



*“H2Ohio is making an impact on Ohioans across our great state, but now is not the time to stop and celebrate. Now is the time to continue pushing forward, dedicating our efforts, and investing in our greatest resource to provide a better, healthier, and safer future for all.”*

*-Mike DeWine, Governor*



# Enacted FY 2024-2025 Budget

## **\$121.4 million for the Department of Agriculture**

Continue nutrient management, water management, and erosion management on farms and launch H2Ohio Rivers work.

## **\$93.2 million for the Department of Natural Resources**

Restore wetlands and launch H2Ohio Rivers work.

## **\$55 million for the Ohio Environmental Protection Agency**

Protect public health by improving water and wastewater infrastructure, reducing lead exposure, and technology investments and launch H2Ohio Rivers work.

## **\$260,000 for Ohio Lake Erie Commission**

Advance an H2Ohio transparency and accountability tools.

***Enacted FY 2024-2025 Budget: \$270 million***

***Enacted FY 2022-2023 Budget: \$168 million***

***Enacted FY 2020-2021 Budget: \$172 million***

**1.4 Million Acres**

in voluntary nutrient management plans

**706**

lead service lines to be replaced

**301**

home sewage treatment systems to be repaired or replaced

**3,000 Square Miles**

of additional watershed to be monitored for nutrient content

**20** new rain gages installed

**130,000+**

acres of watershed filtered by wetland projects

**15,705**

acres of wetland and ecosystem restoration

**Nearly 35%**

of the Western Lake Erie Basin cropland enrolled

**2.2 Million Acres**

enrolled in overwintering cover, manure incorporation, precision and placement practices

**14,000**

number of people to be served by 20 wastewater projects

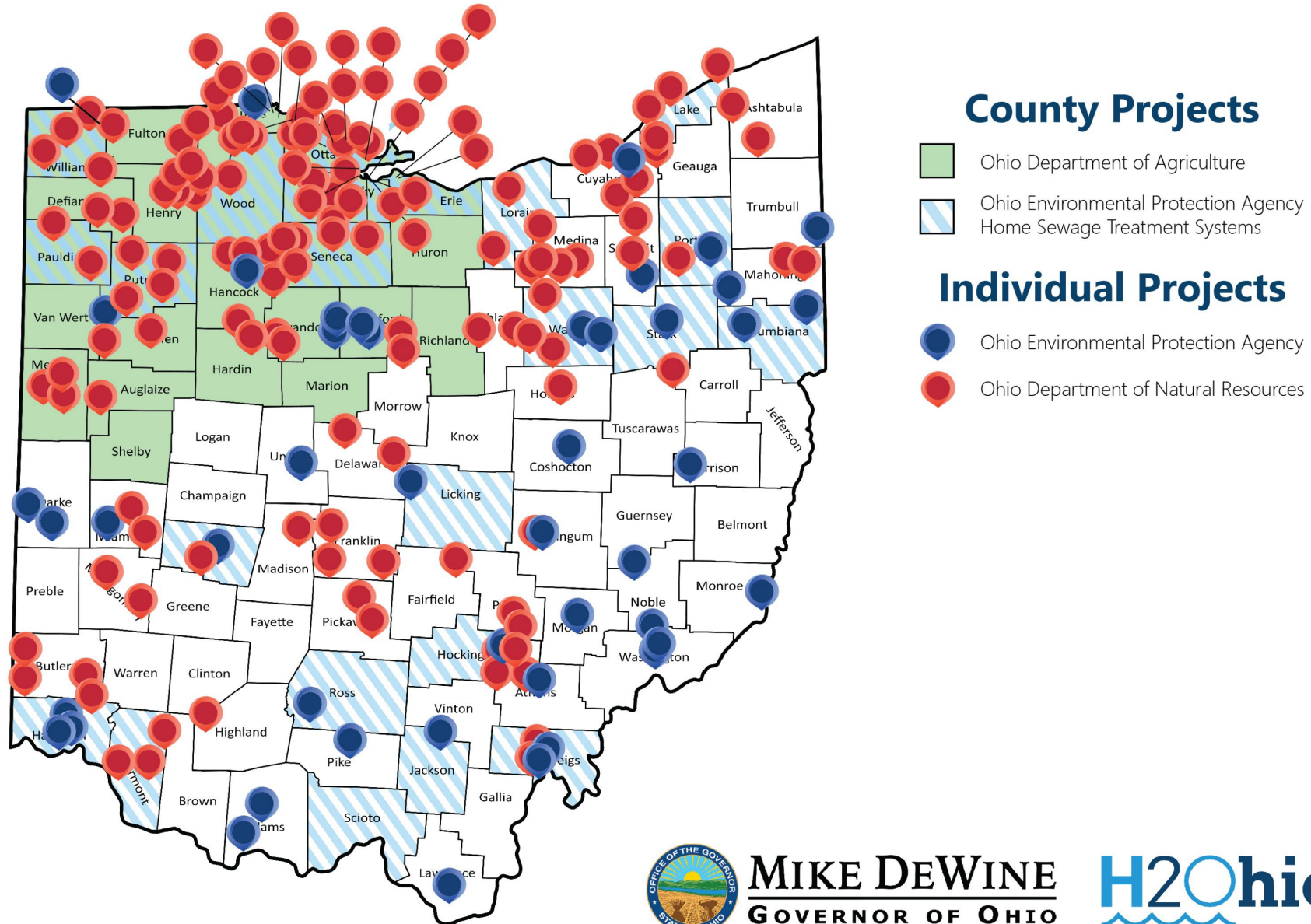
**44,000 People**

people to be served by 19 new drinking water projects

**2400 Producers**

have entered into agreements

# H2Ohio Statewide Projects



**MIKE DEWINE**  
GOVERNOR OF OHIO



# H2Ohio

## H2Ohio Accomplishments for Fiscal Year 2023



[h2.ohio.gov](http://h2.ohio.gov)

*"Ohio is truly the heart of it all, and we must continue to protect our most valuable resource, our water, so that we can continue to thrive for generations to come. H2Ohio continues to use the best science and data available to inform our water quality decisions."*

**MIKE DEWINE**  
GOVERNOR OF OHIO



—Mike DeWine, Governor



### Executive Summary

▲ ABOVE: Governor DeWine looks at a water experiment at a press conference in Marietta, Ohio, to announce the H2Ohio Rivers Initiative, which will preserve and improve Ohio's rivers which provide critical wildlife habitat, drinking water, and recreation space.

H2Ohio continues to see tremendous support from Ohio farmers. The Ohio Department of Agriculture (ODA), with the help of local Soil and Water Conservation Districts (SWCD), enrolled 1.4 million acres into Voluntary Nutrient Management Plans (VNMP) across northwest Ohio.



VNMPs are essential to all other conservation practices and are required for each farmer enrolled in H2Ohio. Farmers VNMP to determine the exact amount of nutrients needed their fields, and in some cases, none is needed. H2Ohio focuses heavily on nutrient management on every farm because nutrient runoff is a leading cause of harmful algal blooms waterways such as Lake Erie. Thanks to H2Ohio, one in every three fields in northwest Ohio is now following a VNMP, and

only the right amount of nutrients are being applied. ODA also incentivizes other best management practices (BMPs) that focus on water management, like two-stage ditches, and land management, like cover crops.



The Ohio Department of Natural Resources (ODNR)

Ohioans are benefiting from H2Ohio's funding for critical water and sewer infrastructure projects led by Ohio EPA. More than 59,000 Ohioans will be served by one of the 65 H2Ohio projects for critical water and sewer infrastructure.



This includes much-needed waterline extensions and new sanitary sewer lines, lead service line replacements at child-care facilities and within communities, and household sewage treatment system repairs and replacements. Ohio EPA's H2Ohio funding addresses critical water and wastewater infrastructure needs in communities throughout Ohio, particularly in economically disadvantaged communities that need projects that are not possible without additional financial support.

The Ohio Lake Erie Commission (OLEC) leads the collaboration and coordination among Ohio's state agencies and stakeholders.

H2Ohio continues to be a transparent initiative, keeping stakeholders and Ohioans updated on its progress. In the last year, 10 new, interactive dashboards were created to inform Ohioans on H2Ohio's progress in overall water quality improvement. OLEC also regularly engages the scientific community as a check and balance on H2Ohio's effectiveness and goals. Another way OLEC is achieving this is through the development of an H2Ohio watershed model with The Ohio State University. This model will provide insight into conservation effectiveness and how long it will take to achieve nutrient reduction goals for Lake Erie.



## H2Ohio CONCLUSIONS

H2Ohio continues to track nutrient reduction progress with modeling, monitoring, and edge-of-field data. We have seen great success with H2Ohio through each agency's unique approach to improving water quality. Though H2Ohio is a statewide effort, one measurement of success is the phosphorus reduction in Lake Erie and beyond.



ODA continues to estimate phosphorus reductions through Implemented Best Management Practices (BMP) on the field. Because the growing season in Ohio begins in spring and extends into the winter, ODA does not yet have complete and verified data for 2022, but based on the 2022 data that is available, ODA estimates that agricultural producers have reduced overall phosphorus runoff by 232,000 pounds, an increase from the 200,000 pounds in 2021. Considering the BMPs currently enrolled for 2023, ODA estimates that this number could increase to over 317,000 pounds over the next year.



Through ODNR's efforts, H2Ohio wetlands that are already built or in the construction process are projected to reduce phosphorus loading in Ohio waterways by over 132,000 pounds per year. These wetlands will also reduce nitrogen by 185,000 pounds per year and sequester an estimated 5.2 million pounds of carbon per year.



Ohio EPA invested their H2Ohio dollars as well as other funds for nutrient management in Lake Erie in wastewater infrastructure improvements. The benefits to improving large-scale wastewater facilities and home sewage treatment systems are largely human health related. Through Ohio EPA's projects, a total of 400 pounds of phosphorus runoff was prevented.

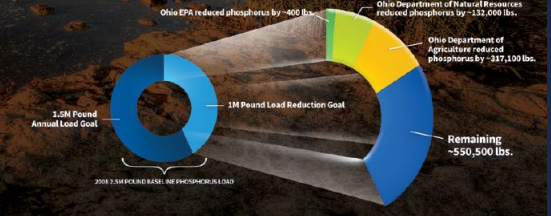


With continued effort and investment, the phosphorus entering Lake Erie is continuing to decrease year after year.

But Ohio has more work to do. Each agency remains focused and committed to ensuring water quality through advancements in technology and software, streamlined BMPs for producers, and expansion into Ohio's rivers and lakes. The calculated potential phosphorus load reduction for 2023, once projects and practices are constructed and completed, is 449,500 pounds of phosphorus, an increased reduction of 181,100 pounds. With continued effort and investment, the phosphorus entering Lake Erie is continuing to decrease, but because Ohio's water quality issues took several years to develop, H2Ohio recognizes that the initiative's impact will also take several years before it is fully realized. In the coming year, H2Ohio will remain focused on the long-term plan of improving water quality in Lake Erie and will also expand to put additional focus on the quality of Ohio's rivers. With support from the Ohio General Assembly in the FY 24-25 biennial budget, the new H2Ohio Rivers Initiative will follow a comprehensive approach to look beyond Lake Erie to address water quality concerns across the state.

### Potential Load Reduction in the Western Lake Erie Basin (2023)

Based on planned projects and practices as well as completed work



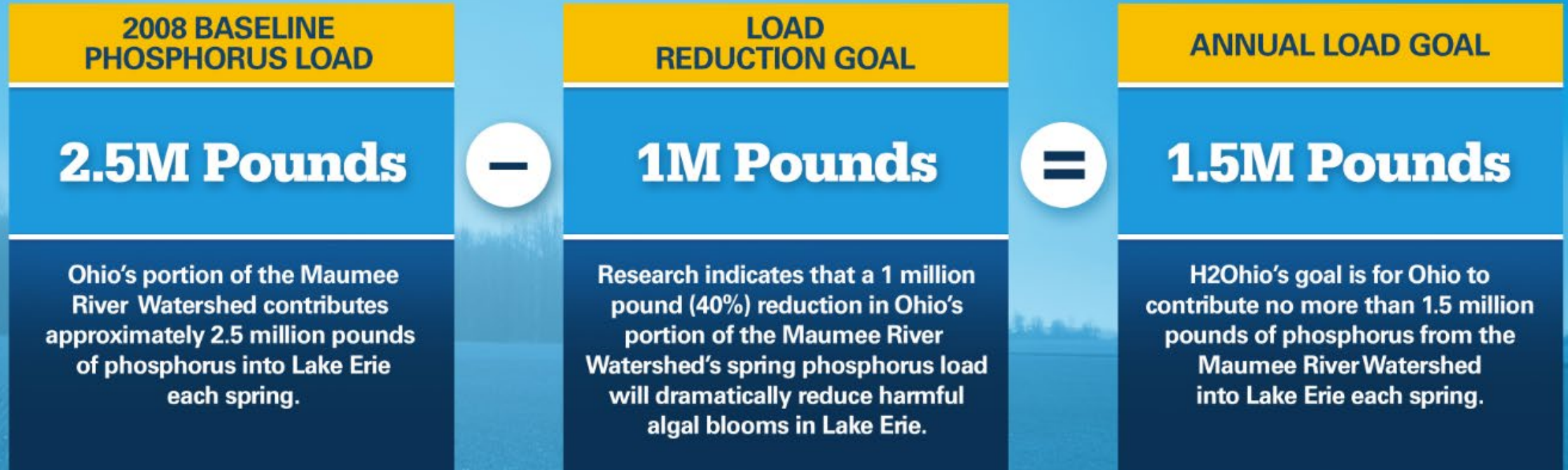
Department of Agriculture

Department of Natural Resources

Environmental Protection Agency

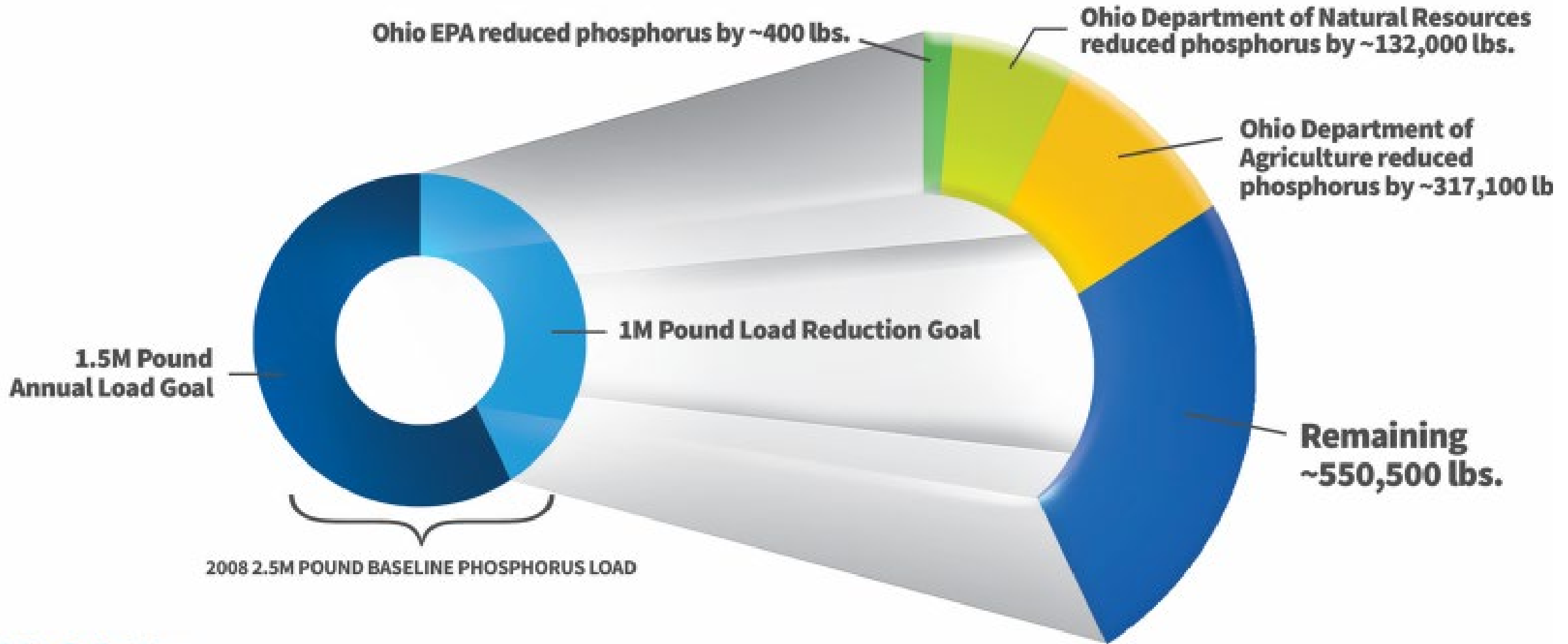
Lake Erie Commission

## Ohio's Phosphorus Reduction Goals for the Maumee River Watershed



# Potential Load Reduction in the Western Lake Erie Basin (2023)

*Based on planned projects and practices as well as completed work*



# H2Ohio



Lake Erie  
Commission





# Watershed Modeling of H2Ohio



Lake Erie  
Commission

## Water quality benefits of H2Ohio conservation practices in the Maumee River Watershed: SWAT model projections



Maumee River Watershed and sub-watersheds (UT team has mapped practices in three, green) and the outlet at Waterville (red).

### The 'top ten' H2Ohio practices

#### **Nutrient management**

1. Soil testing and voluntary nutrient management plans
2. Variable rate application
3. Subsurface fertilizer placement
4. Manure incorporation

#### **Erosion management**

5. Conservation crop rotation
6. Cover crops

#### **Water management**

7. Drainage water management
8. Riparian forest buffers
9. Two-stage ditch construction
10. Headwater and coastal flow-through wetlands



**Department of  
Agriculture**

**H2Ohio**

## 2,400 Producers



enrolled implementing best management practices on the farm

## 1.4 Million Acres



enrolled in a Voluntary Nutrient Management Plan

## More than 18,000 Acres



of watershed improved by conservation ditch projects

## Over 2.2 Million Acres



enrolled in overwintering cover, manure incorporation, precision, and placement practices

# H2Ohio Conservation Ditch Program

**\$5 Million**

in grants to Soil and Water Conservation Districts  
and County Engineers in the WLEB

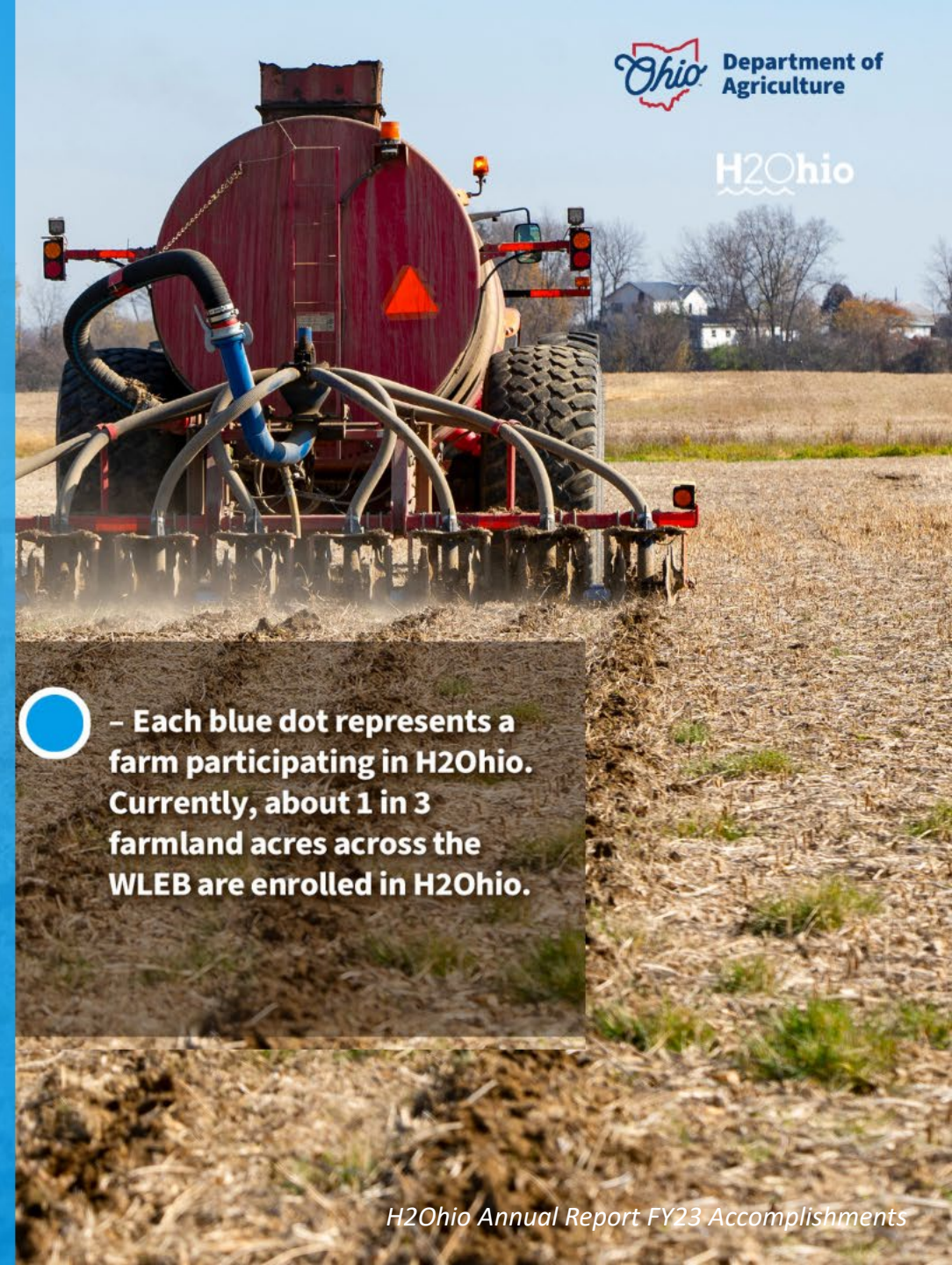
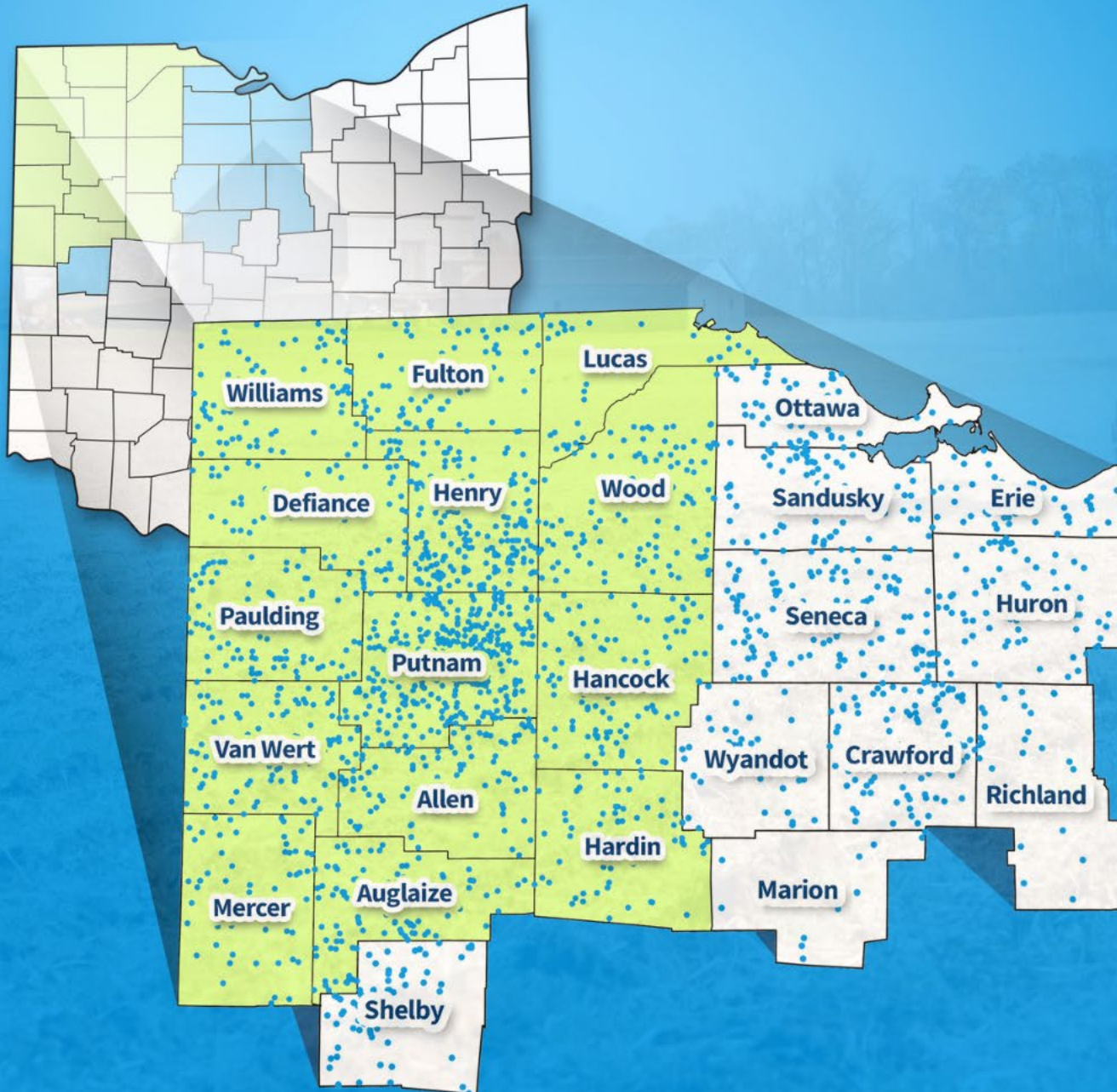


**11 projects covering  
8.4 linear miles**



**benefitting 18,000 acres  
of watershed**

*ODA just concluded a second round of statewide grant applications for \$5 million in 2024.*



– Each blue dot represents a farm participating in H2Ohio. Currently, about 1 in 3 farmland acres across the WLEB are enrolled in H2Ohio.

*ODA and local Soil and Water Conservation Districts are participating in a comprehensive outreach initiative to enroll more producers.*

**Direct Mailing Postcards**

**Phone Calls**

**On-Farm Visits**

**Door Knocking**

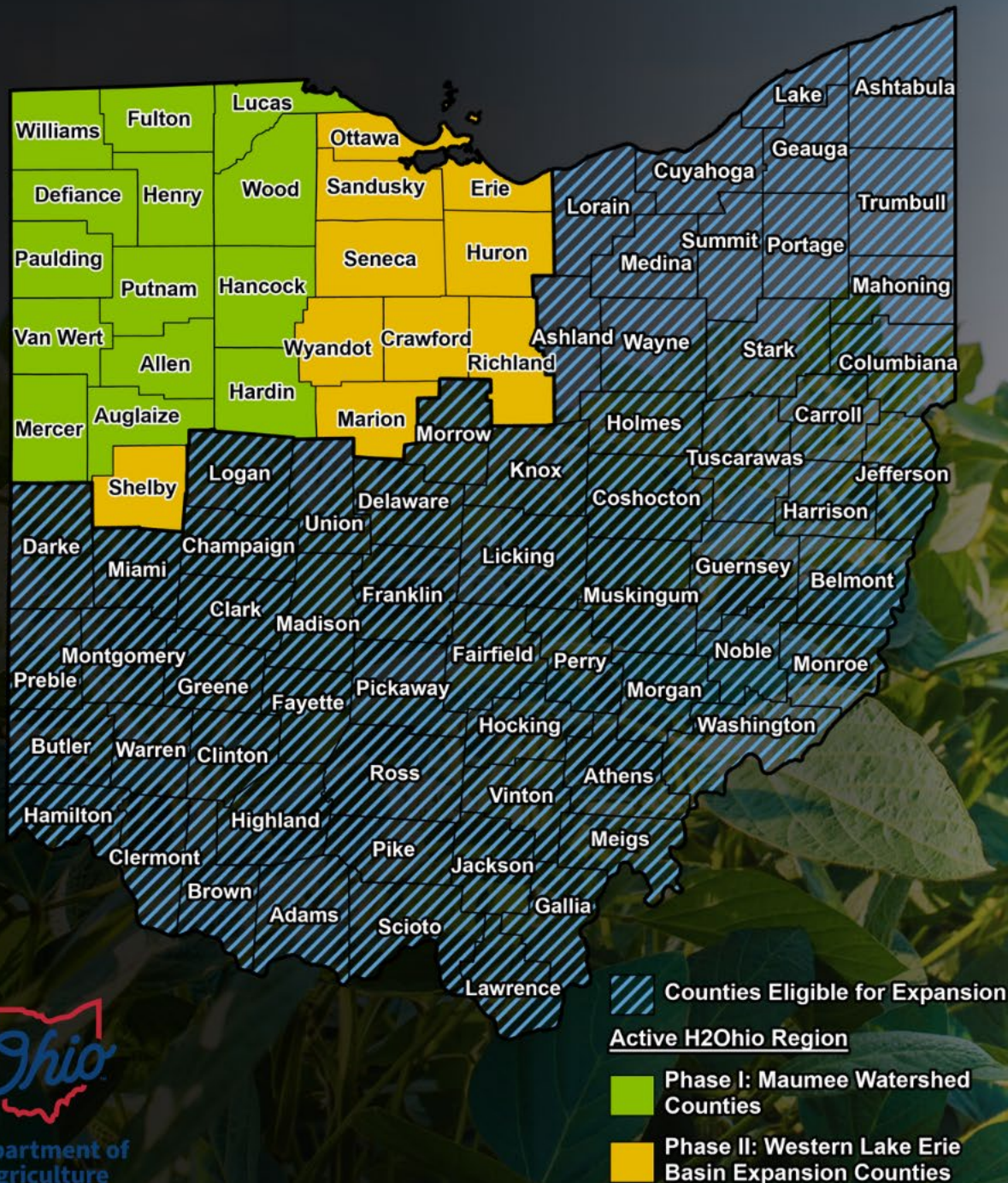


# Statewide Expansion

Producers outside of the Western Lake Erie Basin will be eligible to enroll acres into a Voluntary Nutrient Management Plan.

## 500,000 Acre Goal

ODA's goal is to enroll 500,000 acres across Ohio and build capacity and education at the Soil and Water Conservation Districts to support and implement H2Ohio.









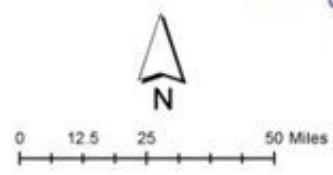


# H2Ohio Statewide Projects (Status)

## and Water Quality Incentive Program Projects

### Map Legend

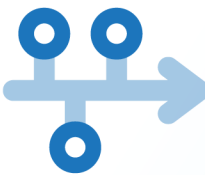
- Completed Projects
- Projects In Progress
- Water Quality Incentive Program Projects
- Western Lake Erie Basin
- Maumee River Watershed
- Lake Erie/Ohio River Watershed Divide



# H2Ohio

BY THE NUMBERS

**156**   
wetlands projects

**\$134 million**   
to support wetland project implementation

**+160K**



trees have been planted in wetland buffers

**72**



nonprofit conservation partners engaged



**66**

number of completed projects

**15,705**



acres of wetland and ecosystem restoration

**203**



landowners incentivized to establish wetlands and wooded riparian buffers through Lake Erie CREP

Sequester more than **5.5 million** pounds of carbon every year

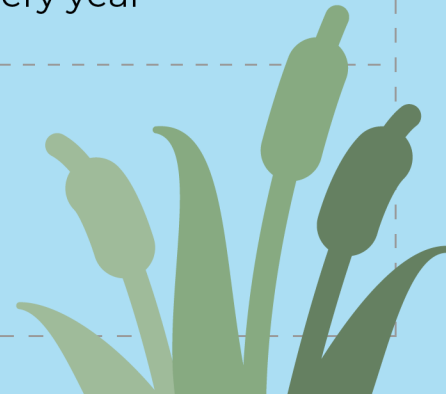
Reduce nitrogen each year by more than

**747k** pounds

And capture more than

**149k**

pounds of phosphorus.



# H2Ohio FUTURE PRIORITIES

**\$30M** 

for FY 24 – allocated and  
contacts signed July 1

**\$30M** 

for FY 25 – more contracts to be  
signed by July 1, 2024

# H2Ohio RIVERS INITIATIVE

1

**Monitoring &  
Data Collection**

2

**Restoring  
River Health**

3

**Preserving  
Healthy Rivers**





**Environmental  
Protection  
Agency**

**H2O**hio  


# **OHIO'S PLAN FOR CLEAN WATER**

# H2Ohio RIVERS INITIATIVE

The H2Ohio Rivers Initiative is designed to improve water quality, ensure community health, protect wildlife, and provide opportunities for recreation in and along Ohio's largest rivers.



Environmental  
Protection  
Agency

**\$15M**  
**Over 2 Years**

An expansion of the H2Ohio initiative, the H2Ohio Rivers Initiative places an emphasis on the preservation and improvement of our rivers, that provide critical wildlife habitat, drinking water, and recreation space.



River  
Restoration



Dam Removal



Road Salt  
Management

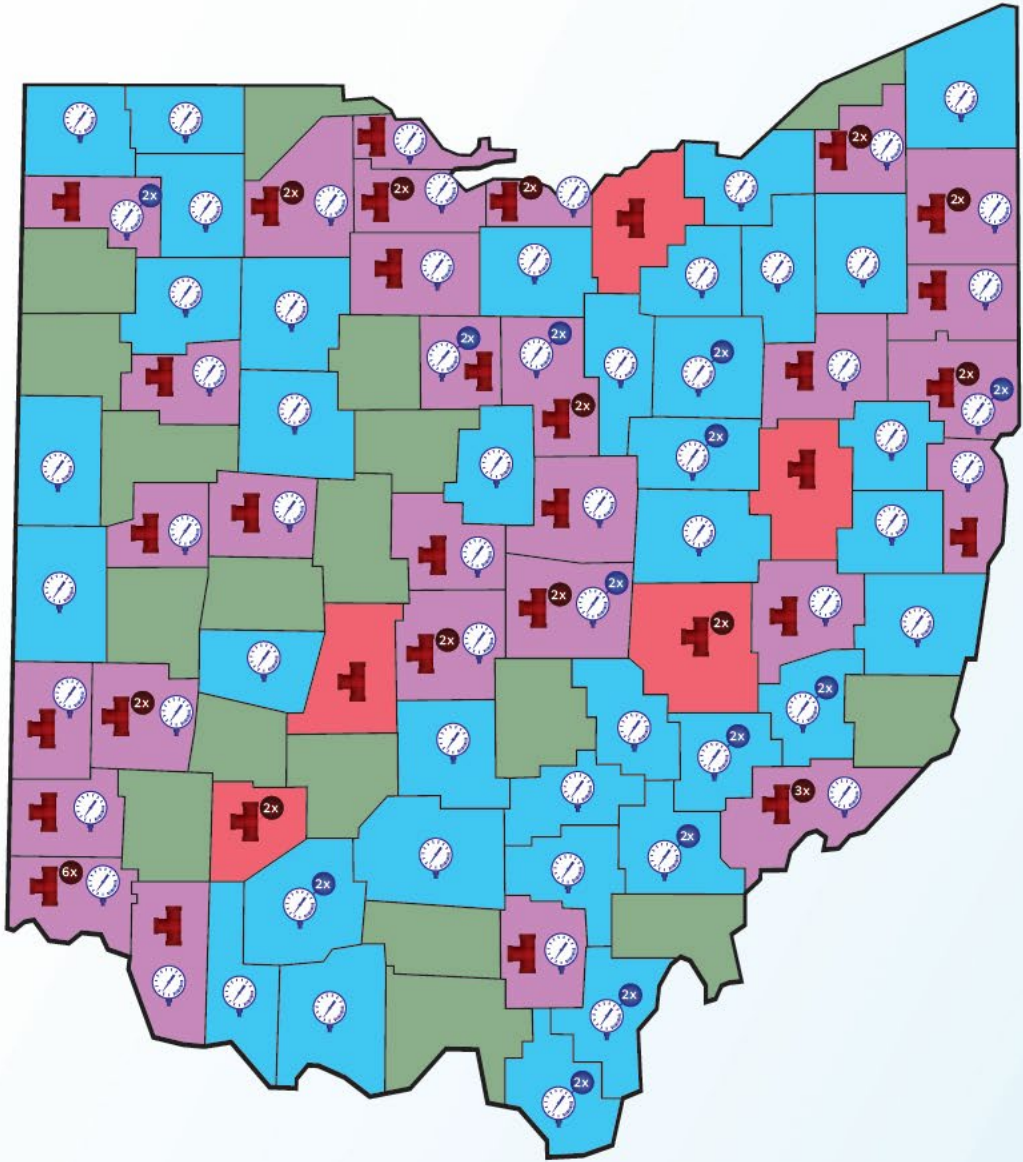


Emerging  
Contaminant  
Assessment

As of 2023

# Statewide Projects

As of 2023



## Drinking Water Equipment Grants

More than 100 communities across the state have been awarded a total of \$1 million in grants to help pay for equipment needed to maintain their public drinking water infrastructure. The grants cover distribution system equipment such as mobile leak detectors, line locators, valve exercisers, flow meters, hydrant condition assessors, pressure monitors, and training to use the equipment.

**Project Count**  

## Lead Service Mapping Grants

Ohio EPA announced approximately \$2.4 million in H2Ohio grant assistance to help 53 public water systems take the first step toward removing and replacing lead water pipes.

**Project Count**    

## Drinking Water Equipment Grants and Lead Service Mapping Grants

**Both Projects**  

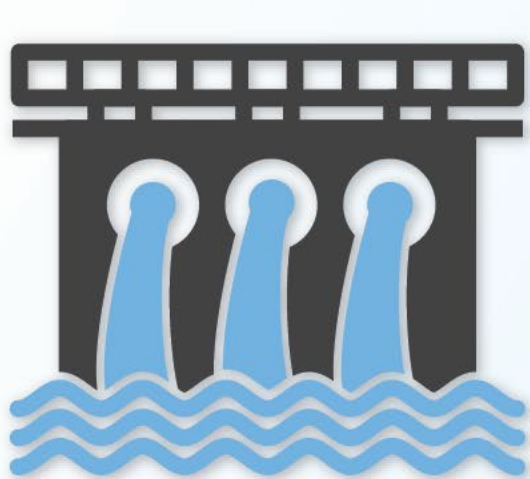






**\$21.09M**

**for 39 critical water and sewer projects**



**\$4,500,000**

for lead service line mapping to help identify pipes for replacement in 106 communities



**\$1,000,000**

for drinking water equipment in 111 communities for better distribution



**\$3,200,000**

for lead service line and fixture replacement resulting in safer water in eight communities



**\$4,238,000**

for 23 local health districts to replace household sewage treatment systems



# H2Ohio



Lake Erie  
Commission

Department of  
Agriculture

Environmental  
Protection  
Agency



OHIO DEPARTMENT OF  
NATURAL RESOURCES

[h2.ohio.gov](http://h2.ohio.gov)