



The Importance of Wetlands and Source Protection in the Great Lakes Basin

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Alliance for the Great Lakes

What is the Alliance for the Great Lakes?

- Founded in 1970 as the *Lake Michigan Federation*
- Nonpartisan, nonprofit organization working across the region to protect the waters of the Great Lakes
 - Advocacy and Leadership
 - Research and Analysis
 - Education and Action
- Adopt-a-Beach Program – Half a million tons of plastic waste removed
- Great Lakes Compact – An agreement across states and Canada about how to manage and protect the GLs in a collective way
- Brandon Road Project – Keeping invasive carp out of the GLs

Wetlands in the News

Trump administration to finalize rollback of Obama's clean water protections

Judge Ditches Trump's Dirty Water Rule

Biden EPA to reverse Trump's sweeping Clean Water Act rollback

WILMINGTON NEWS

Supreme Court limits regulation of some US wetlands, making it easier to develop and destroy them

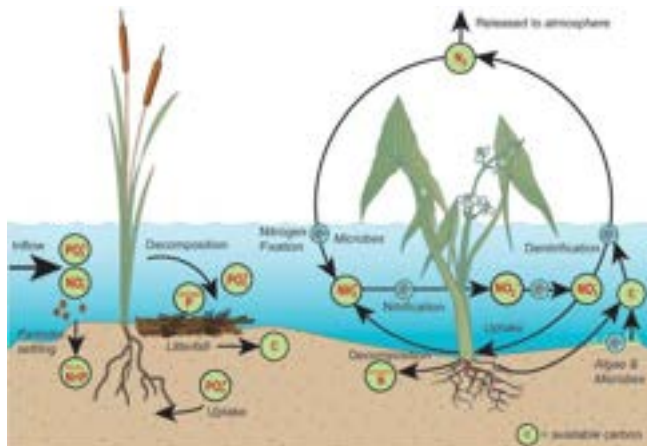
The Future of the Waters of the United States after Sackett v. US Environmental Protection Agency

SHEILA M. OLMSTEAD AND MATT FLECK

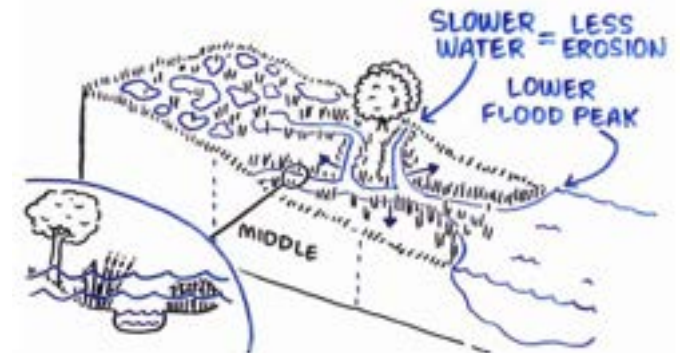
EPA Revises Waters Rule to Align With High Court Wetlands Ruling

Wetland Functions

- Nutrient retention / control / removal
- Water storage
 - ~1-1.5 million gallons / acre
 - >70% of volume in second order streams generated in headwaters. 40-55% of volume in fourth and higher order streams



© The Wetlands Initiative – Adapted from Kadlec and Knight (1996)



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Michigan Wetland Losses to Date

- Pre-English settlers, Michigan had ~10.7M acres of wetlands which covered 17% of the state
- Over the last 200+ years we lost more than 4.2M acres
- Between 1800-2005 ~49% of wetland loss was due to development and 47% due to agriculture
- Huge loss of wetlands in SE Michigan – only 10% remain – which is also an area of intense and ever-increasing flooding
- Some communities and watersheds in the state have lost 99% of their wetlands

Michigan's Program

- Michigan's statute was written to allow the state to assume the federal Section 404 program
- One of three states with a federally assumed program
- Goal is to avoid, minimize, and then mitigate
- Advantages to administering a strong program
 - Effective protection of wetland benefits
 - Clear definitions for regulation
 - Faster permit decisions
 - Local staff to interact and troubleshoot with applicants
 - Clear appeal process
 - Stable and predictable regulatory framework → Sackett will still require Corps determination, definition of WOTUS could be changed by future courts or Congress

Michigan's Program

- Successes:
 - Protection of Michigan's wetlands, lakes and streams
 - Michigan has had a no-net-loss wetland policy for decades
 - EGLE staff work with applicants to significantly reduce project impacts (most projects are issued modified from what is applied for)
 - Effective decision-making that can be defended in appeals
 - Current administration is investing in additional permitting staff for the program
 - Current administration has also added significant compliance and enforcement staff
- Its not all positive
 - The program is still out of compliance due to inappropriate exemptions
 - Environmental organizations would like to see the program go even further

The I states

- Illinois

- Strong interest to develop a state program to fill protection gaps left by recent federal decisions

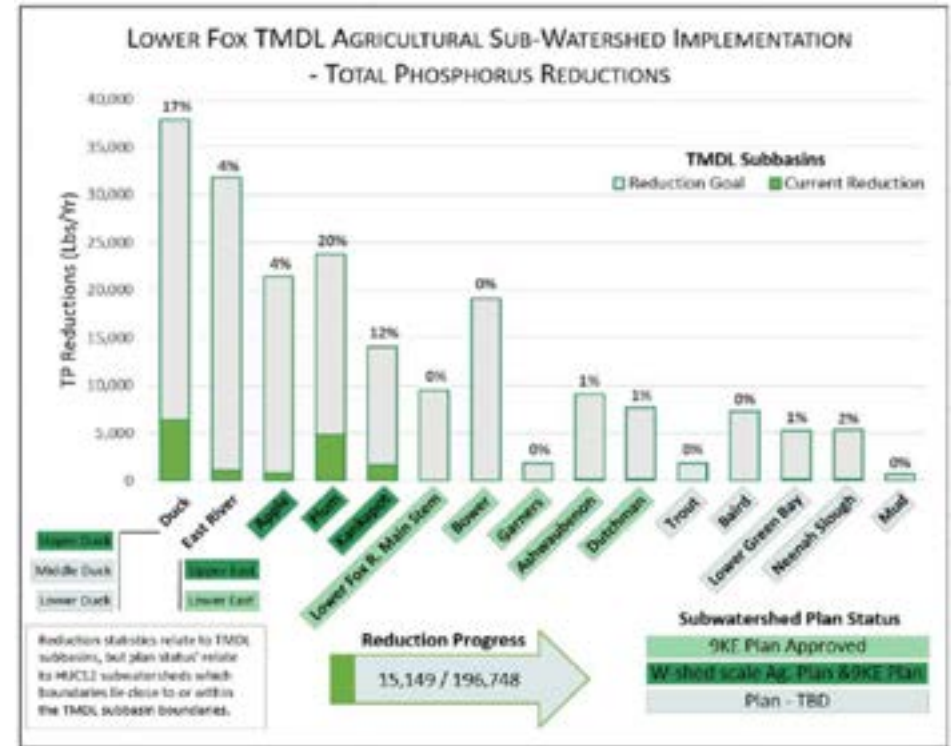
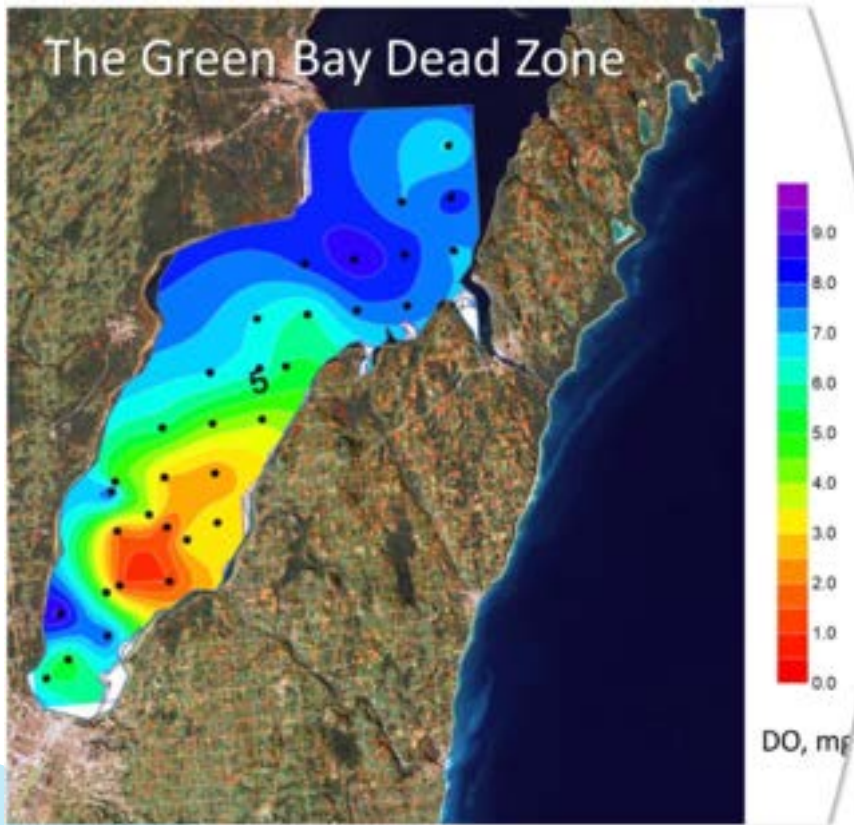
- Indiana

- Several recent attempts by industry – primarily builders – to roll back IN wetlands protection despite...
- 2021 statewide poll found 94% of Hoosier support either strengthening or maintain current wetland protections in the state

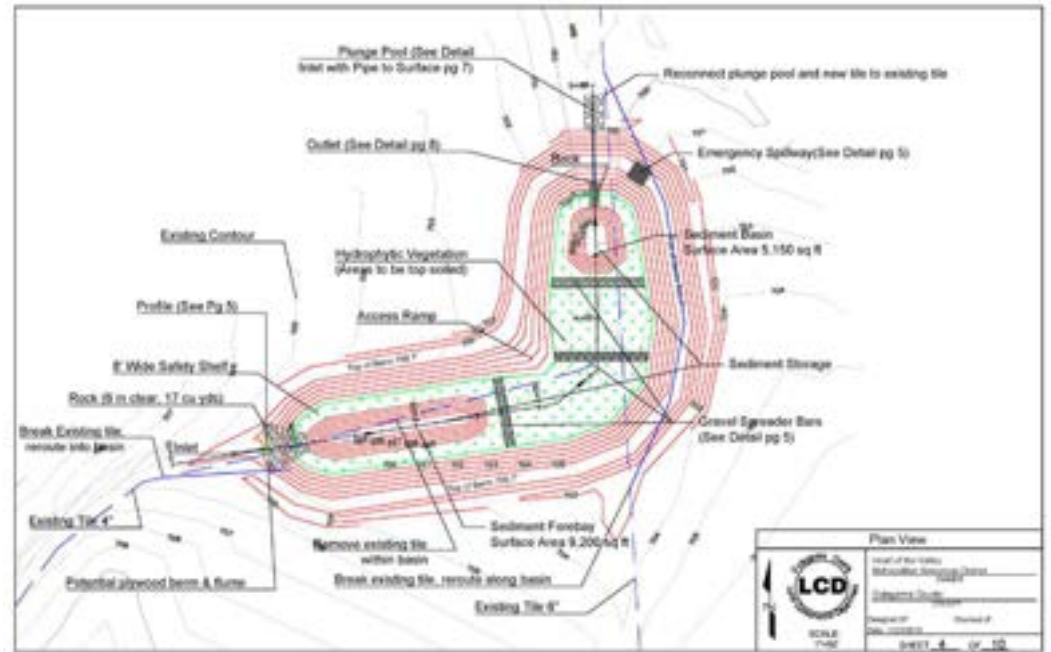
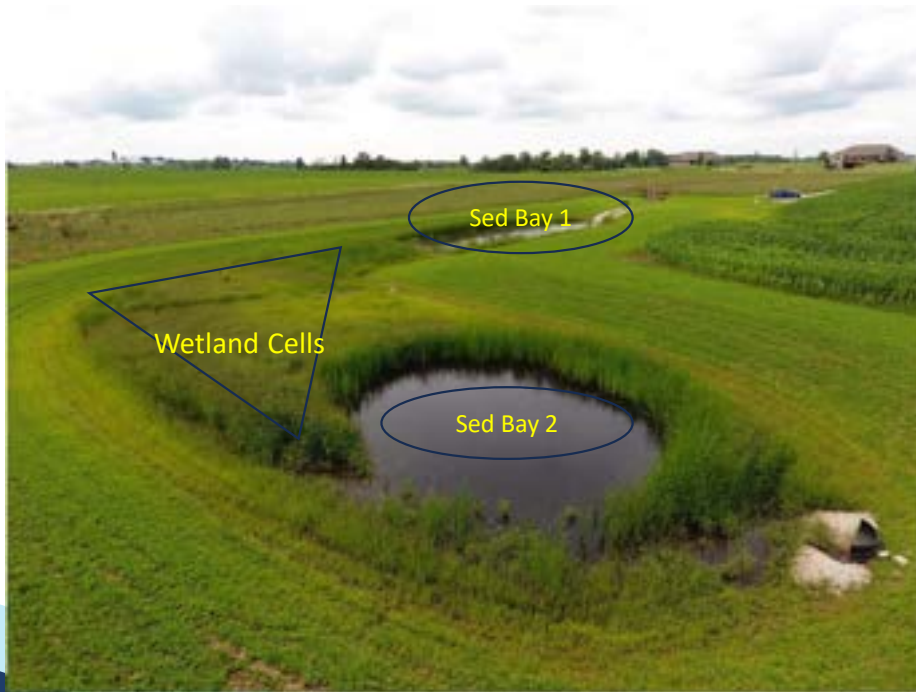
Wisconsin

- Both parties have historically and continue to understand the value and importance of wetlands
- Bill package making its way through the legislature – with bipartisan support – to provide \$\$ to local units and first nations (w/demonstrated flooding issues) to assess restorable wetlands and \$\$ for dirt moving activities

Ag Runoff Treatment Systems ARTS – Wisconsin

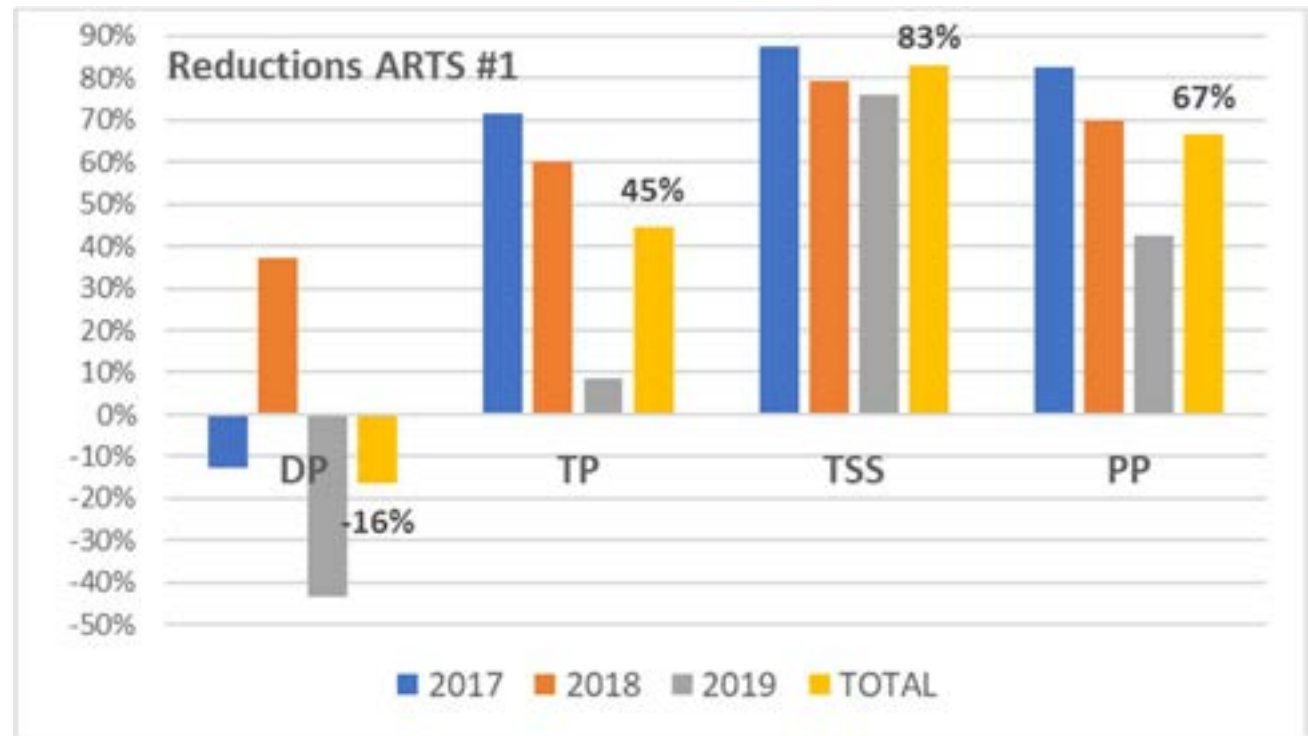


ARTS – Wisconsin



ARTS – Wisconsin

- 45% Reduction in Total P
- 83% Reduction in TSS
- 67% Reduction in Particulate P
- Adding tertiary treatment at outlet will achieve 90%+ reduction of TP



Contact Greg Baneck @ Outagamie County (WI) for more information on ARTS greg.baneck@outagamie.org

Ohio – H2OOhio

- Launched in 2019 with \$172M in 2020-2021 biennium
- Four primary objectives:
 - Reduce phosphorus, create wetlands, address failing septic, prevent lead contamination
- Program budget expanded to \$270M in 2024-2025 budget
 - \$120M to ODA for Ag BMPs
 - \$55M to OEPA for water infrastructure
 - \$93M to ODNR for wetlands and the H2OOhio Rivers Initiative

H2OOhio Rivers Initiative

Monitoring & Data Collection
Restoring River Health
Preserving Healthy Rivers

WHAT IS IT?
As part of Governor DeWine's executive budget, he has proposed the development of the H2OOhio Rivers Initiative, which would work to improve water quality, assess community health, protect wildlife, support economic development, and provide opportunities for recreation in and along Ohio's largest rivers.

\$58.8M 2024-2025 INVESTMENT REQUEST

WHY IT MATTERS.

An expansion of the H2OOhio Initiative, the H2OOhio Rivers Initiative will place an emphasis on the preservation and improvement of our rivers, which provide critical wildlife habitat, drinking water, and recreation space.

KEY STEPS

- Monitoring & Data Collection**
Expand survey of contaminants in Ohio's rivers and expand monitoring of Ohio's fish and mussel populations.
- Restoring River Health**
Clean and restore Ohio's riverways in need.
- Preserving Healthy Rivers**
Preserve Ohio's high-quality riparian areas to maintain healthy waterways for the future.

Critical Wildlife Habitat
Flowing rivers and their forested banks are critical for migration, nesting, and survival of fish and other wildlife.

River Integrity
Strategic dam removal, stream-bank cleanup, and removal of contaminants left behind by acid mine drainage will restore rivers.

Protect Drinking Water
The health of Ohio's waterways has a direct impact on drinking water. Healthier rivers will recharge aquifers that Ohio communities rely on.

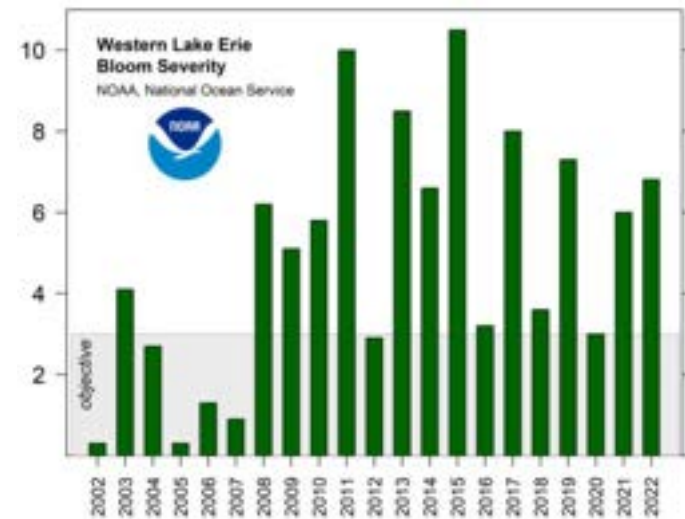
Recreation Space
Improved water quality will contribute to better boating, fishing, and exploration of Ohio's rivers.

Additional Conservation Benefits
The Conservation Reserve Enhancement Program (CREP) expansion will create grassed filter strips, wetlands, and forested riparian buffers along streams and ditches to improve watersheds.

MIKE DeWINE Governor of Ohio | hio | Department of Agriculture | Ohio Department of NATURAL RESOURCES | hio | Ohio | Lake Erie Commission

Wetlands and connection to other water quality issues

- WLEB algal blooms pose a risk to human and aquatic health and raise the cost to ratepayer communities
- WLEB blooms often exceed the severity target of 3 (set via GLWQA)
- U.S. and Canada agreed to a goal of reducing phosphorus entering WLEB by 40%. Michigan executive directive reaffirmed this commitment
- Wetlands play a key role in this conversation – evident in Ohio



Scale of needed wetlands (and other BMPs)

- Michigan farmers will need to implement and maintain two to four annual, in-field BMPs on virtually all agricultural acres along with edge-of-field structural BMPs (i.e. wetlands) to meet load reduction targets
- Wetlands are not the entire answer to our problems but improving hydrology and upstream nutrient retention is clearly needed at scale

Table 4: Matrix of BMPs represented for different hypothetical scenarios.

BMP	Scenario Number							Watershed Group	Baseline Load (MT/yr)	Scenario Load (MT/yr)	Reduction	Continuous No-Till (acres)	Cover Crops (acres)	Crop Rotation (acres)	Subsurface Placement (acres)	Filter Strips (acres)	Wetlands (acres)	Two Stage Ditches (miles)	Grassed Waterways (miles)
	1	2	3	4	5a - 5c	6a - 6c	7a - 7c												
Continuous No-Till	X				X	X	X	Ottawa-Stony	190	131	31%	101,800	119,400	35,300	56,100	3,830	1,530	38	502
Cover Crops		X			X	X	X	Raisin	172	104	39%	281,800	184,200	179,300	89,300	8,990	3,280	87	1,421
Conservation Crop Rotation			X		X	X	X	Maumee	3,812	2,275	40%	68,600	42,900	41,700	32,700	2,000	640	16	483
Subsurface Nutrient Placement				X	X	X	X	Cedar-Portage	595	355	40%	0	0	0	0	0	0	0	0
Filter Strips					X	X	X	Sandusky	1,100	661	40%	0	0	0	0	0	0	0	0
Constructed Wetlands					X		X												
Two-Stage Ditch							X												
Grassed Waterway							X												

Leveraging Research in Advocacy

- Utilizing our recent report – along with education / advocacy from other conservation partners – we were able to secure \$10M (from ARP) in the 2023 supplemental budget for wetland restoration in Lake Erie and Saginaw Bay watersheds
- Continuing this education / advocacy, we helped secure \$2M ongoing for wetland restoration and \$550,000 ongoing for urban wetland restoration in the FY24 budget

Questions



ALLIANCE *for the*
GREAT LAKES
Protecting Water, Sustaining Life