

***MOVING FORWARD: LEGAL SOLUTIONS TO LAKE  
ERIE'S HARMFUL ALGAL BLOOMS***

**A Watershed Mentality**

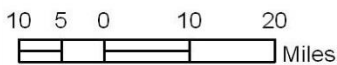
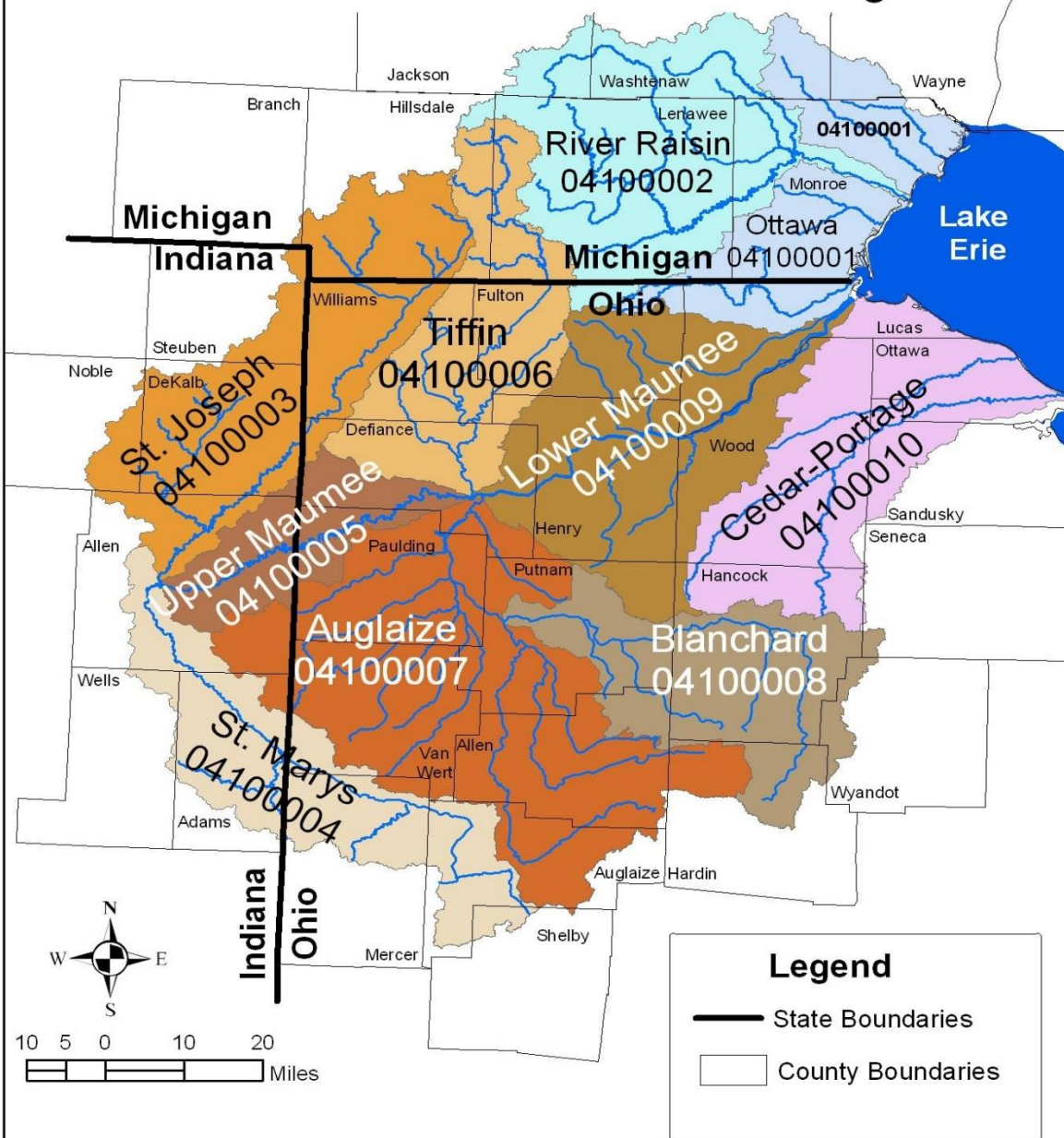
LUCAS COUNTY



**CAROL CONTRADA**

**LUCAS COUNTY COMMISSIONER**

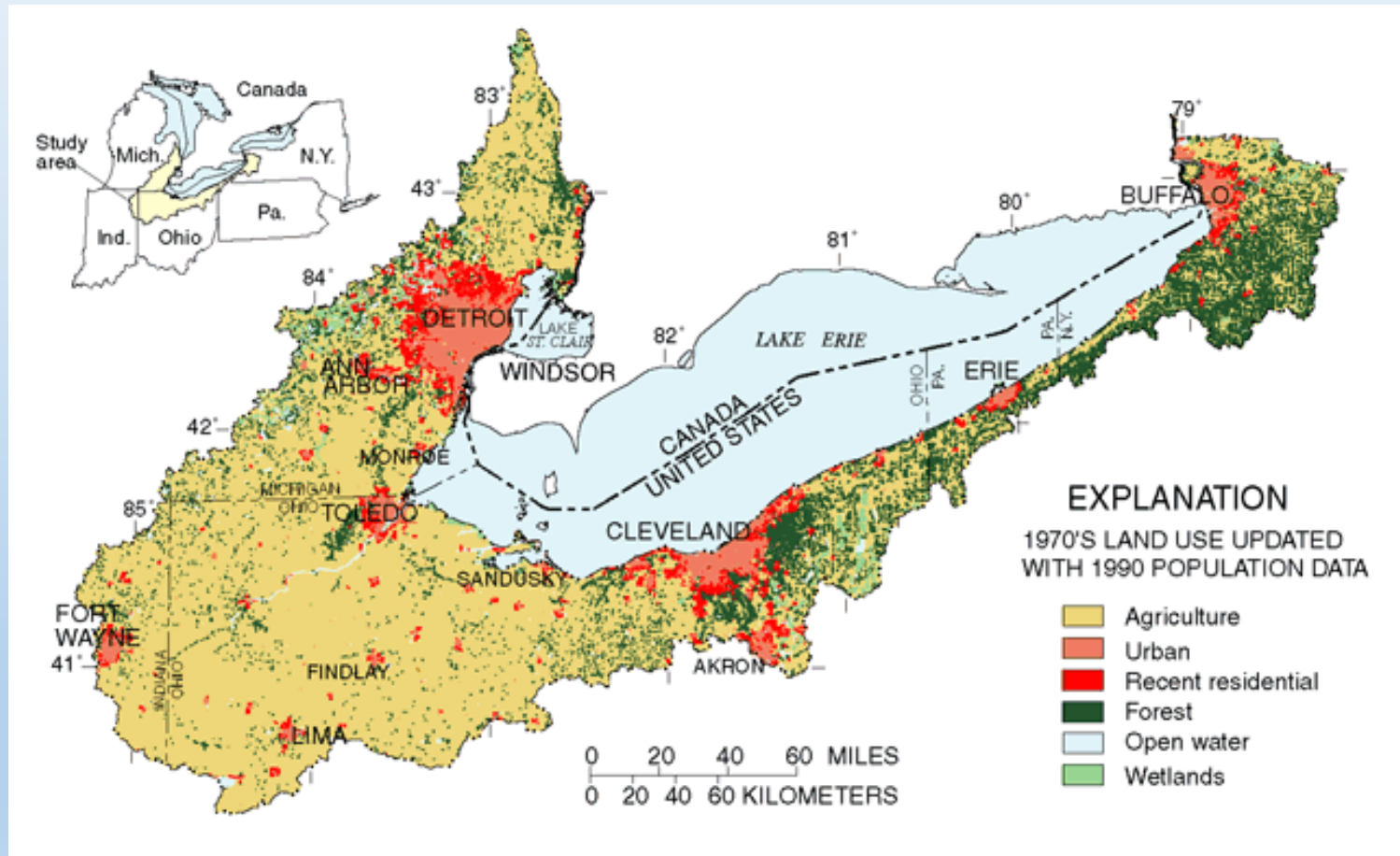
# Western Lake Erie Basin Drainage



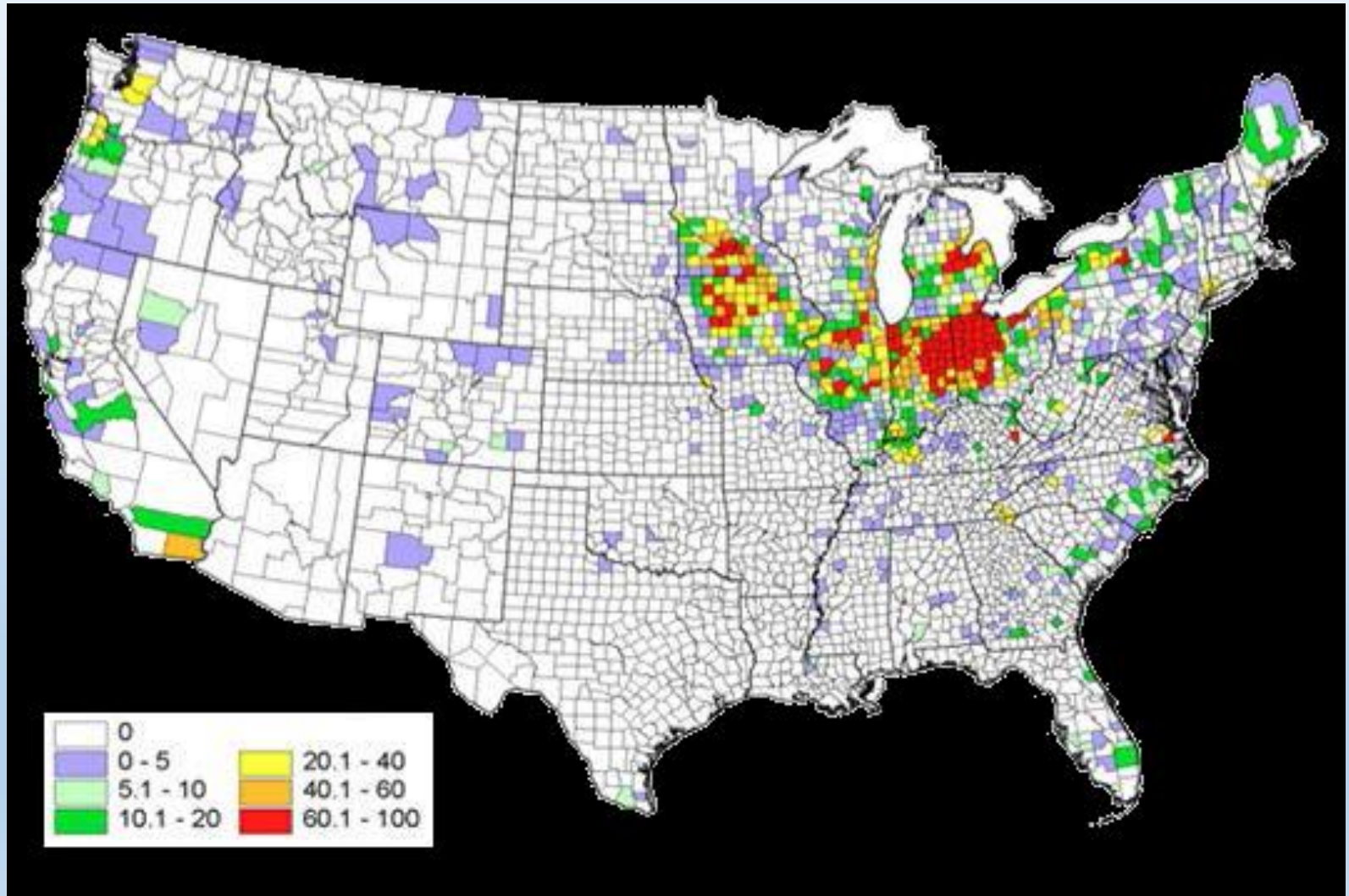
**Legend**

- State Boundaries
- County Boundaries

# USGS Land Use Map



# Harvest Acres with Sub-Surface Drainage



# Legislative Action

## Ohio House Bill 64 Budget highlights

- Drinking Water Solutions
- Section 401 Water Quality Certification; Certified Water Quality Professionals
- Healthy Lake Erie Fund
- Studies of Zebra Mussels, Quagga Mussels, and Canada Geese
- Study of Nutrient Loading to Ohio Watersheds
- Lakes in Economic Distress Revolving Loan
- Travel and Tourism Grants
- Transfer of the Soil and Water Program, Soil and Water Districts Funding

## Oho Senate Bill 1

- Application of fertilizer and manure
- Certification of manure applicators
- Application of sewage sludge
- Phosphorous monitoring for Publicly Owned Treatment Works
- Dredged material in Lake Erie and tributaries
- Healthy Lake Erie Fund
- Harmful algae management and response coordinator

## Western Basin of Lake Erie Collaborative Agreement

The Governors for the Western Lake Erie Basin States of Michigan and Ohio and the Premier of the Province of Ontario affirm:

Through an adaptive management process, work to achieve a recommended 40% total load reduction in the amount of total and dissolved reactive phosphorus entering Lake Erie's Western Basin by the year 2025 with an aspirational interim goal of a 20 percent reduction by 2020

Ohio EPA: Public Notification Guidelines for Algal Bloom-affected Drinking Waters

- USEPA established national health advisory levels for microcystin & clindrospermopsin based on drinking water over a 10-day period
- Microcystin detected in treated drinking water at higher than 0.3 micrograms/liter over a period of time
- Microcystin detected in treated drinking water at higher than 1.6 mc/liter over a period of time

# Local Action

## Lucas County

- Resolution and appropriation for Regional Water Distribution System Evaluation; appropriation for water study
- Resolution and appropriation for development and implementation of Source Water Protection Plan
- Resolution endorsing all recommendations in *A Balanced Diet for Lake Erie – Reducing Phosphorus Loadings and Harmful Algal Blooms* A report of the Lake Erie Ecosystem Priority, February, 2014
- Resolutions commissioning and endorsing *Moving Forward: Legal Solutions to Lake Erie's Harmful Algal Blooms*
- Endorsement of 40% reduction in the amount of total and dissolved reactive phosphorus entering Lake Erie's Western Basin
- Water Resource Recovery Facility: Investment in Digester System Improvements, wastewater collection system upgrades: reduce phosphorus from 1 mg/liter to 0.6 mg/liter 40% point source reduction
- Water Resource Recovery Facility: Twice weekly sampling
- Clear Water 2: Partnership with National Wildlife Federation – advocacy and implementation of conservation and sustainability plans
- County Commissioners Association of Ohio Water Task Force
- Toledo Metropolitan Area Council of Governments Water Quality Council:
  - Regional Water Planning
  - Stormwater Coalition
  - Public Water Supply
  - Wastewater
  - Watersheds
- Expanded education through Soil and Water District
- Rain Garden, Wetlands initiatives

## City of Toledo

- Toledo Waterways Initiative
- Increased Monitoring
- Water Quality Dashboard

# Toledo Water Quality Meter

## Water Quality

Toledo tests raw and treated water regularly for the presence of toxins, including microcystin created by algae blooms. See scale below for the current status of drinking water quality according to Ohio EPA guidelines.



- CLEAR** – Non-detect in the intake crib in Lake Erie and non-detect in tap water.
- WATCH** – Detect in the intake crib in Lake Erie and non-detect in tap water.
- CAUTION** – Microcystin has been detected in tap water, but test results do not indicate the need to issue an advisory. Additional testing and sampling is underway and water treatment has been accelerated.
- PRE-SCHOOL ADVISORY** – DO NOT DRINK for children five and younger. Tap water tests greater than 0.3 ppb and not exceeding 1.6 ppb.
- DO NOT DRINK** – DO NOT DRINK. Tap water tests greater than 1.6 ppb.



# Lucas County Source Water Protection Plan

Ohio's Source Water Protection Program helps public water suppliers protect drinking water sources, such as streams, lakes, and aquifers, from contamination.



Assessment



Planning



Action

The Sustainability Commission is working to develop a drinking water protection plan. This plan will help us to determine the best actions we can all take to make sure our water is safe to drink and we have a back-up plan if it isn't.

## What You Can Do

- Limit or stop the use of pesticides, fertilizers, and other lawn chemicals;
- Don't pour chemicals down the drain;
- Recycle used motor oil and antifreeze;
- Clean up animal waste
- Have septic systems inspected regularly