

Great Lakes Restoration Initiative

Water Quality Forum
Ottawa County

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photo courtesy of the US EPA





The Great Lakes Restoration Initiative
<http://www.epa.gov/glnpo/glri/>



The Great Lakes Restoration Initiative

Status

Conference Committee

House \$475M, Senate \$400M

Expected announcement for the RFP
could be the end of October

To be added to a listserv which will provide updates on funding information, including funding information about the Great Lakes Restoration Initiative, please go to to

<http://www.epa.gov/glnpo/maillist/index.html>



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Great Lakes Restoration Initiative

The President's [2010 Budget](#) provides [\\$475 million in EPA's budget](#) for a new Environmental Protection Agency-led, interagency Great Lakes restoration initiative, which will target the most significant problems in the region, including invasive aquatic species, non-point source pollution, and contaminated sediment.

This initiative will use outcome-oriented performance goals and measures to target the most significant problems and track progress in addressing them. EPA and its Federal partners will coordinate State, tribal, local, and industry actions to protect, maintain, and restore the chemical, biological, and physical integrity of the Great Lakes.

The Initiative builds upon 5 years of work of the [Great Lakes Interagency Task Force](#) (IATF) and stakeholders, guided by the [Great Lakes Regional Collaboration Strategy](#) EXIT Disclaimer. The IATF includes 16 cabinet and agency organizations, including: EPA, State, Interior, Agriculture, Commerce, HUD, Transportation, Homeland Security, Army, CEQ, and Health and Human Services.

To jump-start the Initiative, the IATF has developed a [Plan \(PDF\)](#) (18pp, 103KB) for the proposed \$475 million budget, including over \$250 million in grants and project agreements and jump-starting achievement of long term goals: safely eating the fish and swimming at our beaches, assuring safe drinking water, and providing a healthy ecosystem for fish and wildlife. A companion [Agency Actions \(PDF\)](#) (26pp, 97KB) document describes what proposed accomplishments for each Agency pursuant to the Initiative. A summary of [FY 2010 proposed programs and projects](#) (28pp, 516KB) is also available. The Initiative is proposed to Congress as part of [EPA's 2010 Congressional Justification \(PDF\)](#) (319pp, 1.9MB)

In the summer of 2009, Agencies will initiate processes for one or more Requests for Proposals for competitive grants advancing the Initiative, in order that some grants may be issued as early as December, 2009. A series of [stakeholder meetings](#), open to the public, will be held in July and August 2009 in various Great Lakes locations.

Great Lakes Restoration Initiative Activities

EPA's Request for Proposals for the Great Lakes Restoration Initiative has not yet been announced. Information about the Request for Proposals will be posted here when an announcement is made.

[Stakeholder meetings](#) in eight Great Lakes states and webcast

[Great Lakes Multi-Year Restoration Action Plan Outline](#)

[Interagency Funding Guide](#)

Stakeholder meetings

[Video - U.S.EPA presentation](#)

[Meeting agenda](#) (1 p. 143 Kb, PDF, July 20, 2009)

[Thank you — Cameron Davis](#)

Action Plan Outline

[Great Lakes Multi-Year Restoration Action Plan Outline](#) (100 Kb, 24 pp. PDF, July 17, 2009)

[Provide Comments](#)

Funding Guide

[Interagency Funding Guide](#) providing one-stop-shopping for over \$250 million in grants and project agreements.

[Interagency Funding Guide](#) (107Kb, 13 pp. PDF, July 18, 2009. revised August 24.

[Great Lakes Home](#)[Basic Information](#)[Interagency Task Force](#)[Interested Parties](#)[US Agencies](#)[States](#)[Canada](#)[Tribal Nations](#)[Cities](#)[Others](#)[Federal Programs](#)[Legacy Act](#)[Policies & Strategies](#)[Monitoring](#)[and Indicators](#)[Ecosystems](#)[Toxics Reduction &](#)[Pollution Prevention](#)[Funding](#)



The Great Lakes Restoration Initiative

Major Themes

- Target the most significant Great Lakes issues
- Results- and action-oriented
- Fully engage Great Lakes community as implementation partners
- Transparency and accountability



The Great Lakes Restoration Initiative

Qualifiers

- Represents new resources for Great Lakes restoration — should not supplant existing resources
- Funding not to be used for traditional water infrastructure projects otherwise covered by State Revolving Funds



Coordinated Multi-Agency Plan to Achieve Goals and Objectives

- Programs and actions identified for 16 federal agencies
- Objectives and the Plan are based on the Great Lakes Regional Collaboration Strategy to Restore and Protect the Great Lakes



Five Focus Areas

- **Toxic Substances and Areas of Concern**
- **Invasive Species**
- **Nearshore Health and Nonpoint Source Pollution**
- **Habitat and Wildlife Protection and Restoration**
- **Accountability, Monitoring, Evaluation, Communication, and Partnerships**



Implementation Basics

- \$475 million proposed for EPA FY 2010 Budget
- EPA provides funds to other federal agencies through Interagency Agreements in a coordinated effort to address the most significant Great Lakes problems
- Federal agencies fund States, Tribes, Cities, and Local Governments and Non-Governmental Organizations through Grants



FY 2010 Funding Plan and Implementation Process

Provisional FY2010 Allocations (x1,000)

Agency	Toxic Substances and Areas of Concern	Invasive Species	Nearshore Health and Nonpoint Source Pollution	Habitat and Wildlife Protection and Restoration	Accountability, Monitoring, Evaluation, Communication, and Partnerships	Totals	Percentages
DHS-USCG	\$2,850	\$4,000				\$6,850	1.4%
DOC-NOAA	\$2,450	\$1,000	\$2,720	\$15,000	\$11,000	\$32,170	6.8%
DOD-USACE	\$9,996	\$3,250	\$14,550	\$17,800	\$500	\$45,896	9.7%
DOI-BIA				\$3,000		\$3,000	0.6%
DOI-NPS	\$2,800	\$2,738	\$1,550	\$2,862	\$500	\$10,450	2.2%
DOI-USFWS	\$5,400	\$19,859		\$32,242		\$57,501	12.1%
DOI-USGS	\$2,070	\$2,338	\$2,562	\$3,920	\$4,090	\$14,980	3.2%
DOS-GLFC		\$7,000				\$7,000	1.5%
DOS-IJC					\$300	\$300	0.1%
DOT-FHWA				\$2,500		\$2,500	0.5%
DOT-MARAD		\$3,000				\$3,000	0.6%
EPA	\$113,880	\$8,280	\$44,807	\$18,880	\$48,306	\$234,153	49.3%
HHS-ATSDR	\$5,500					\$5,500	1.2%
USDA-APHIS		\$3,000				\$3,000	0.6%
USDA-NRCS		\$1,000	\$30,842	\$2,000		\$33,842	7.1%
USDA-USFS	\$2,000	\$4,800	\$500	\$7,258	\$500	\$15,058	3.2%
Totals	\$148,948	\$80,285	\$97,331	\$105,282	\$85,198	\$475,000	100.0%
Percentages	31%	13%	20%	22%	14%	100%	



Where Does the Money Go?

- **Over \$250M for grants, cooperative agreements, or project agreements that will be awarded by EPA or other Federal agencies to non-Federal partners**
- **Over 40% just for grants and cooperative agreements**



How Do Funds Get to Projects?

- **Interagency Agreements establish terms and transfer funds**
- **Summer 2009 process initiates coordinated Request(s) for Proposals by EPA and other Agencies**
- **Utilization of existing funding mechanisms**
- **Intended Result: On-the-ground projects in FY2010**



Development of the Great Lakes Restoration Multi-year Action Plan Outline

- EPA and Great Lakes Interagency Task Force and its Regional Working Group began development after May 2009 Budget Announcement
- Based on GLRI Proposed 2010 Funding Plan and the GLRC Strategy to Restore and Protect the Great Lakes
- Stakeholder input through July / August Public Meetings in each Great Lakes state and via the Internet
- GLRI Goals, Objectives, and Targets intended to align with those of Great Lakes State, Tribal, and local governments



Toxic Substances and Areas of Concern

Principal Actions to Achieve Progress

- Restore Areas of Concern/Remediate Contaminated Sediments
- Strategic Pollution Prevention and Reduction Projects
- Protect Human Health through Safer Fish Consumption
- Measure Progress and Assess New Toxic Threats



Invasive Species

Principal Actions to Achieve Progress

- **Develop Ballast Water Treatment that Protects Freshwater Ecosystems**
- **Implement Early Actions to Address Water Pathways Vectors**
- **Prevention by Broad Stakeholder Outreach and Education**
- **Develop and Demonstrate Innovative Control Technology**
- **Support States Role in Invasive Species Prevention and Control**
- **Control Key Invasive Species and Investigate Causal Mechanisms by which Invasives impact Native Species**
- **Establish Early Detection and Rapid Response Capability**



Nearshore Health and Nonpoint Source Pollution

Principal Actions to Achieve Progress

- **Place-Based Watershed Implementation**
- **Identify sources and reduce loadings of nutrients and soil erosion**
- **Improve Public Health Protection at Beaches**
- **Generate Critical Information for Protecting Nearshore Health**



Habitat and Wildlife Protection and Restoration

Principal Actions to Achieve Progress

- Improve Aquatic Ecosystem Resiliency
- Maintain or Improve the Population Status of Threatened, Endangered, Rare and Migratory Species
- Enhance Wetlands, Wetland-Associated Uplands, and High Priority Coastal, Upland and Island Habitats
- Identify, Inventory, and Track Progress on Great Lakes Habitats, Including Coastal Wetlands Restoration
- Restore Habitat Functioning in Areas of Concern



Accountability, Monitoring, Evaluation, Communication, and Partnerships

Principal Actions to Achieve Progress

- **Develop Great Lakes Restoration Accountability System**
- **Measure and Evaluate the Health of the Great Lakes Ecosystem using the best available science**
- **Enhance Partnerships**



The Great Lakes Restoration Initiative

5 Focus Areas

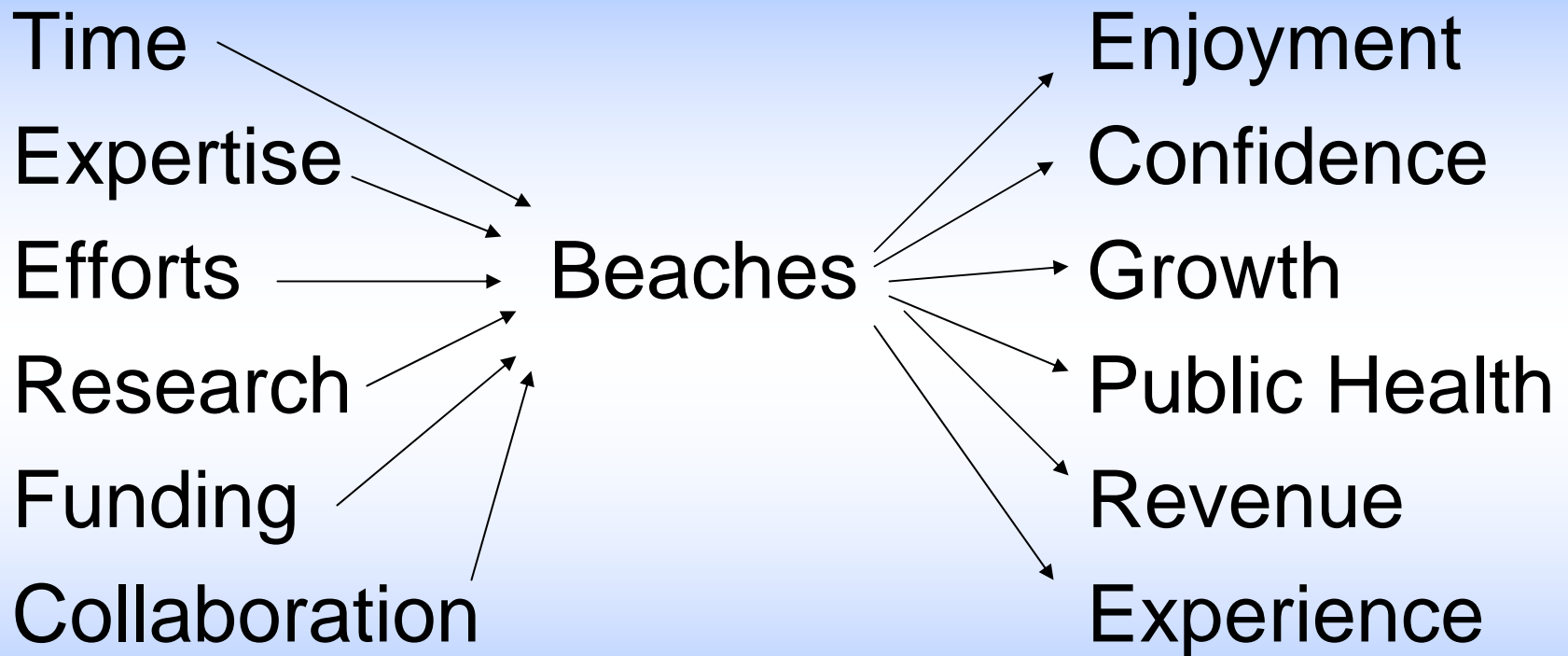
<u>Focus Area</u>	<u>Categories</u>	<u>% of \$</u>	
Toxic Substances and Areas of Concern	8	31%	
Invasive Species	10	13%	
Nearshore Health and Nonpoint Source Pollution	17	20%	
Habitat and Wildlife Protection and Restoration	18	22%	
Accountability, Monitoring, Evaluation, Communication, and Partnerships	6	14%	
	Total	59	100%



*Nearshore Health
Beaches!*

4 of the 17 categories as of 8/24/09

Beach Sanitary Surveys	\$12M
Implement Rapid Methods	\$900,000
Forecasting	\$800,000
<u>Beach data to the public</u>	<u>\$500,000</u>
Total	\$14.2M



Investing in Beaches = Investing in Community



*Nearshore Health
Beaches!*

MDEQ plans to submit proposals for these categories with the intent that funds will be passed through to local health departments for Great Lakes beaches.

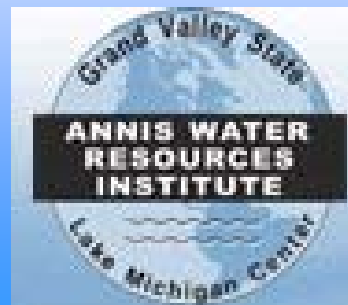
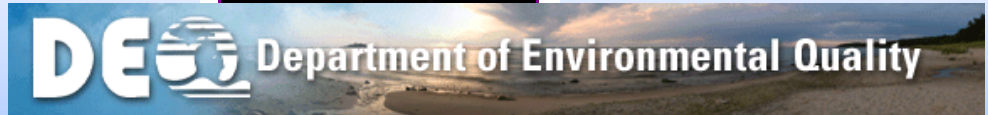


*Nearshore Health
Beaches!*

**Health Departments will have a lead role
with these efforts.**

**Now is the time to become familiar with
potential partners and tools.**

Partners?





Great Lakes Beach Conference 2009

Home

About Us

Upcoming Events

BEACHNET
Discussion

Past Conferences: [2001](#) | [2002](#) | [2003](#) | [2004](#) | [2005](#) | [2006](#) | [2007](#) | [2008](#) | [2009](#)

2009:

**6th State of Lake Michigan / 9th Great Lakes
Beach Association Joint Conference**

*September 29 - October 1, 2009
Milwaukee, Wisconsin*

Information to be announced.



*Nearshore Health
Beaches!*

Beach Sanitary Surveys

**Fundamental Approach for Assessing
Water Quality
*at beaches and in watersheds***



*Nearshore Health
Beaches!*

Collect more than bacteria data

Puts bacteria data in context

**Builds understanding of spatial and
temporal relationships**

**Groundwork for source tracking and
developing forecast models**

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 _____ inches or _____ 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				
Lap/Pool current speed and direction (cm/sec, S or 180°):		Wave Height _____ ft <input type="checkbox"/> Estimated or <input type="checkbox"/> Actual				
Comments/Observations						
PART II – WATER QUALITY						
Bacteria Sample Results						
Type		E. coli		Staphylococcus		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						
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
Number						Clamming
						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)						
Flow Rate (M/sec)						
Volume						
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 Nearshore 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						
Comments/Observations (continue 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 _____ inches or _____ 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°): _____	Wave Height: _____ 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:	<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 <u>Nearshore Water</u> :	<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					

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%



["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.



Nearshore Health

Beaches!

Implement Rapid Methods

Collect monitoring data in real time

Feed into models more quickly

**QPCR is also used with Molecular Source
Tracking Methods**



*Nearshore Health
Beaches!*

Implement Rapid Methods

QPCR

for enterococci? for E. coli?

IMS-ATP



*Nearshore Health
Beaches!*

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



*Nearshore Health
Beaches!*

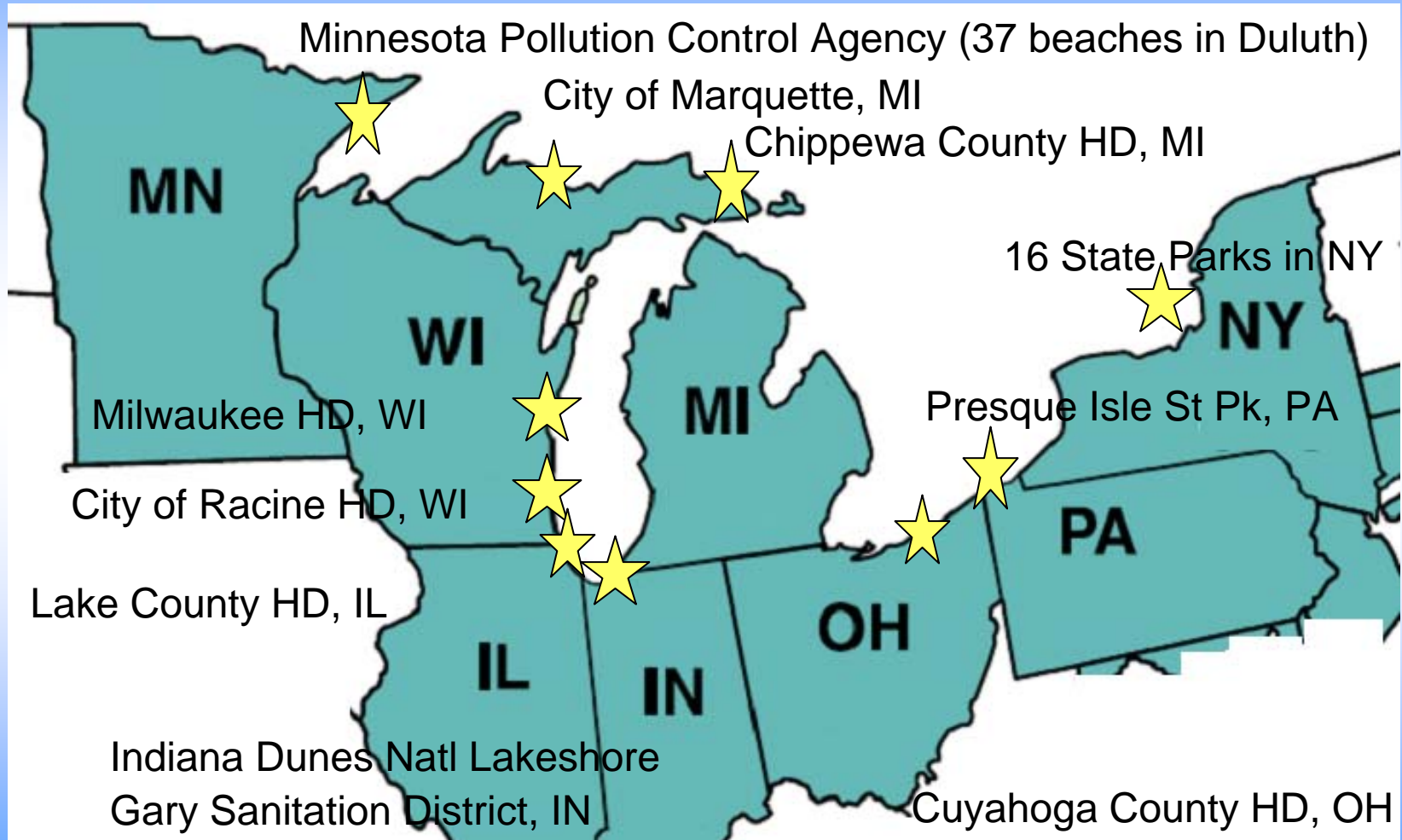
Remediation

Look at previous success stories

**Visit Great Lakes Beach Association web
site for presentations**

Join beachnet listserv

Great Lakes Success Stories





*Nearshore Health
Beaches!*

Forecast Models

Requires frequent monitoring data

more than just *E. coli* data, i.e., sanitary survey data

Need sufficient monitoring data

Improve access to data (NOAA, etc)

Need equipment (e.g., GLOS, monitoring buoys?)

Need training and technical support



*Nearshore Health
Beaches!*

Forecast Models

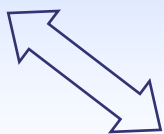
**Build a Regional Model for Lake Michigan
network all monitoring locations**

Across the entire Great Lakes shoreline?

Federal Collaboration on Beach Health in the Great Lakes



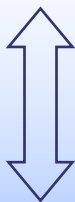
Remediation, Decision Support,
& Environmental Research



Operational Forecasting
& Research

**BEACH HEALTH INTERAGENCY
COORDINATION TEAM**

Beach Water Quality
Forecasting
Coordinator



Monitoring & Modeling
Research

Courtesy of David Rockwell



*Nearshore Health
Beaches!*

Beach Data to the Public

Real-time

Sanitary survey data

Modeling data

Easy Access to Tools

Reports for local, state, & region



The Great Lakes Restoration Initiative

5 Focus Areas

<u>Focus Area</u>	<u>Categories</u>	<u>% of \$</u>	
Toxic Substances and Areas of Concern	8	31%	
Invasive Species	10	13%	
Nearshore Health and Nonpoint Source Pollution	17	20%	
Habitat and Wildlife Protection and Restoration	18	22%	
Accountability, Monitoring, Evaluation, Communication, and Partnerships	6	14%	
	Total	59	100%

WATER

- > Biosolids & Industrial Pretreatment
- > Campgrounds and Pools
- > Drinking Water
- > **Great Lakes**
 - Aquatic Invasive Species
 - Areas of Concern
 - Coastal Management
 - Ballast Water Reporting
 - Dredging Projects
 - Protection Fund
 - Shipwrecks
 - Shoreland Management
 - Submerged Lands
 - Submerged Logs Recovery
 - Water Use, Levels, & Diversion
 - Protection and Restoration
- > Groundwater Conservation Advisory Council
- > Groundwater Discharge
- > Groundwater Modeling
- > Inland Lakes & Streams
- > On Site Wastewater

Printer Friendly Text Version **A-** **A+** Text Size Share

Great Lakes Protection and Restoration

Agency: Environmental Quality



Michigan Great Lakes Protection and Restoration Initiative

The Great Lakes are integral to the past, present, and future economic vitality of Michigan and the region. The health of the people of Michigan, our economy, and our quality of life depends on clean water and productive land that is sustainable far into the future.

MI Business One Stop

Departments/Agencies

Online Services

Surveys

RSS Feeds

- DEQ Quick Links
 - DEQ Calendar
 - DEQ Military Salute
 - DEQ Who Does What List
 - DEQ Publications
 - DEQ Laws and Rules
 - DEQ Acronyms
 - DEQ Shortcuts
 - Public Comment Opportunities
 - DEQ Staff Spotlight
 - DEQ Forms
 - DEQ Training & Workshops

Beach Monitoring System

MISWIM
Surface Water Information Management System

EnviroFlash
Your Environmental News Flash

MIair

Office of the Great Lakes

Michigan Department of Environmental Quality

P.O. Box 30473-7973

Lansing, Michigan 48909

517-335-4056

DEQ-GreatLakesRestoration@michigan.gov

Beach Related Questions

Shannon Briggs

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517-335-1214

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