

# DEQ WRD Update

**Mike Masterson**

Field Operations Section Chief

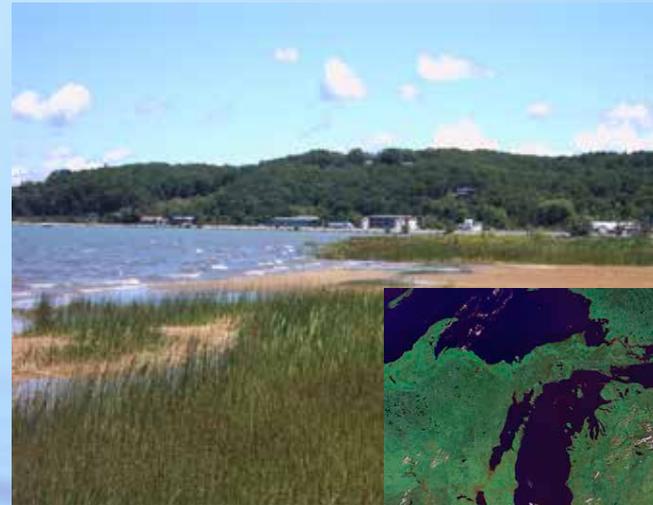
Water Resources Division

# MDEQ

## Water Resources Division

### Protect and Monitor

- 4 Great Lakes
- 3,288 miles of Great Lakes shoreline
- 11,000 inland lakes
- 36,000 river miles
- 6.5 million acres of wetlands
- 70,000 acres of critical dunes



For swimming, fishing, drinking water, and aquatic ecosystems.

# Organizational Change



# TAKING ACTION ON FLINT WATER



How volunteers help when Flint residents call United Way 2-1-1

**Get Clean Water**



Find a location near you.  
Free Water - Free Filters - Free Testing Kits

**FLINT WATER RESPONSE TEAM**

Sign up for EMAIL UPDATES



## Help and Support Services

Local 370 Plumbers and Pipefitters assistance with installing a filter or replacing a faucet



Services for Central Michigan  
Call United Way 2-1-1 if you have questions, to submit donations, or to volunteer your services.

**NOTE:** If your phone can't call 2-1-1, you can also all this toll free phone number: 866-561-2500

### Disaster Distress Helpline

Flint residents who need crisis counseling can call the **Disaster Distress Helpline at 800-985-5990** or text "TalkWithMe" to 66746. The helpline can provide immediate confidential counseling to anyone who needs

## News

Flint Residents Encouraged to Check Filter Cartridges

La SBA anuncia una extensión de las operaciones en el Centro de Recuperación de Negocios de Flint

MDHHS Reminds Residents Bathing is Safe for Children, Adults in Flint

To Help Flint's Urban Gardeners, Edible Flint, MIFFS Awarded State Grant

Flint Building Owners Advised of Proper Maintenance of Fire Suppression Systems

Gov. Rick Snyder appeals denial of federal funding

# MDEQ Guiding Principles

Leaders in Environmental Stewardship

Partners in Economic Development

Providers of Excellent Customer Service

# Water Resources Division Outcomes

- Ensure best management of Michigan's water resources while growing our economy.
- Improve water quality to support recreational and commercial uses.
- Protect public health and ensure greatest recreational experience for current and future generations.



# DEQ FY17 Budget

The Conference Committee presented their resolutions of the FY17 DEQ Budget. The Committee recommended budget is \$527,103,000.

- School water testing.
- Saginaw River Dredging.
- Lake Erie Basin Agreement.

# Lake Erie

Western Basin

Central Basin

Eastern Basin



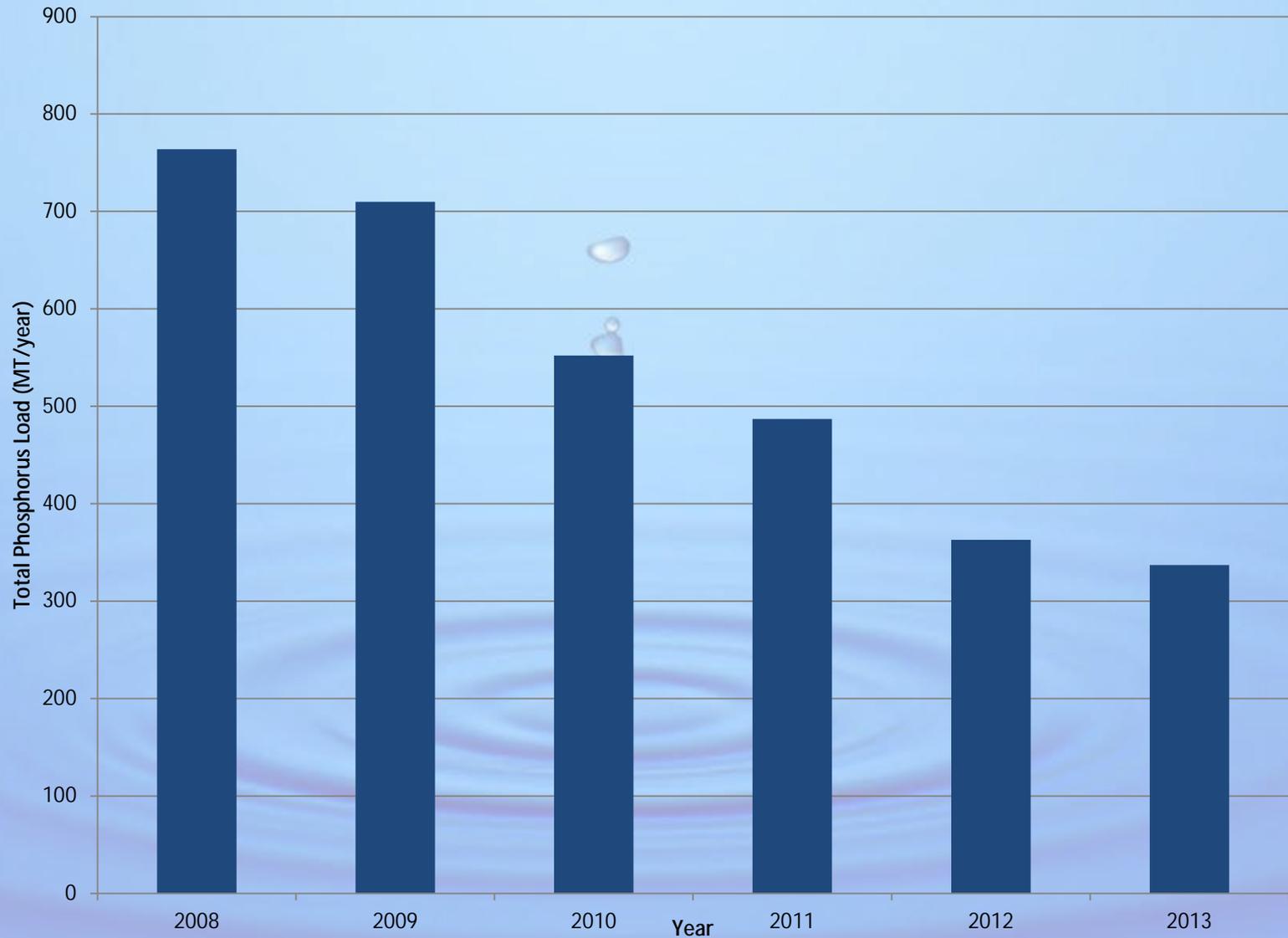
# Evaluation of Progress Since 2008

❖ Detroit River

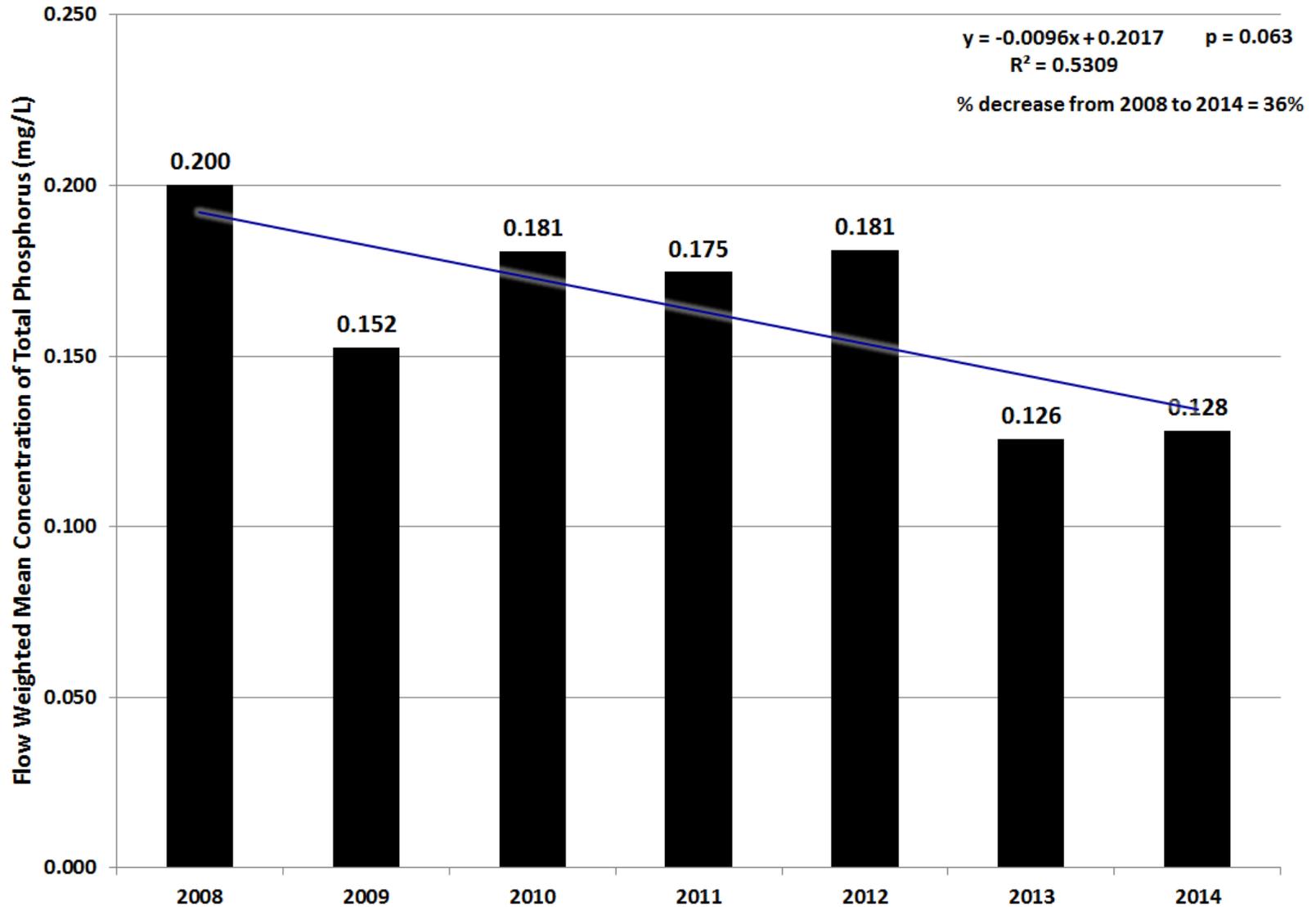
❖ Raisin River

❖ Maumee River (two Michigan watersheds: Bean Creek and St. Joseph River)

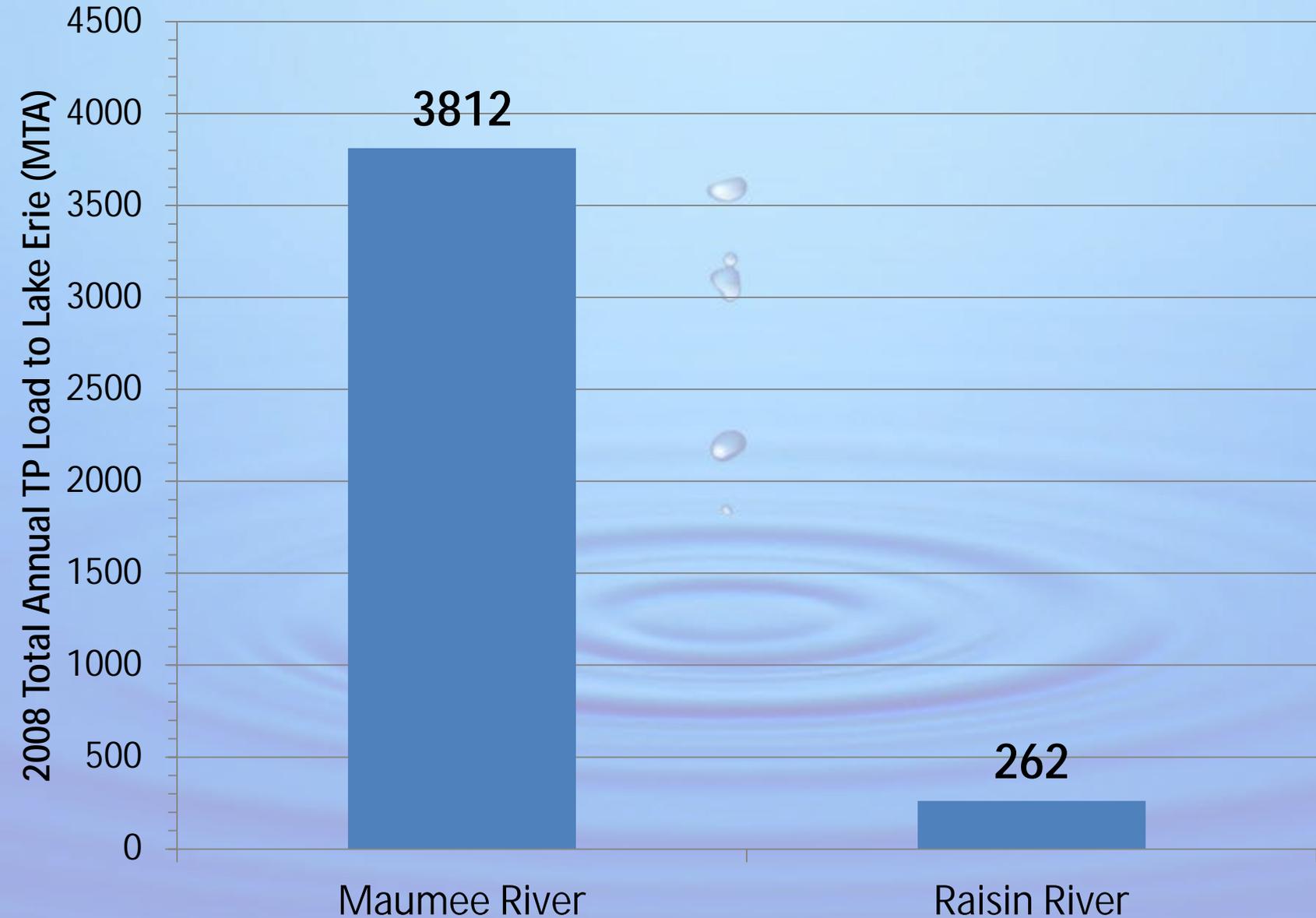
# GLWA/DWSD Annual Total Phosphorus Load



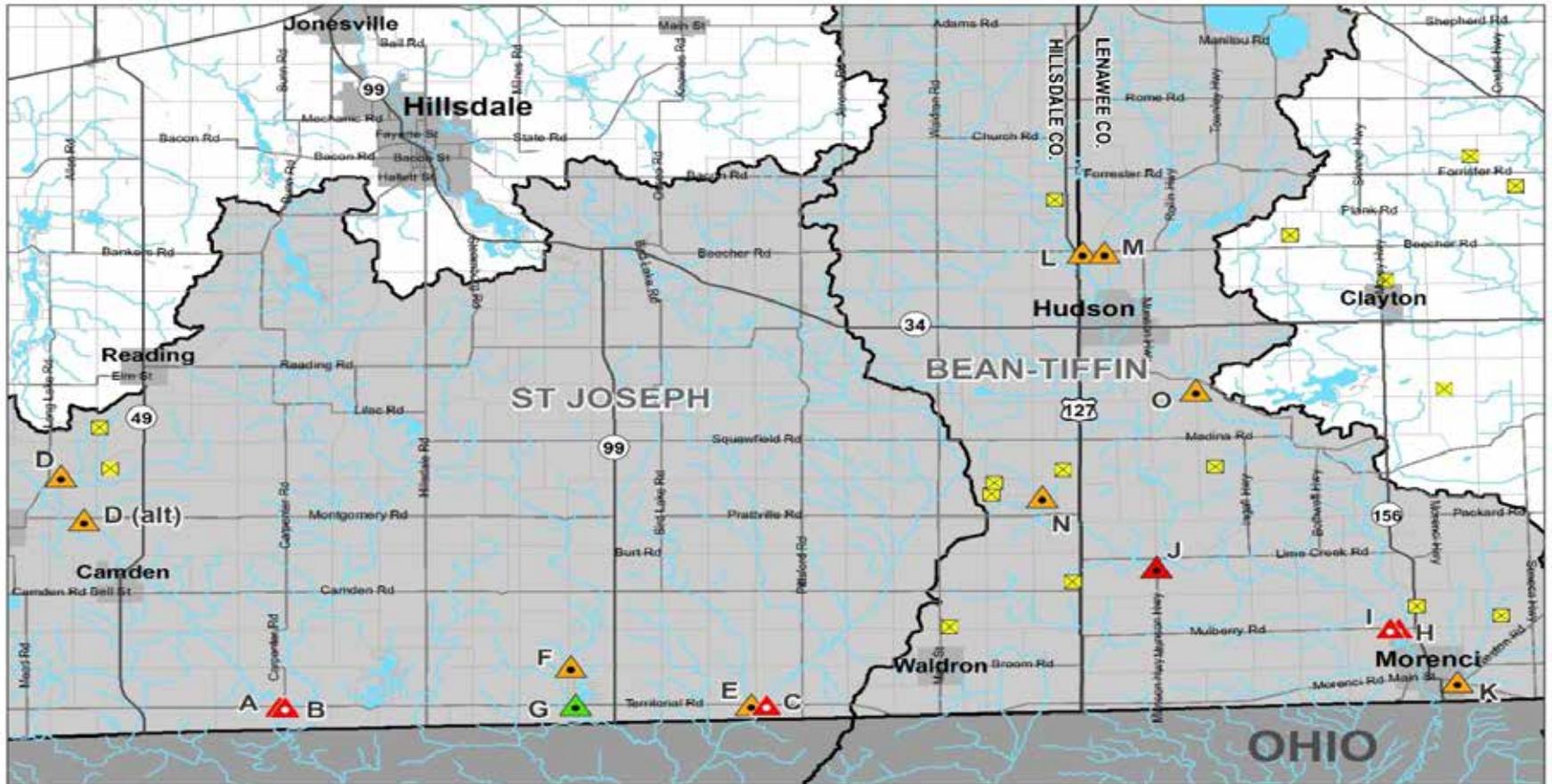
# River Raisin Phosphorus Trend



# 2008 Phosphorus Load to Lake Erie

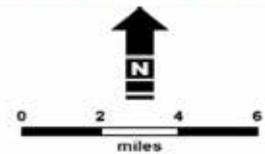


# Michigan's Maumee River Tribs



**Figure 3. Proposed Upper Maumee River Tributaries (St. Joseph, Bean-Tiffin) Phosphorous Monitoring Locations.** (DRAFT 12/18/2015)

-  **Priority 1** (ISCO and Flow Monitoring, monthly samples)
-  **Priority 1** (monthly samples)
-  **Priority 2** (monthly samples)
-  **Priority 3** (monthly samples)
-  **CAFO**



# WRD Implementation Plan

- Maintain phosphorus reductions at the Detroit WWTP.
- Achieve phosphorus reductions at the Wayne County – Downriver WWTP.
- Achieve target phosphorus reductions in Michigan's part of the Maumee.
- Monitor and understand HABs.
- Understand the role of invasive mussels.
- Understand the specifics for phosphorus reductions in the Raisin River.

# Harmful Algal Blooms



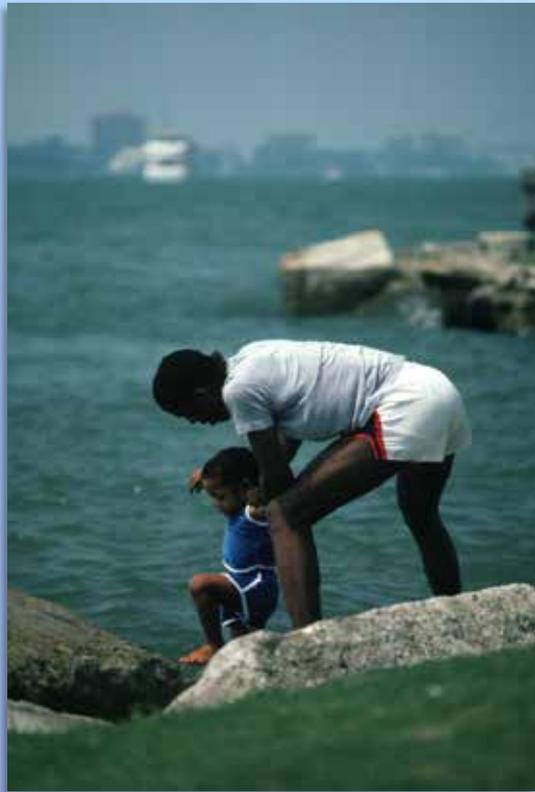
# Real-Time Beach Monitoring

- Builds on 2014 real-time pilot at Metro Beach
- Uses eDNA technology
- Partnership with local health departments and MSU
- Labs provide multiple benefits



# Real-Time Beach Monitoring

Know it is safe to swim before swimming!



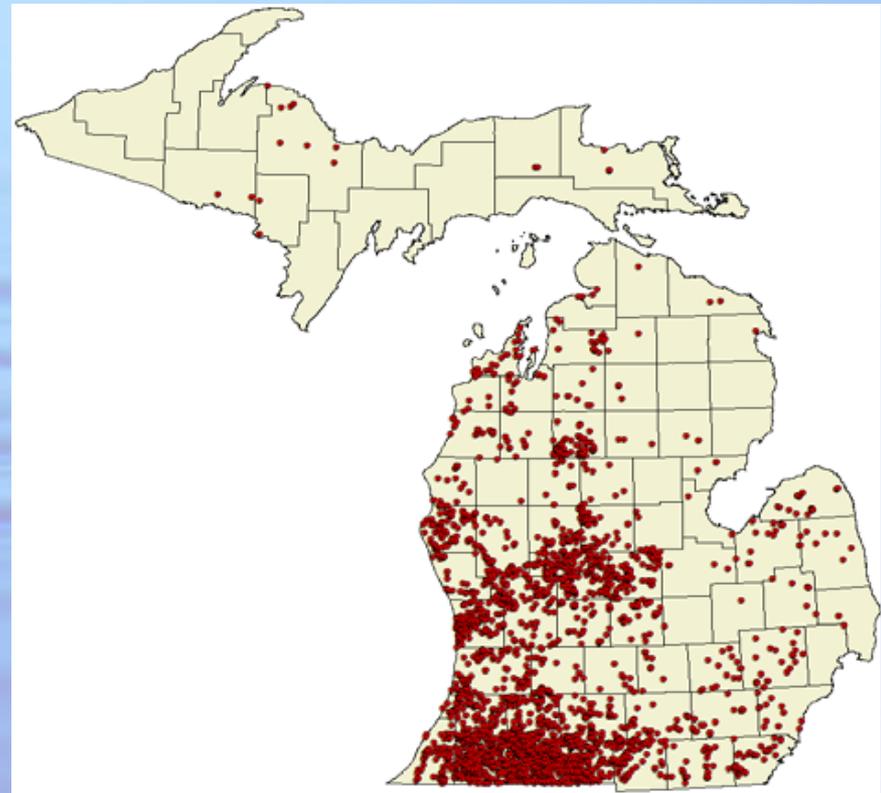
# Water Use Advisory Council

- Convened by former MDEQ Director Dan Wyant
- Broad stakeholder participation
- Two-year process
- Report issued in December 2014

# Water Withdrawal Assessment Tool Registrations

Cumulative totals for the Water Use Program are:

- 2,138 LQW authorized by WWAT
- 796 required DEQ staff review
- 2,934 total LQWs authorized
- 20 Site-Specific Review denials



# Part 31 Rules

Part 5: Spill Response

Part 13: Floodplains

Part 23: Industrial Pretreatment

# MDEQ, MDNR, and MDARD FY15 AIS Accomplishments

Interdepartmental program to prevent, detect, and manage AIS:

- Michigan Invasive Species Grant Program - awarded \$4 million.

## Prevent

- Implemented new decontamination procedure.
- New statutory requirements for organisms in trade - develop permitted species lists and use science-based risk assessments to evaluate plant and animals for prohibited and restricted listing.
- Educated recreational boaters during the second AIS "Landing Blitz."
- Coordinated with Great Lakes states, provinces, and federal agencies through mock response exercises and the finalization of a mutual aid agreement.

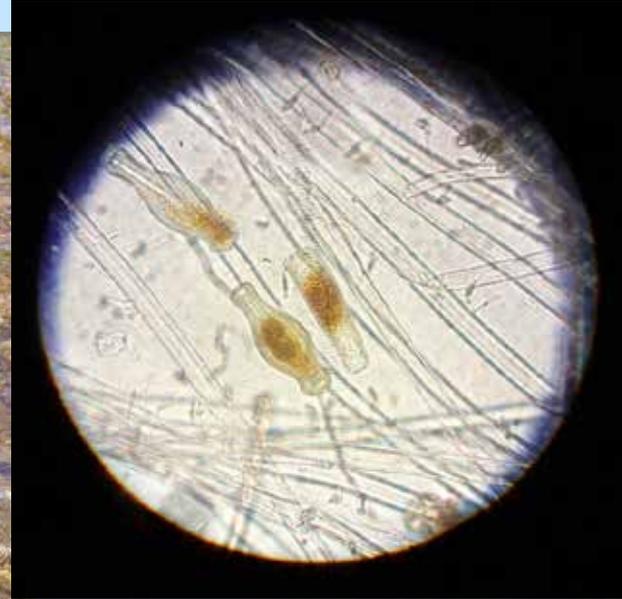
## Detect

Conducted early detection monitoring in inland lakes, rivers, and coastal areas.

## Manage

- Conducted removal efforts for European frog-bit, parrot feather, water lettuce, and water hyacinth.
- Responded to early detections of New Zealand mudsnails, Didymo, yellow floating heart, and red swamp crayfish.

# Didymosphenia geminata (Didymo or Rock snot)

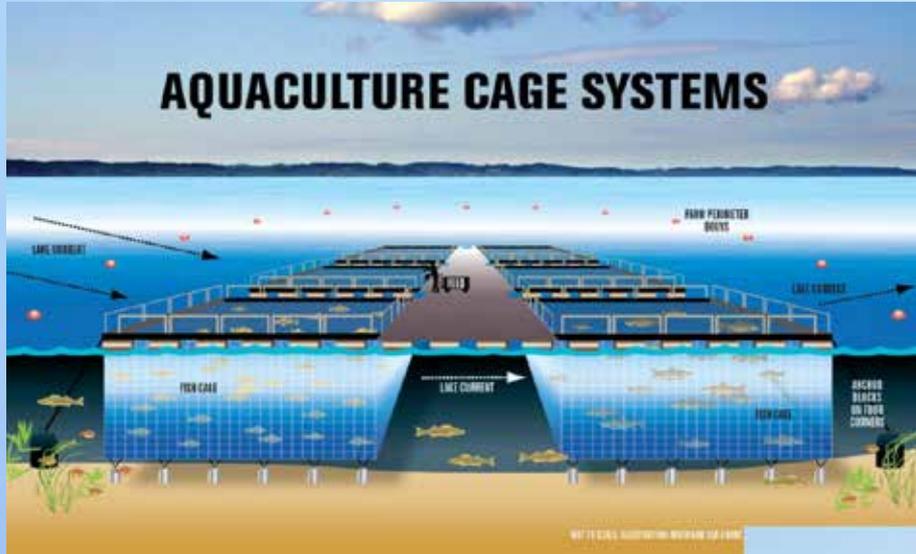


# New Zealand Mudsnail



[www.michigan.gov/invasives](http://www.michigan.gov/invasives)

# Great Lakes Commercial Net Pens



# Celebrating 32 Years of Michigan's 404 Program



# Clean Water Rule



# Enbridge Oil Spill 2010



# Dam Removal



July 2015

# Michigan Petroleum Pipeline Task Force Report



# MiWaters

- New database launched August 17, 2015
- Combines and updates 25 applications and databases
- NPDES, storm water, CSO, wetlands, dredge and fill, compliance, and inspections
- Public facing system

# Wastewater Recycling

## *Our World View is Changing!*

- "Wastewater treatment plants" are **NOT** *waste disposal facilities*
- They are "**Water Resource Recovery**" facilities that produce clean water, recover nutrients, and generate renewable energy