

*Great Lakes Region Coastal Managers Meeting  
September, 2008*

**Sustainable Development  
and the  
Michigan Coastal Management Program**

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*Department of Environmental Quality*



## *Mission:*

*To protect, restore, and promote appropriate, sustainable use of our Great Lakes coastal resources.*

## Goals

- To increase and improve public access to the waters and shores of Michigan's Great Lakes
- To help coastal communities plan future land use, identify hazards, and manage growth and development
- To revitalize urban waterfronts, brownfields, and ports
- To protect, restore, and foster stewardship of coastal habitats and water quality
- To preserve and interpret cultural and historic maritime resources

# *Two-Pronged Approach Toward Achieving Goals . . .*

- Support permitting programs with a coastal resource protection focus
- Coastal Zone Management Grants



# **CZM Grants:** ***Coastal Management through Local Partnerships***

- Local and tribal governments, nonprofit organizations, academic institutions, and state agencies
- Projects implement Coastal Program goals
- Annual RFP with May 1 application deadline
- \$50,000 maximum grant, 1:1 match

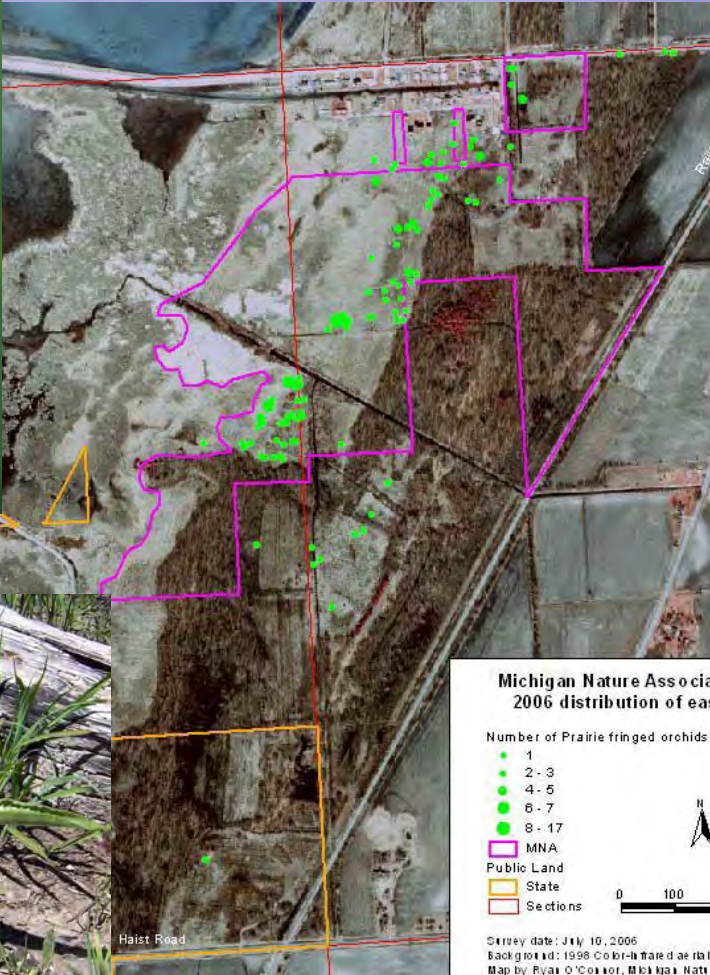


# Watershed Management: Surveys and Resource Inventories





# Watershed Management: Research, Management, and Stewardship



**Michigan Nature Association Saginaw Bay Wetlands  
2006 distribution of eastern prairie fringed orchid**

Number of Prairie fringed orchids




- 1
- 2-3
- 4-5
- 6-7
- 8-17

MNA  
 State  
 Sections

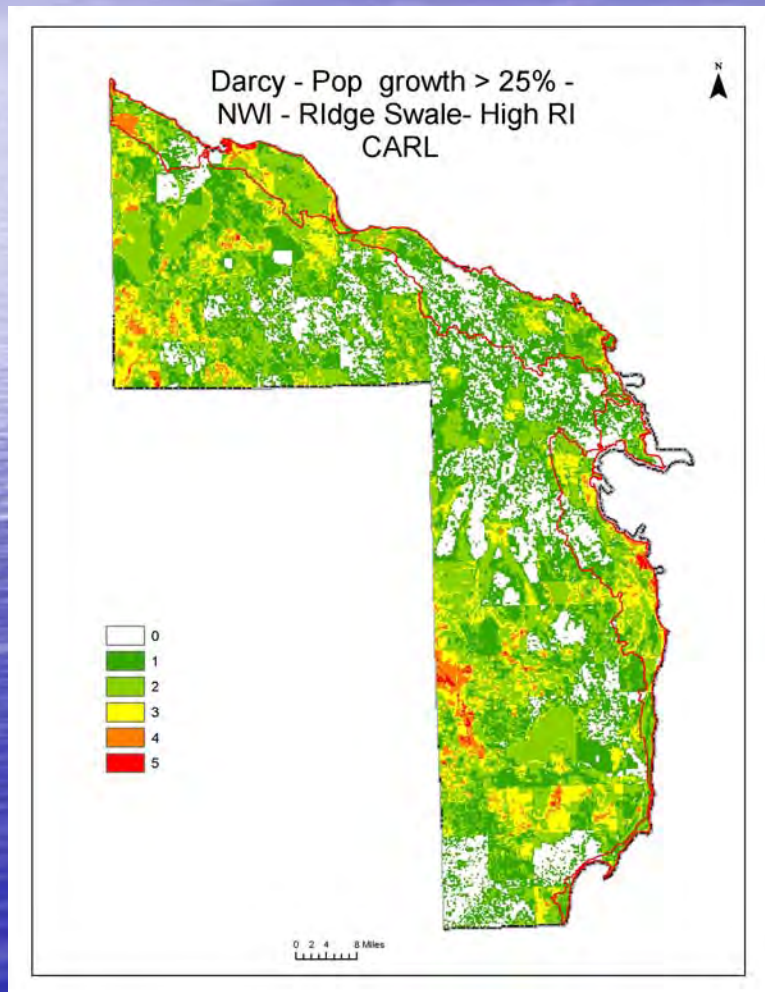
Public Land

0 100 200 300 Meters

Survey date: July 10, 2006  
 Background: 1998 Color-Infrared aerial photo  
 Map by Ryan O'Connor, Michigan Natural Features Inventory

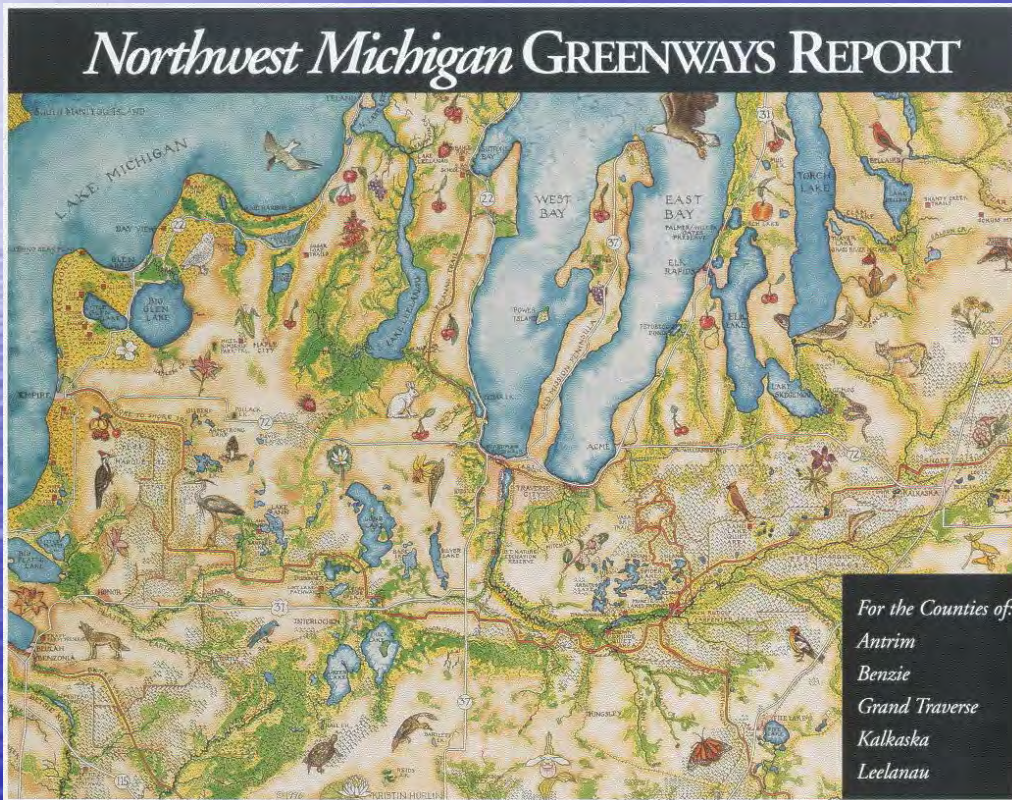




# Watershed Management: Habitat Mapping





# Watershed Management: Conservation and Green Infrastructure Planning



- Large blocks of habitat
- Rare natural communities
- Wetlands
- Riparian buffers
- Ecological corridors



# Watershed Management: Outreach and Education



- Brochures
- Displays
- Curricula and programming
- Web-based outreach
- Public meetings and special events

# **Sustainable Development Projects:**

*Improving Use and Reuse of Coastal Land and Water Resources through Planning and Growth Management*

## **Filling the Gaps: Environmental Protection Options for Local Governments**

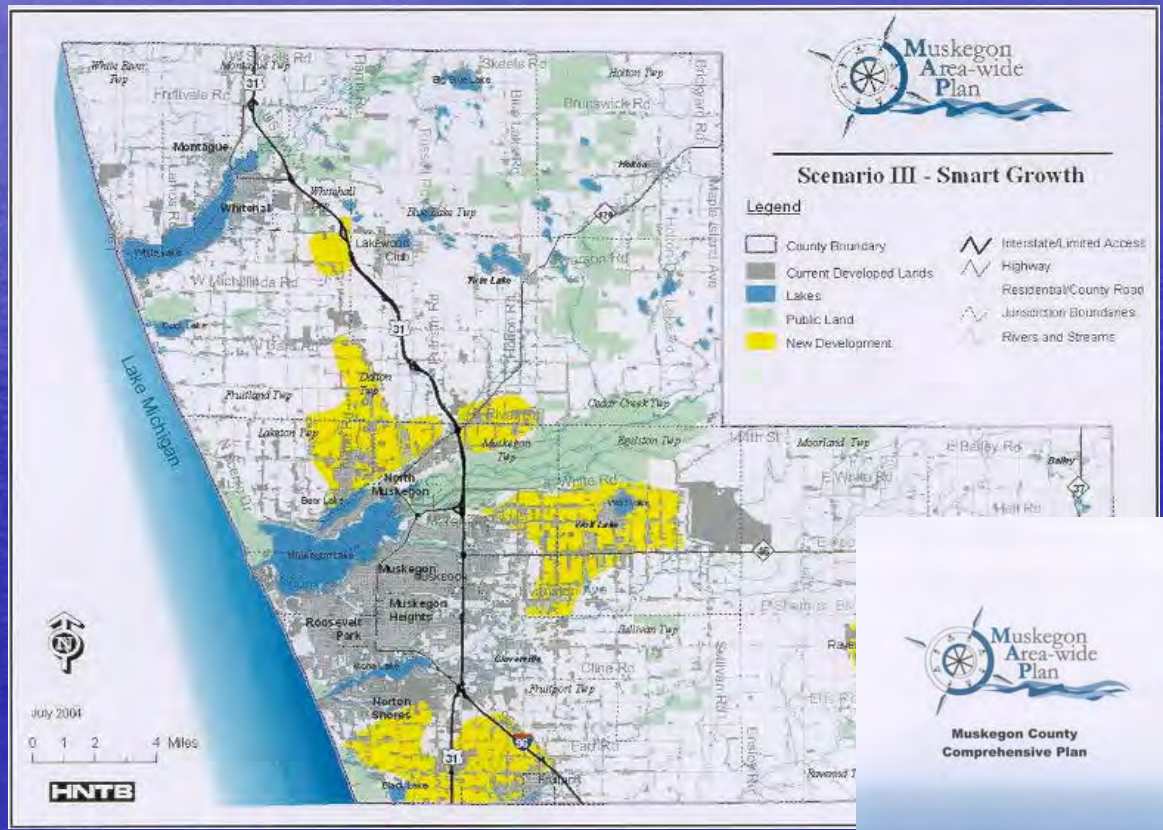
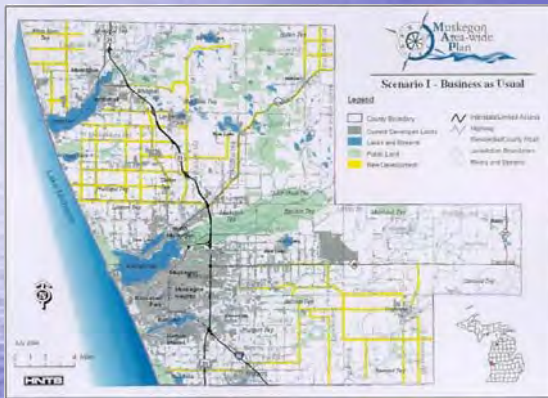


### **Local Planning and Zoning Techniques to Supplement State Protections:**

- Wetlands
- Sand Dunes
- Floodplains
- Inland Lakes and Streams
- High Risk Erosion Areas
- Soil Erosion and Sedimentation



# Sustainable Development Projects: *Improving Use and Reuse of Coastal Land and Water Resources through Planning and Growth Management*



**Muskegon Area-wide Plan**

**Muskegon County Comprehensive Plan**

2004



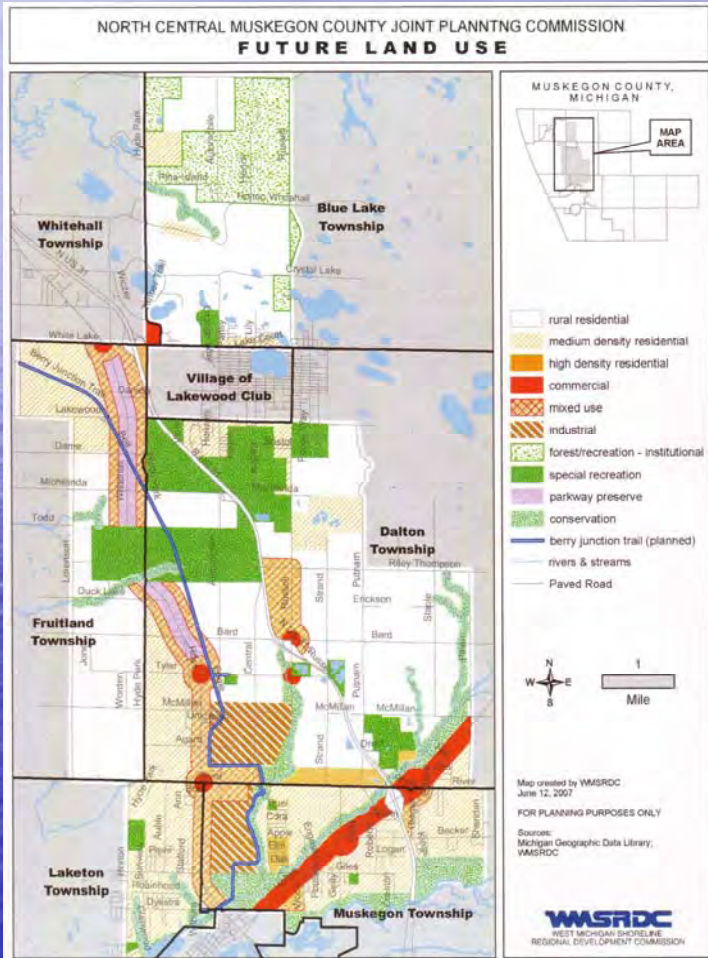
# Muskegon Area-Wide Plan

## Scenario Comparison

<b>FACTOR</b>	<b>Business as Usual</b>	<b>Zoning Build-out</b>	<b>Smart Growth</b>
<b>Forest lost (acres)</b>	8,612	84,658	13,808
<b>Ag/open space lost (acres)</b>	8,563	25,056	4,195
<b>% New development outside of sewer service area</b>	65%	56%	5%
<b>Number of new septic systems</b>	5,054	33,999	532



# Sustainable Development Projects: *Improving Use and Reuse of Coastal Land and Water Resources through Planning and Growth Management*

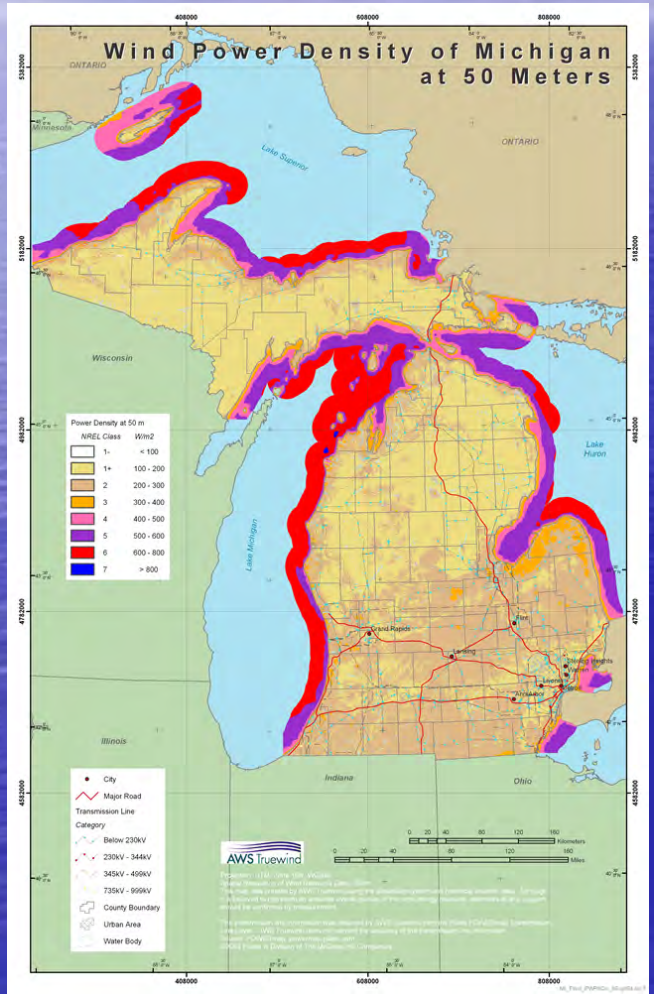


## Joint Planning and Zoning: *North Central Muskegon County Joint Planning Commission and Plan*

Farmland, forest land, riparian corridors, and other land and water resources spanning multiple jurisdictions are best managed cooperatively



# Sustainable Development Projects: *Improving Use and Reuse of Coastal Land and Water Resources through Planning and Growth Management*



## Sustainable Economic Development: *Manistee County Wind Energy Plan*





# **Sustainable Development Projects:** *Improving Use and Reuse of Coastal Land and Water Resources through Planning and Growth Management*



## **Sustainable Economic Development: *Water Trails***

Promoting recreation  
and tourism based on  
coastal natural  
resources

A scenic sunset over a body of water. The sun is low on the horizon, creating a bright orange glow and a reflection on the water. The sky is filled with soft, golden clouds. The text is overlaid on the upper half of the image.

**Questions? Contact the Michigan Coastal  
Management Program!**

**[www.michigan.gov/deqcoastal](http://www.michigan.gov/deqcoastal)**

**(517) 335-3168**