoring results
- Analyze ongoing monitoring efforts for:
  - status and trends information, climate change, restoration and preservation priorities, etc.







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