



Beach Data & Trends

Shannon Briggs

Water Bureau

Michigan Department of Environmental Quality

517-335-1214

briggss4@michigan.gov

*Head over heels
in love with our water!*



*We just don't look at it or drink it,
...we play in it!*

Beach Monitoring

E. coli Monitoring

Beach Sanitary Surveys

Forecasting Models

Source Tracking Tools

Data Reports

Trends

Field Gear for Collecting Samples



Some of the *E. coli* Methods approved by the US EPA

Current methods requires incubation time

m-Tec, 24 to 48 hours

Colilert, 24 hours

Colilert-18, 18 hours



WQS Fresh Water

USEPA standards

Single Sample

235 *E. coli* /100 ml

62 *Enterococci* /100 ml

Geometric Mean

126 *E. coli* /100 ml

33 *Enterococci* /100 ml

Health Canada

200 *E. coli* /100 ml



Michigan

Daily geometric mean = 300 *E. coli* /100 ml

30-d geometric mean = 130 *E. coli* /100 ml

Ontario

100 *E. coli* /100 ml



LINKS

- ▶ [Beach Home](#)
- ▶ [Advanced Search](#)
- ▶ [MDEQ Home](#)
- ▶ [Related Links](#)
- ▶ [Health Departments](#)
- ▶ [Help](#)
- ▶ [Log In](#)

DISCLAIMER

Information found on this Web site is entered and maintained by health departments and water quality monitoring authorities for their corresponding monitoring locations. All information should be checked for validity by contacting the respective authority.

Search Results

17 Records Displayed

Waterbody/Location Name	Description	County
Crockery Lake - Grose Park	Conklin	Ottawa
Georgetown Lake - Georgetown Community Park	end of 8th Avenue	Ottawa
Lake Macatawa - Dunton Park		Ottawa
Lake Macatawa - Fallen Leaf Park		Ottawa
Lake Macatawa - Holland State Park	Holland	Ottawa
Lake Michigan - Grand Haven City Beach	Grand Haven	Ottawa
Lake Michigan - Grand Haven State Park	Grand Haven	Ottawa
Lake Michigan - Holland State Park	Holland	Ottawa
Lake Michigan - Kirk Park	At end of Filmore and Lakeshore Dr.	Ottawa
Lake Michigan - Kouw Park		Ottawa
Lake Michigan - North Beach Park	Ferrysburg	Ottawa
Lake Michigan - Rosy Mound Recreation Area		Ottawa
Lake Michigan - Tunnel Park	Holland	Ottawa
Lake Michigan - Windsnest Park		Ottawa
Maplewood Lake - Maplewood Lake Park	Jenison	Ottawa
Pottawattomie Bayou - Pottawattomie Park	Grand Haven	Ottawa
Spring Lake - Lakeside Beach	end of Lake Avenue	Ottawa

LINKS

- [Beach Home](#)
- [Advanced Search](#)
- [MDEQ Home](#)
- [Related Links](#)
- [Health Departments](#)
- [Help](#)
- [Log In](#)

DISCLAIMER

Information found on this Web site is entered and maintained by health departments and water quality monitoring authorities for their corresponding monitoring locations. All information should be checked for validity by contacting the respective authority.

Lake Michigan - Grand Haven City Beach



This beach currently has no warnings or swimming advisories in effect.



[click for larger map](#)

[Site Details](#)
[Test Results](#)
[Advisories/Closures](#)
[Monitoring](#)

Entire Monitoring Result History

Testing Date	Sample Type	Count (#/100ml)
8/26/2008	30 Day Mean	2.92
8/26/2008	Daily Mean	1
8/26/2008	Individual Sample	< 1
8/26/2008	Individual Sample	< 1
8/26/2008	Individual Sample	< 1
8/19/2008	30 Day Mean	7.05
8/19/2008	Daily Mean	4.51
8/19/2008	Individual Sample	92
8/19/2008	Individual Sample	< 1
8/19/2008	Individual Sample	< 1
8/12/2008	30 Day Mean	8.95
8/12/2008	Daily Mean	1

Using the Annapolis Protocol & 95th Percentiles

- Annapolis Protocol
 - Developed at conference of experts hosted by WHO and EPA
 - Use statistical approaches for managing beaches
 - Focus on local conditions and site-specific information
 - Uses 95th percentile as one component of classification



MICHIGAN STATE
UNIVERSITY



What's the 95th Percentile?

- 95% of data are below the 95th percentile estimate
- If the 95th percentile = 100
 - 95% of data points fall below 100
 - 5% of data points fall above 100

95th Percentiles: Public Beaches

From Center for Water Sciences, MSU

Water Quality	95th Percentile	% Beaches in Michigan
Good  Poor	<35	5
	35-130	27
	131-500	50
	500-1000	11
	>1000	8

Beach Name (Data thru '06)	50 th percentile Median Value	95 th Percentile	Number of individual samples
Grand Haven City Beach	22	303.2	101
Grand Haven State Park	18.17	167.1	85
Rosy Mound Rec Area	18.46	189.22	64
Tunnel Park	27.14	298.68	94

Annapolis Protocol

- 95th percentile just first step
- Need sanitary survey information to complete classification
- Allows managers to focus on improving beach water quality (not just open vs closed---but reducing bacteria counts).



GREAT LAKES BEACH SANITARY SURVEY LOCATIONS



Lake Superior

- Minnesota**
- 1 LAKEWALK
 - 2 NEW DULUTH BOAT CLUB 47TH STREET
- Wisconsin**
- 3 SAFFORD ISLAND INNER BEACH
 - 4 BRALLE RIVER STATE FOREST BEACH #1
 - 5 BRALLE RIVER STATE FOREST BEACH #2
 - 6 BRALLE RIVER STATE FOREST BEACH #3
 - 7 SCOMPION WEST END PARK BEACH
 - 8 KROEMER PARK BEACH
 - 9 MASLOWSKI BEACHES

Lake Michigan

- Wisconsin**
- 10 UPPER LAKE PARK BEACH
 - 11 NICEVIL BEACH
 - 12 ZOO BEACH
 - 13 BENDER BEACH
 - 14 GRANT PARK BEACH
 - 15 NESHKON BEACH
 - 16 POINT BEACH STATE PARK - CONCESSION STAND BEACH
 - 17 WHITEFISH DUNES BEACH
 - 18 SUNSET PARK BEACH STURGEON BAY
 - 19 DELAND PARK BEACH
 - 20 GENERAL JORD PARK BEACH
 - 21 KOHLER ANDRAE STATE PARK NORTH BEACH
- Illinois**
- 22 HIGHLAND PARK ROSEWOOD BEACH
 - 23 JACKSON PARK BEACH

- Michigan**
- 24 TORRELL PARK
 - 25 GRAND HAVEN CITY BEACH
 - 26 GRAND HAVEN STATE PARK
 - 27 ROSE MOUND RECREATION AREA
 - 28 CHEKKAHA
 - 29 NASHKON PARK
 - 30 MASON CREEK
 - 31 TRAVLER CITY STATE PARK BEACH
 - 32 EAST BAY PARK BEACH
 - 33 BRYANT PARK BEACH
 - 34 NORWOOD PARK
 - 35 CROSS VILLAGE BEACH
 - 36 WILDERNESS STATE PARK
 - 37 MACKINAW CITY LIGHTHOUSE PARK
 - 38 HENES PARK

Lake Huron

- Michigan**
- 39 STARLETTE BEACH
 - 41 DYER RD. BEACH
 - 42 SINGING DUNGE BEACH
 - 43 TWINING RD. BEACH
 - 44 WHITES BEACH
 - 45 SOUTH LINWOOD BEACH TOWNSHIP PARK
 - 46 BRESSETTE BEACH TOWNSHIP PARK
 - 47 BAY CITY STATE RECREATION AREA
 - 48 WINDORA BEACH
- Canada**
- 49 BAYFIELD MAIN BEACH
 - 50 BAYFIELD SOUTH BEACH
 - 51 MAIN BEACH
 - 52 ST. CHRISTOPHER'S BEACH
 - 53 ROTARY COVE BEACH

Lake Erie

- Pennsylvania**
- 50 BEACH 2
 - 51 BEACH 10 (BUCKY BEACH)
- New York**
- 52 EVANG TOWN PARK
 - 53 LAKE ERIE BEACH

Lake Ontario

- New York**
- 54 FAIRVIEW BEACH STATE PARK
 - 55 BELKORP SHORES STATE PARK BEACH
 - 56 SANDY ISLAND BEACH

Other

- Michigan**
- 54 ST. MARY'S RIVER-SUGAR ISLAND TOWNSHIP PARK
 - 44 PIER PARK

PRIORITY

- High
- Medium
- Low
- Not Applicable



Map by: Matt Hord 10/2007

Routine Beach Sanitary Survey

4 Parts, 1 Page

GREAT LAKES BEACHES ROUTINE ON-SITE SANITARY SURVEY						
Name of Beach:			Date and Time of Survey:			
Sampling Station(s)/ID:			Surveyor Name(s):			
PART I – GENERAL BEACH CONDITIONS						
Air Temperature:		°C or °F		Wind Speed and Direction (e.g., E or 90° at 15 mph):		
Rainfall:		<input type="checkbox"/> <24 hours	<input type="checkbox"/> <48 hours	<input type="checkbox"/> <72 hours since last rain event	and	<input type="text"/> inches or <input type="text"/> cm rainfall measured
Weather Conditions:		<input type="checkbox"/> Sunny	<input type="checkbox"/> Mostly Sunny	<input type="checkbox"/> Partly Cloudy	<input type="checkbox"/> Mostly Cloudy	<input type="checkbox"/> Overcast
		<input type="checkbox"/> Rainy				
Applicable current speed and direction (cm/sec, S or 180°):		<input type="text"/>	Wave Height:		<input type="text"/> ft	<input type="checkbox"/> Estimated or <input type="checkbox"/> Actual
Comments/Observations						
PART II – WATER QUALITY						
Bacteria Sample Results						
Type		E. coli	Escherichia	Other (specify):		
Concentration (CFU/100 mL)		<input type="text"/>	<input type="text"/>	<input type="text"/>		
Water Temperature:		°C		Change in Color? <input type="checkbox"/> yes <input type="checkbox"/> no (if yes, describe)		
Odor:		<input type="checkbox"/> None	<input type="checkbox"/> Septic	<input type="checkbox"/> Algae	<input type="checkbox"/> Sulfur	<input type="checkbox"/> Other
Turbidity:		<input type="checkbox"/> Clear	<input type="checkbox"/> Slightly Turbid	<input type="checkbox"/> Turbid	<input type="checkbox"/> Opaque	or NTU: <input type="text"/>
Comments/Observations						
PART III – BATHER LOAD						
Total number of people at the beach:			Total number of people in the water:			
Number of People Non-bathing/Non-swimming						
Type	Boating	Fishing	Surfing	Windsurfing	Diving	Clamming
Number	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other (specify):						
Comments/Observations						
PART IV – POTENTIAL POLLUTION SOURCES						
Sources of Discharge:						
Type	River(s)	Pond(s)	Wetland(s)	Outfall(s)	Other (specify):	
Name(s) of Source(s)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Flow Rate (M/sec)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Volume	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Characteristics						
Floppables present:		<input type="checkbox"/> yes	<input type="checkbox"/> no	Describe type and amount		
Amount of Beach Debris/Litter on Beach:		<input type="checkbox"/> None	<input type="checkbox"/> Low (1-20%)	<input type="checkbox"/> Moderate (21-50%)	<input type="checkbox"/> High (>50%)	
Type of Debris/Litter Found:		<input type="checkbox"/> Tar	<input type="checkbox"/> Oil/Grease	<input type="checkbox"/> Trash	<input type="checkbox"/> Plastic	<input type="checkbox"/> Medical Waste
		<input type="checkbox"/> Other (describe)				
Amount of Algae in Wetland Water:		<input type="checkbox"/> None	<input type="checkbox"/> Low (1-20%)	<input type="checkbox"/> Moderate (21-50%)	<input type="checkbox"/> High (>50%)	
Amount of Algae on Beach:		<input type="checkbox"/> None	<input type="checkbox"/> Low (1-20%)	<input type="checkbox"/> Moderate (21-50%)	<input type="checkbox"/> High (>50%)	
Presence of Wildlife and Domestic Animals						
Type	Geese	Gulls	Dogs	Other (specify):		
Number	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		
Comments/Observations (cont'd on back if necessary):						

Routine Beach Sanitary Survey

Part I

GREAT LAKES BEACHES ROUTINE ON-SITE SANITARY SURVEY

Name of Beach:		Date and Time of Survey:	
Sampling Station(s)/ID:		Surveyor Name(s):	
PART I – GENERAL BEACH CONDITIONS			
Air Temperature:	°C or °F	Wind Speed and Direction (e.g., E or 90° at 15 mph):	
Rainfall: <input type="checkbox"/> <24 hours	<input type="checkbox"/> <48 hours	<input type="checkbox"/> <72 hours since last rain event	and <input type="text"/> inches or <input type="text"/> cm rainfall measured
Weather Conditions:	<input type="checkbox"/> Sunny	<input type="checkbox"/> Mostly Sunny	<input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Mostly Cloudy <input type="checkbox"/> Overcast <input type="checkbox"/> Rainy
Longshore current speed and direction (cm/sec, S or 180°):	<input type="text"/>	Wave Height:	<input type="text"/> ft <input type="checkbox"/> Estimated or <input type="checkbox"/> Actual
Comments/Observations			

BEACH CURRENTS



BEACH GROOMING & GRADING



WIND DIRECTION

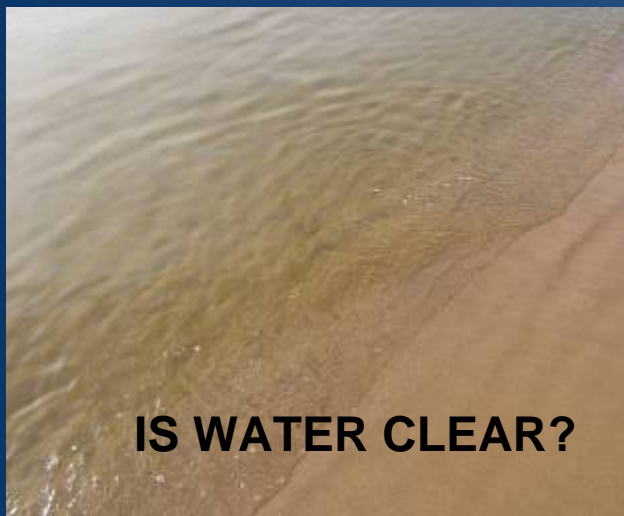


WAVE HEIGHT

Routine Beach Sanitary Survey

Part II

PART II – WATER QUALITY						
Bacteria Sample Results						
Type	<i>E. coli</i>	<u><i>Enterococcus</i></u>	Other (specify):			
Concentration (CFU/100 mL)						
Water Temperature:	°C	Change in Color?	<input type="checkbox"/> yes	<input type="checkbox"/> no	If yes, describe	
Odor:	<input type="checkbox"/> None	<input type="checkbox"/> Septic	<input type="checkbox"/> Algae	<input type="checkbox"/> Sulfur	<input type="checkbox"/> Other	
Turbidity:	<input type="checkbox"/> Clear	<input type="checkbox"/> Slightly Turbid	<input type="checkbox"/> Turbid	<input type="checkbox"/> Opaque	or	NTU:
Comments/Observations						



Routine Beach Sanitary Survey

Part III

PART III – BATHER LOAD

Total number of people at the beach:			Total number of people in the water:				
Number of People Non-bathing/Non-swimming							
Type	Boating	Fishing	Surfing	Windsurfing	Diving	Clamming	Other (specify):
Number							
Comments/Observations							



Routine Beach Sanitary Survey

Part IV

PART IV – POTENTIAL POLLUTION SOURCES

Sources of Discharge:

Type	River(s)	Pond(s)	Wetland(s)	Outfall(s)	Other (specify):
Name(s) of Source(s)					
Flow Rate (M/sec)					
Volume					
Characteristics					

Floatables present: yes no Describe type and amount

Amount of Beach Debris/Litter on Beach: None Low (1-20%) Moderate (21-50%) High (>50%)

Type of Debris/Litter Found: Tar Oil/Grease Trash Plastic Medical Waste

Other (describe)

Amount of Algae in Nearshore Water: None Low (1-20%) Moderate (21-50%) High (>50%)

Amount of Algae on Beach: None Low (1-20%) Moderate (21-50%) High (>50%)

Presence of Wildlife and Domestic Animals

Type	Geese	Gulls	Dogs	Other (specify):
Number				

Comments/Observations (continue on back if necessary):

CSO and SSO Discharge Information

[About CSO and SSO Discharges](#)

Learn about what causes Combined Sewer Overflows and Sanitary Sewer Overflows.

[Locate a CSO Facility](#)

Search our database to find out which facilities may discharge wastewater under a CSO Permit.

[Search for Discharge Information](#)

Search our database for information about specific discharges. A search may be performed by either the receiving water, county of discharge, or by the responsible entity.

[Display Info about Recent Discharges](#)

Facilities are required to notify the MDEQ within 24 hours when a CSO or SSO discharge begins. After the discharge ends, the facility must submit a complete report including the locations and volume of the discharge. Use this link to locate information about [events](#) where MDEQ has not yet received a complete report.

[Download SSO Reporting Form](#)

Use this link to download the Microsoft Word SSO Reporting form. This form should be used by municipalities or legal entities responsible for reporting a sanitary sewer overflow.

Routine Beach Sanitary Survey

Part IV



Beach Sanitary Surveys

USEPA invested \$522,824 into
Great Lakes Beach Sanitary Surveys
for 61 beaches (26 in Michigan).

Unknown Pollution Sources
that caused beach closures

Before 84%

After 24%

Help us find about \$8,570 for your local beach to
identify pollution sources.



["Clean Boats Every Day" Initiative](#) 

[Clean Beaches Initiative](#) 

[GLRC](#) 

[Initiatives May 2008 Updates](#)
(see individual initiatives below)

Beach Project Initiative Progress Report – May 2008

(printer-friendly PDF, 56Kb)

Introduction

The Great Lakes Regional Collaboration (GLRC) identifies coastal health as a challenge recognizing the significance of beaches to the economic well-being, health and quality of life of the region's citizens. Contamination leading to beach advisories and threats to public health continues to be a concern in the Basin. The GLRC calls for identification of

Memorial Day 2008, the GLRC Clean Beaches Initiative... encourages increased use of sanitary survey forms for tracking down sources of pollution causing beach closings and will provide information on other beach monitoring and man management resources through the GLRC Website.

Next Steps

- ✓ *E. coli* monitoring & Beach Sanitary Surveys
- Identify Sources
 - Common sense, Source Tracking, Target Monitoring
- Remediation
- Beach Modeling-Forecasting

The Story of Racine

Number of Days When EPA Standards for Recreational Water Were Exceeded

<u>Year</u>	<u>North Beach</u>	<u>Zoo Beach</u>	<u>Season Length</u>
2000	62	39	94
2001	17	21	84
2002	27	20	87
2003	34	29	88
2004	22	16	94
2005	5	5	93
2006	3	7	94
2007	3	7	

Remediation Projects Completed in 2004



How did they do that?



Political *Involvement*

Expertise in Science

Public/Academic Partnerships

A *Team* Effort at the Municipal Level

Research Scientists, Public Health Officials, Department of Public,
Works, Parks and Recreation

Public Interest/Concern

Effective Communication

Political *Involvement*

Mayor Gary Becker



- **Great Lakes and St. Lawrence Cities Initiative – Board Member**
- **Wisconsin Coastal Management Council – Chair**
- **Great Lakes Regional Collaboration – Chair, Sustainable Development Strategy Team**

Targeted Remediation Efforts: City of Racine Health Department

Inspection and plume study determined outfall to be cause of frequent closures at North Beach



Step 1- relocate outlet



Step 2- install Vortechs® chamber



Step 4 – volunteers plant native wetland plants in overflow.

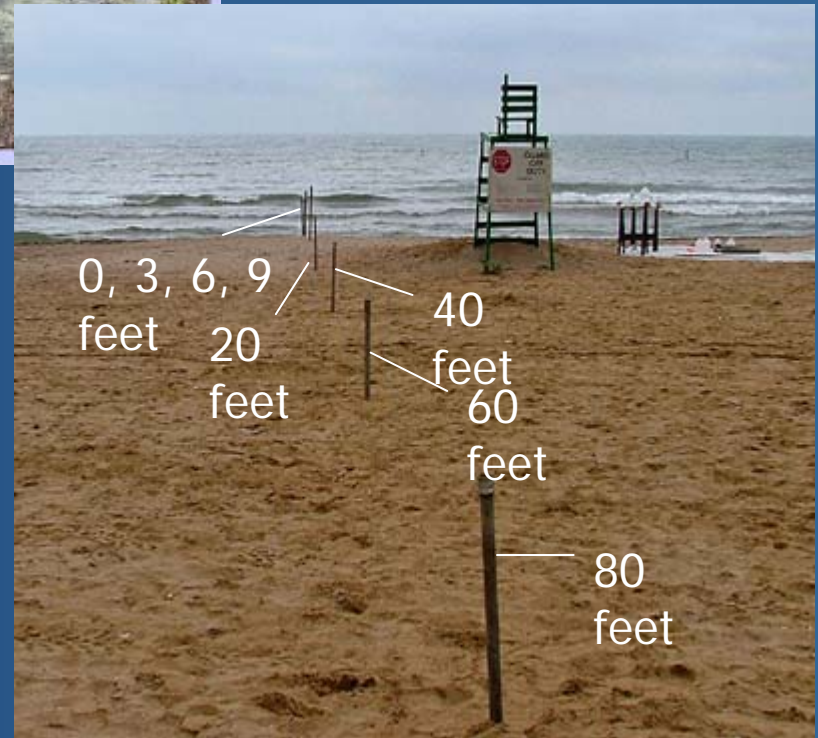


Remediation Efforts

Two Grooming Strategies - 2002



beach grooming methods
run off & wetland
management strategies
daily grooming
groundwater contamination





Slope of beach



Wildlife



ALGAE BLOOMS

Next Steps

- ✓ *E. coli* monitoring & Beach Sanitary Surveys
- ✓ Identify Sources
 - Common sense, Source Tracking, Target Monitoring
- ✓ Remediation
- Beach Modeling-Forecasting



- Publications
- Information Sheets
- Photo Gallery
- Technology Development
- GLERL Library
- Vessels
- Water Levels
- Web Cams
- Meteorological Data

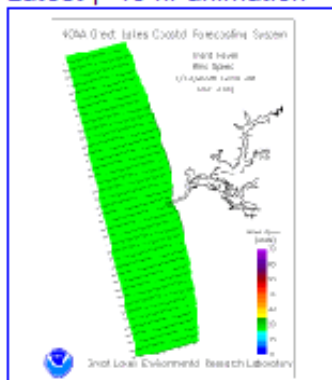
Grand Haven Area Nowcast

Check out [Grand River Plume: Aerial Photos vs Model Simulation](#) (updated Jul 20, 2007)
See also [Forecast](#)

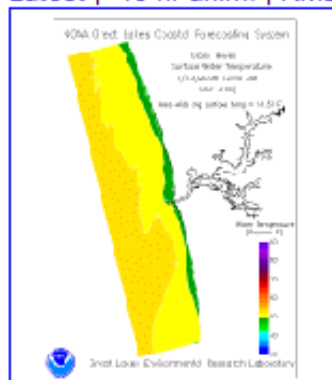
Timestamp: 11/13/2008 (DOY 318) 12:00 GMT

The products on this page are updated 4x per day at about 0055, 0655, 1255, and 1855 GMT (subtract 5 for EST)

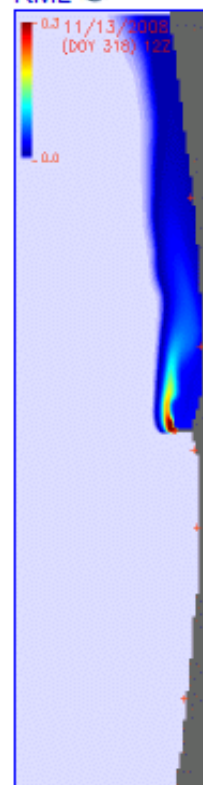
Winds:
[Latest | -48 hr animation](#)



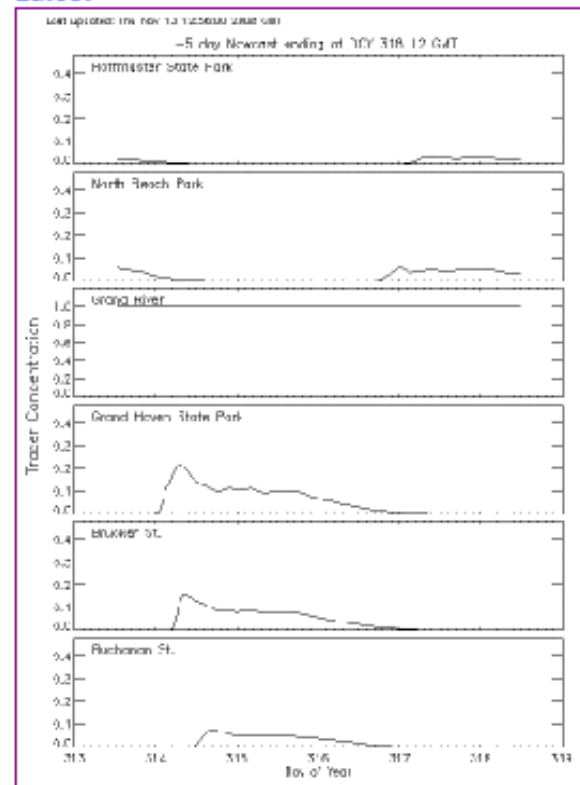
Surface Water Temps:
[Latest | -48 hr anim. | KML](#)



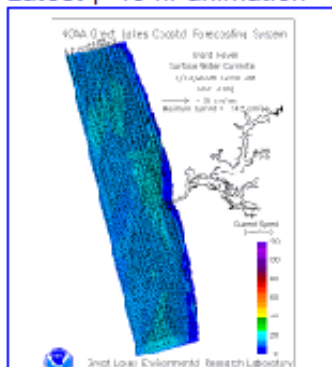
Tracer Concentration:
[Latest | -5 day anim. | KML](#)



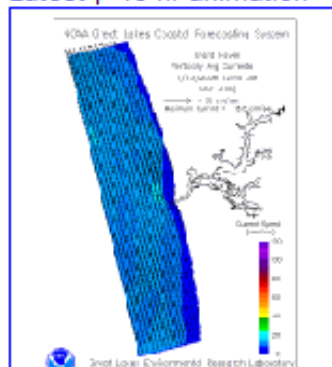
Timeseries at Beaches:
[Latest](#)



Surface Currents:
[Latest | -48 hr animation](#)



Vertically Avg Currents:
[Latest | -48 hr animation](#)



“The City of Marquette has excellent water quality at the five beaches located on Lake Superior. This is very positive and should be presented as a “feel good story”, instilling confidence in the users of the beaches.”

--Curt Goodman



“Sun Model” may be best suited for great beaches!

95th Percentiles: Marquette Public Beaches

Beach Name	95 th Percentile	Number of individual samples
North Beach	96	456
North Picnic Rocks	130.8	453
Picnic Rocks	130.2	459
McCarty's Cove	58.1	459
South Beach	128	428

Beach Data

National

Great Lakes Region

Michigan

Ottawa County

National Beach Data

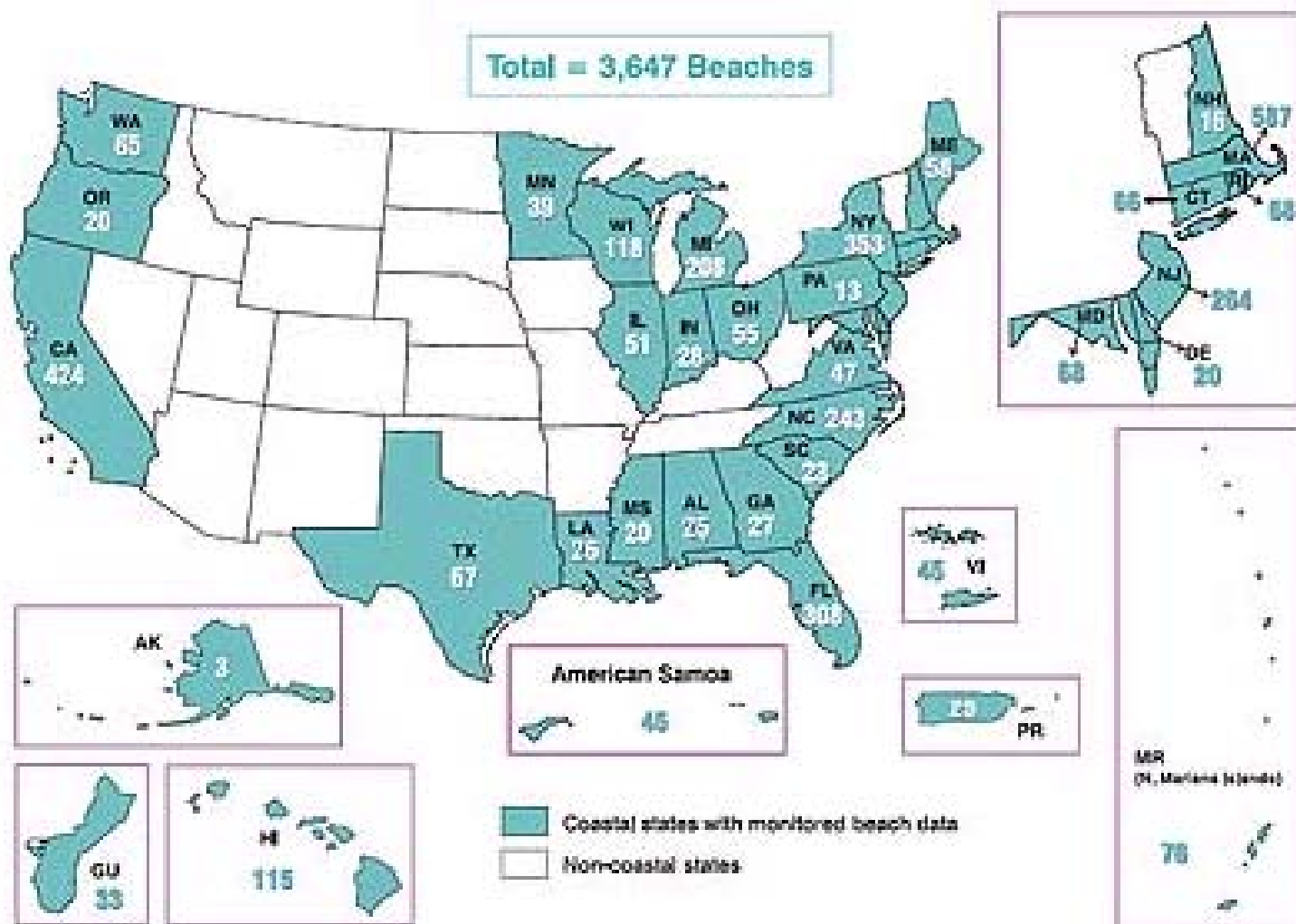
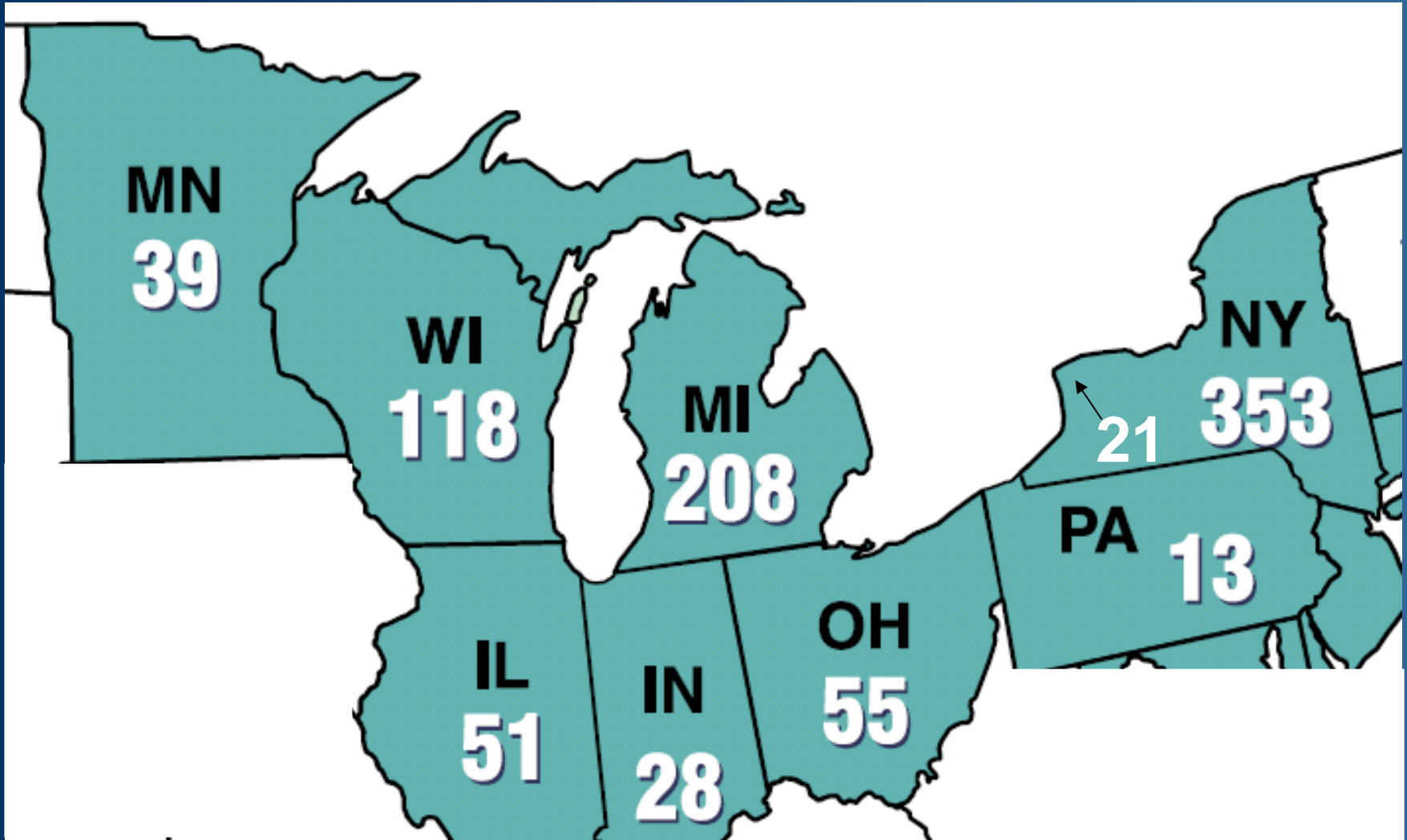


Figure 1. Coastal states with 2007 monitored beach data.


Great Lakes Monitored Beaches




Beach Data

	Total beaches	Monitored beaches	% Open Days
National	6,237	3,647	95%
Great Lakes	1,503	520	83% to 98%
Michigan	970 all <i>610 public</i>	208	97%
Ottawa County	19 <i>11 GL + 8 Inland</i>	17 <i>9 GL + 8 Inland</i>	100% GL 71% Inland

Wednesday June 11, 2008



Department of Environmental Quality


Michigan.gov

[Michigan.gov Home](#) | [Beach Monitoring Home](#) | [Contact DEQ](#) | [Log In](#) | [RSS](#) | [Help](#)

Beach Search:


LINKS

- [Beach Home](#)
- [Advanced Search](#)
- [MDEQ Home](#)
- [Related Links](#)
- [Health Departments](#)
- [Help](#)
- [Log In](#)

DISCLAIMER

Information found on this Web site is entered and maintained by health departments and water quality monitoring authorities for their corresponding monitoring locations. All information should be checked for validity by contacting the respective authority.

Click a County



Click a County to See Beach Info

Statewide Beach Information

Public Beaches	1147
Closures and Advisories	23

<i>Waterbody and Location Name</i>	<i>County</i>
Lake Macatawa - Dunton Park	Ottawa
Lake Macatawa - Fallen Leaf Park	Ottawa
Lake Macatawa - Holland State Park	Ottawa
Lower Trout - Bald Mountain Rec. Area	Oakland
Dumont Lake - Dumont Lake County Park Beach	Allegan
Lake Michigan - Douglas Beach	Allegan
Lake Michigan - Pier Cove Beach	Allegan
Lake Michigan - West Side County Park Beach	Allegan
Little John Lake - Little John Lake County Park Beach	Allegan
Lake St. Clair - Crescent Sail Yacht Club	Wayne
Cedar River - Gladwin City Park	Gladwin
Ross Lake - Beaverton City Park	Gladwin
Billings Lake - Manton Park	Wexford
Tommys Lake - Camp Agawam Boy Scout Camp	Oakland
Adams Lake - Addison Oaks Co. Park	Oakland
Tamarack Lake - Tamarack Subdivision	Oakland
Elizabeth Lake - Bloomfield	Oakland
No Name - Thelma Spencer Park	Oakland
Crooked Lake - Independence Oaks Co. Park	Oakland
Walker Lake - Emerald Lake Homeowners Assoc. - Sandshore	Oakland
Mill Pond - Davisburg Village Beach (Hart Community Center)	Oakland
Phillips Lake - Camp Dearborn - Lake #1	Oakland
Phillips Lake - Camp Dearborn - Lake #5	Oakland

Welcome

Welcome! This site contains information about Michigan public beaches and recreational-use waterways. Here you will find information about beach closings, monitoring efforts and *E. coli* test results. Information on this site is entered and maintained by local health department offices.

Next steps...

You have a key role in
improving beach monitoring programs
and
helping beaches that were closed!

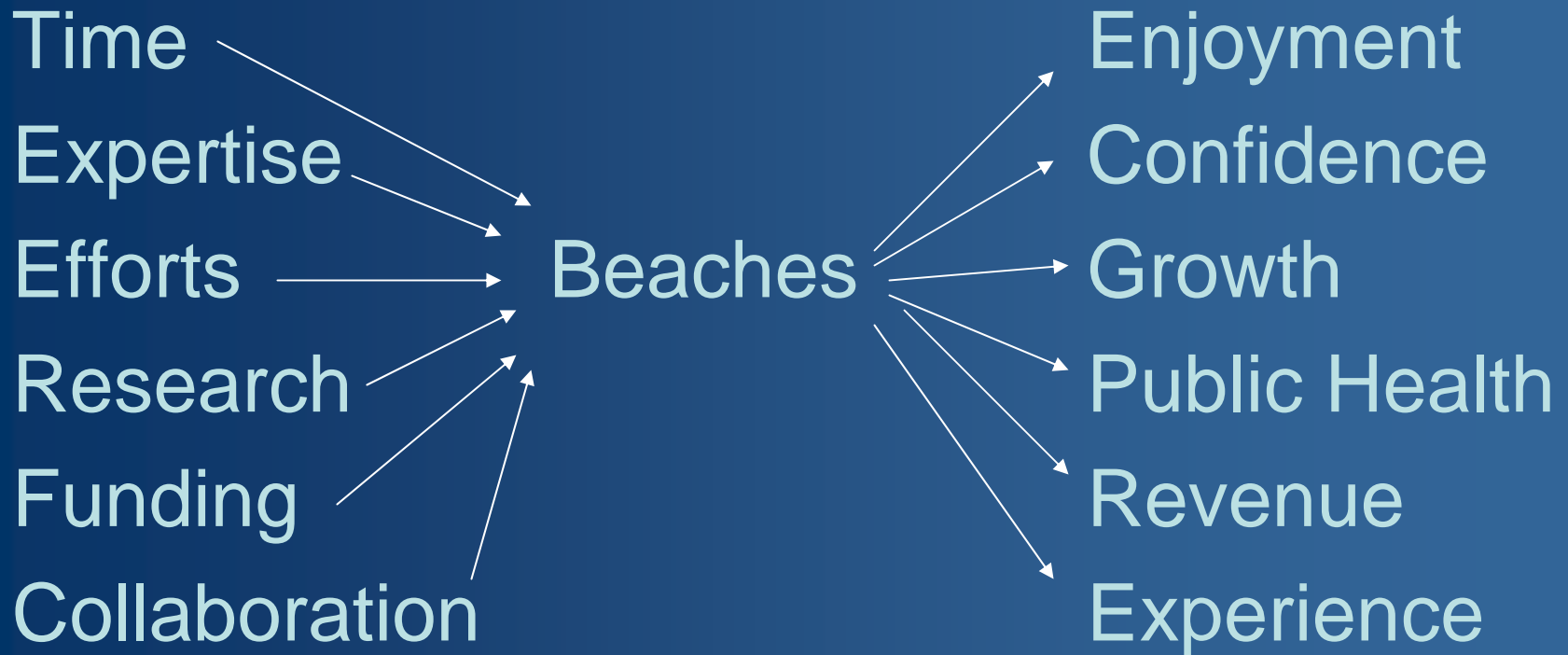
Investing in Beaches = Investing in Community

Funds Invested Can Lead to Revenue Gained

***Doing nothing about a beach closure =
estimated cost is \$8,000 to \$30,000 per day***

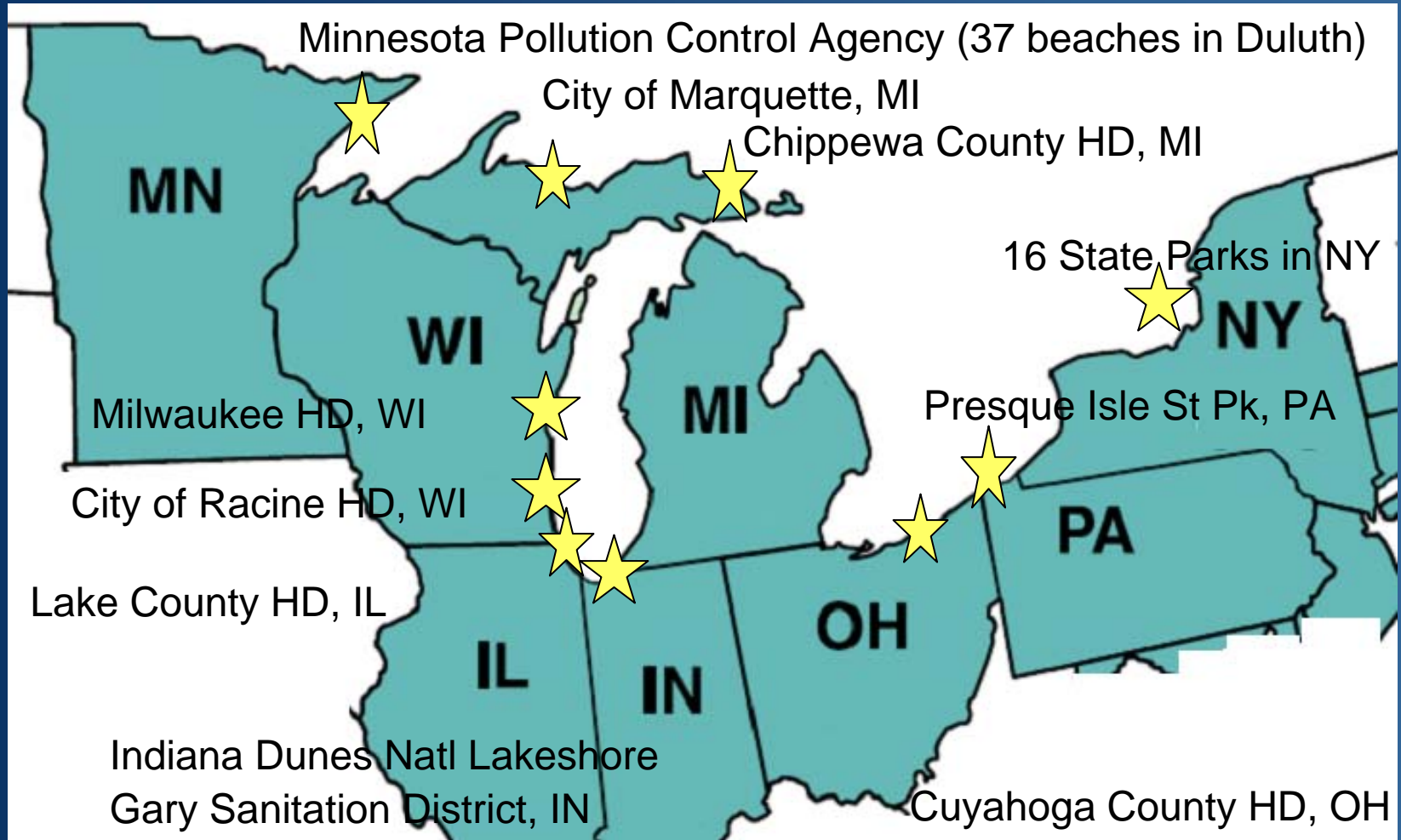
Long-term revenue loss ?

Trends

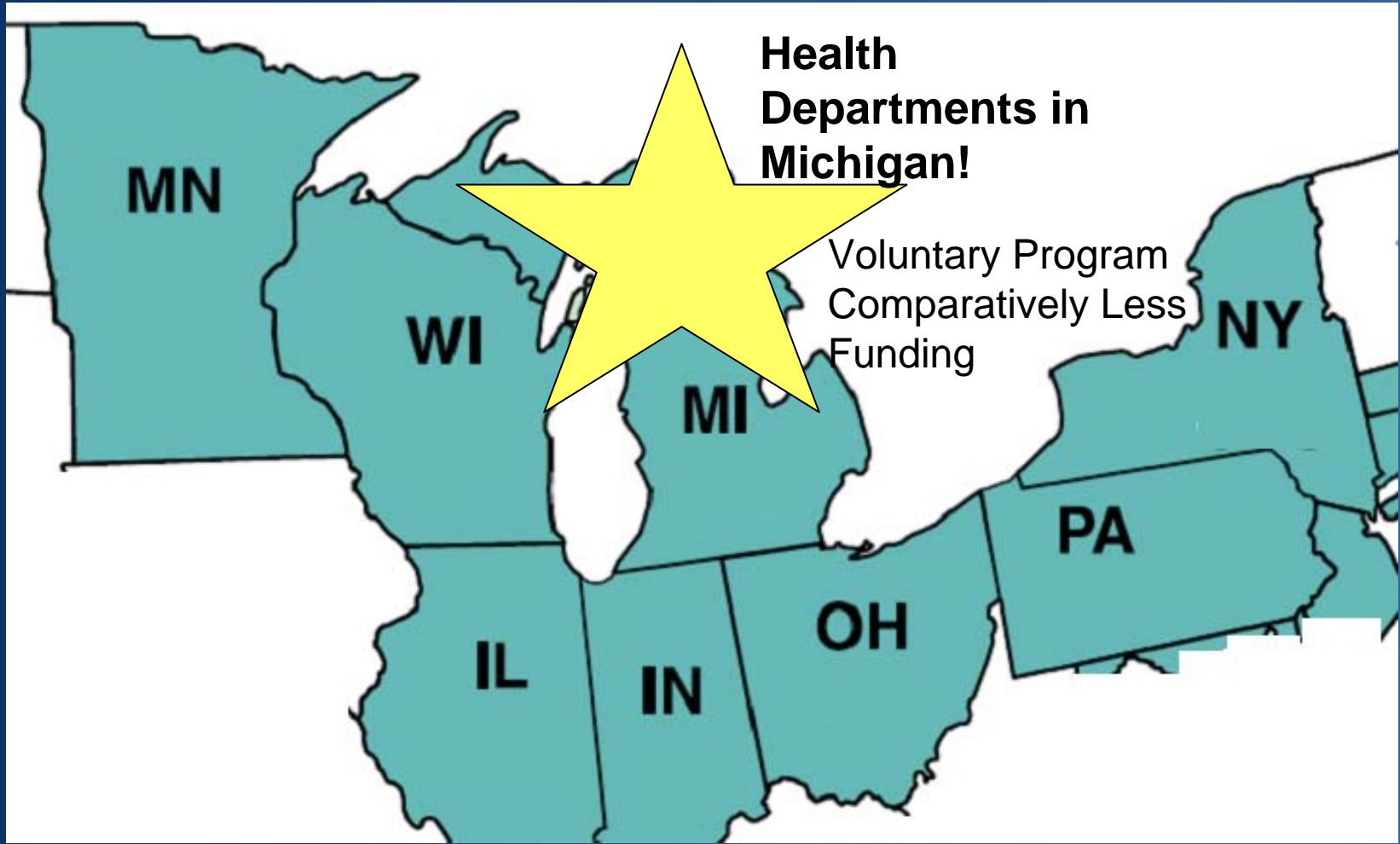


Investing in Beaches = Investing in Community

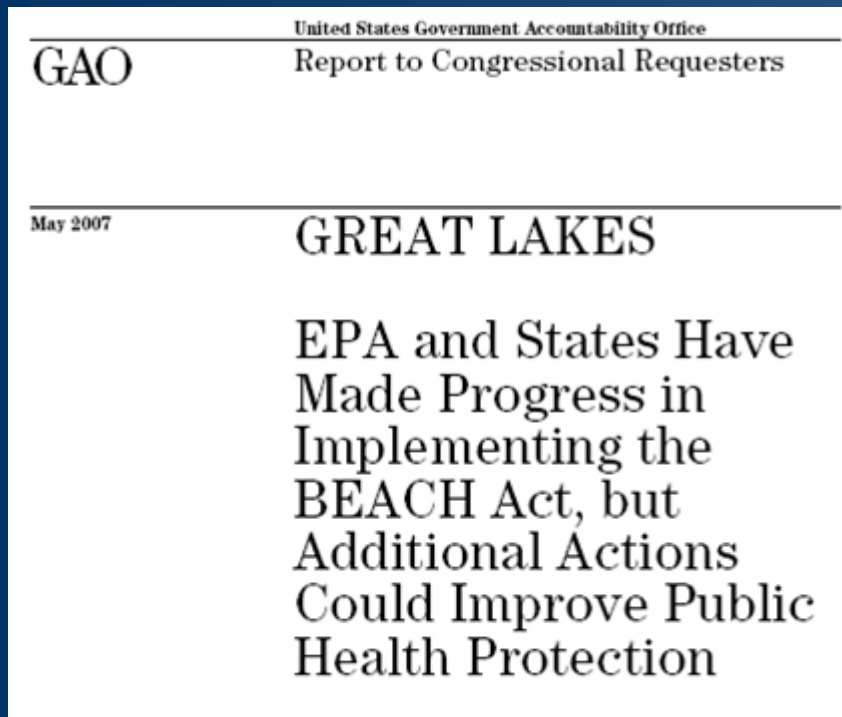
Great Lakes Success Stories



Great Lakes Success Stories



GAO was asked to assess (1) the extent to which EPA implemented the BEACH Act including how it allocated grants to the states, (2) the monitoring and notification programs developed by Great Lakes states, and (3) the effect of the BEACH Act on water quality monitoring and contamination at Great Lakes beaches.



GAO recommends that EPA distribute grant funds in a way that reflects states' monitoring needs and help states improve the consistency of their monitoring and notification activities. In addition, Congress should consider providing EPA more flexibility to allow states to use BEACH Act grants to investigate and remediate contamination sources. EPA generally agreed with GAO's recommendations but stated that states may resist making substantial changes to the funding formula because of their tight budgets.

“Therefore, we strongly encourage you to reconsider the formula used to distribute BEACH Act grants to states.”



THE NORTHEAST-MIDWEST COALITION
GREAT LAKES TASK FORCE

May 24, 2007

The Honorable Stephen Johnson
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Dear Administrator Johnson:

We are writing to follow-up on concerns raised by a recently released Government Accountability Office (GAO) report titled “GREAT LAKES: EPA and States Have Made Progress in Implementing the BEACH Act, but Additional Actions Could Improve Public Health Protection.” While we appreciate the ability of the EPA to stretch funding, we encourage you to reconsider how your agency distributes BEACH Act grant funds to states.

Contaminated water along Great Lakes beaches continues to be a human health threat to swimmers and others that come in contact with the water. Water borne illnesses have been reported in several states, some with serious consequences. The Natural Resources Defense Council reported that in 2005 beaches in the Great Lakes had at least 2,740 days of health advisories or beach closures. Considering that beaches in the Great Lakes are only open on a seasonal basis, the information about advisories and closures is concerning.

In the GAO’s report, the GAO found that EPA’s formula to distribute grants “does not accurately reflect the monitoring needs of the states.” The BEACH Act requires EPA to consider three factors in the formula for distributing grant funds—length of beach season, beach miles, and beach use. In practice, EPA places considerably more weight on the beach season factor than the other factors. Because of that emphasis, states that have seasonal beaches but differing coastlines and coastal populations will receive about the same amount of grant funding. Therefore, we strongly encourage you to reconsider the formula used to distribute BEACH Act grants to states.

We appreciate your support for improving the Great Lakes and look forward to working with you on this issue.

Sincerely,

George V. Voinovich
United States Senator

Carl Levin
United States Senator

Debbie Stabenow
United States Senator

Russell D. Feingold
United States Senator

Mark Kirk
Member Congress

John Dingell
Member of Congress

Brian M. Higgins
Member of Congress

Dale E. Kildee
Member of Congress

Sander Levin
Member of Congress

Joy Mulinex

Joy Mulinex is director of the bipartisan Senate and House Great Lakes Task Forces, working in the office of Senator Carl Levin (D-MI). She previously was legislative counsel to Senator Mike DeWine (R-OH), where she focused on energy, environmental, and Great Lakes issues. Ms. Mulinex also served as associate counsel for the House Committee on Agriculture, and she was a Knauss Sea Grant Fellow.

Ms. Mulinex is a graduate of the University of Oregon School of Law, where she concentrated on environmental and natural resources law. She received her B.A. from Miami University in Oxford, Ohio, with an emphasis in environmental studies.

[Staff List](#) | [Home](#)

Joy_Mulinex@levin.senate.gov

“Michigan with 3,224 miles of shoreline and 4.8 million people living near the coast gets less money than American Samoa which has 126 miles of shoreline and 57,291 people living near the coast.”

CARL LEVIN
MICHIGAN

United States Senate

WASHINGTON, DC 20510-2202

September 18, 2007

The Honorable Frank Lautenberg
Chairman
Subcommittee on Transportation Safety,
Infrastructure Security, and Water Quality
United States Senate
Washington, DC 20510

The Honorable David Vitter
Ranking Member
Subcommittee on Transportation Safety,
Infrastructure Security, and Water Quality
United States Senate
Washington, DC 20510

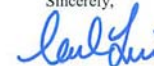
Dear Mr. Chairman and Ranking Member:

I am pleased by your efforts to reauthorize the Beaches Environmental Assessment and Coastal Health Act (BEACH Act) and am writing to encourage you to include language in this reauthorization to encourage the Environmental Protection Agency (EPA) to reconsider the weight it places on factors to distribute state grants.

The Government Accountability Office (GAO) completed a report entitled, “*Great Lakes: EPA and States Have Made Progress in Implementing the BEACH Act, but Additional Actions Could Improve Public Health Protection*” (GAO-07-591). In the report, the GAO recommended that EPA change the distribution formula. According to the GAO, EPA uses three factors: length of beach season, beach use, and beach miles. However, EPA places far more emphasis on beach season length. Because of the emphasis on length of beach season, states that have longer beach seasons but shorter coastlines and smaller coastal populations will receive a greater amount of grant funding. Michigan, for instance, with 3,224 miles of shoreline and 4.8 million people living near the coast gets less money than American Samoa which has 126 miles of shoreline and 57,291 people living near the coast.

I urge you to include language in S.1506, the Beach Protection Act, to require EPA to review the formula. I appreciate your consideration of this request, and if you have any questions, please contact Joy Mulinex on my staff at 224-1211.

Sincerely,



Carl Levin

CL/jam

Thank you Rep Jeff Mayes for House Resolution #239

Letting Congress know that
funding for coastal states does
not accurately reflect monitoring
needs, especially in Michigan.



Testimony from
Bay County
and
MDEQ



What limits our ability?

Technology

It's no one's fault. The standard tests are simply too primitive and imprecise. They leave crucial questions unanswered, which in turn makes remedies difficult.

We hope this can change, with good science to guide policy and the legislature's help.

There is a financial advantage for the state: assuring our victory in the so-called "water wars," which are rapidly emerging as the world's number one struggle over resources. To be blunt, in the very near future: those who have an abundance of clean water will have a sharp competitive edge.

http://cws.msu.edu/pathogen_wkshop.htm

Waterborne Pathogens:

Where Michigan Stands Now and Recommendations for Our Future

A Report on Pathogens in Michigan's Water for
Legislators, Regulators, Policymakers and the Michigan Media



Reporting from Michigan State University,
Center for Water Sciences
Pathogen Workshop Series held in 2007

Sen. Birkholz with Dr. Joan Rose announced the release of the Waterborne Pathogens Report at a joint committee meeting with the MI Senate Committee on Natural Resources and the Environment and the House Committee on the Great Lakes and Environment.

Two Priority Issues for Beach Monitoring in Great Lakes

Predictive Models

multiple factors, provides answers now,
potential for regional model (unmonitored areas)

Need sufficient monitoring data (4-5 days/wk)

Improve access to data (NOAA, etc)

Need equipment (e.g., monitoring buoys)

Need training and technical support

Two Priority Issues for Beach Monitoring in Great Lakes

Affordable Rapid Tests

reduce delay, potential for source tracking

Need to invest in technology

Develop new technology

Modify existing technology

Upcoming Opportunities

BEACH Act Reauthorization may have amendments that include

Beach Sanitary Surveys

Source Tracking

24-hour electronic reporting

Rapid Tests

However, more funding is needed to actually do all that & scheduled monitoring.

BEACH Act Reauthorization

In Senate Committee

Authorization from \$30M to \$60M now to
\$40M to ???

Authorization extended to 2012

Opportunities in your Community

Stormwater Remediation
(small and large scale projects)

Septic Tank Inspections (point of sale)

Sanitary Codes

Reduce Impact of nonpoint sources

Opportunities in your Community


Reduce Phosphorus Applications

Encourage membership for
Watershed Groups or Adopt-a-Beach

Opportunities in your Community

Enjoy your local beach!

Reaffirm value of high quality beaches!

PURE  MICHIGAN® **Michigan's Official Travel and Tourism Site**

Celebrate Community Success!

Remaining Questions

Algae in MI, WI, IN, NY, OH, PA

Cladophora & Blue-Green (toxic) Algae

Sand bacteria?

Public Health Issues?

What about pathogens?

Rotting algal mats are causing closures?

Botulism E?

Garbage dumping?

8th Annual Great Lakes Beach Conference

September 2008 at Indiana Dunes



Your link to 860 beach buddies!

beachnet@great-lakes.net

Great Lakes Beach Association



Great Lakes Beach Conferences

Home

About Us

Upcoming Events

BEACHNET
Discussion

Great Lakes
Beach Conferences

Additional Beach
Information

The Great Lakes Beach Association holds an annual business meeting, which typically includes an open beach conference highlighting the activities of state and provincial beach monitoring programs, U.S. EPA's BEACH Act projects and funding opportunities, and related public outreach and research initiatives.

Current Conference

[2008](#) - [September 15-17](#) at the Indiana Dunes Environmental Learning Center and Indiana Dunes State Park, Porter, IN

Past Conferences

[2007](#) - October 1-3 in Grand Traverse, Mich.

[2006](#) - October 11-13 in Niagara Falls, N.Y.

[2005](#) - November 2-3, 2005 in Green Bay, Wisconsin

[2004](#) - November 30 - December 1, 2004 in Parma, Ohio

[2003](#) - October 21-22, Muskegon, MI

[2002](#) - October 30, Chicago, IL

[2001](#) - February 6-8, Chicago, IL

<http://www.great-lakes.net/glba/index.html>

May I invite you to the next
Great Lakes Beach Conference?

We will be co-hosting with the
State of the Lake Michigan
Conference.

September 29, 30, & October 1
Milwaukee, Wisconsin

Great Lakes Beach Conference

September 29, 30, & October 1
2009 Milwaukee, WI



Discovery World



Hyatt in Downtown Milwaukee



What does it look like?





...and this is why we work on beaches.