

H2Ohio

H2Ohio Accomplishments for Fiscal Year

2024



MIKE DEWINE
GOVERNOR OF OHIO

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

Cover: Wetland acres in Seneca County



Department of
Agriculture

Department of
Natural Resources

Environmental
Protection Agency

Lake Erie
Commission

H2Ohio Accomplishments

for Fiscal Year 2024

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Letter from the Governor

▲ ABOVE: Governor Mike DeWine participates in 2024 Inland Fish Ohio Day on April 27, 2024. H2Ohio is making great strides in protecting our waters and improving the health of Ohio’s many waterways.

Dear Fellow Ohioans,

Ohio is the heart of opportunity, and our unique abundance of water makes our state the ideal location for economic growth and prosperity. Thanks to H2Ohio, we continue to gain the support and attention of representatives of technology industries, such as Intel, who want to join us in our clean water mission. H2Ohio offers opportunities from which all Ohioans will benefit. This fifth annual report outlines H2Ohio’s progress and continued commitment to keeping Ohio’s waterways clean and safe.

H2Ohio has many partners. Working together with the Ohio Legislature, scientists and researchers, the farming community, local municipalities, and conservation organizations, we have made great strides. I am grateful for the continued support from each and every one of our partners.

I want to thank the Ohio General Assembly for their continued support to make clean and safe water accessible to more Ohioans. In the last biennial budget, the Legislature supported an expansion of H2Ohio to include improving and maintaining the health and preservation of Ohio’s many large rivers.

The work of the H2Ohio Rivers program has already begun. So far, we have sampled 29 rivers for PFAS, or “forever chemicals,” which are manmade compounds that can lead to health problems. We have also begun awarding local government grants to upgrade road salt equipment, which is necessary to reduce salt runoff into rivers, lakes, and streams. The H2Ohio Rivers program also addresses litter cleanup and prevention and conservation farming practices.

H2Ohio has seen extraordinary participation in the voluntary farm conservation program. More than 2.2 million acres of farmland have been enrolled across the state into practices designed specifi-

cally to reduce nutrients that cause algal blooms. Ohio’s agricultural community is dedicated to H2Ohio’s mission to clean and improve our water for the future.

In addition to the work happening in agriculture across Ohio, H2Ohio is continuing work on restoring wetlands statewide. Wetlands act as nature’s filter, taking out excess nutrients and pollutants from the landscape, leading to better water quality. We have worked hard to identify wetland sites that will have the greatest impact on our water. H2Ohio has restored or created 183 wetlands across Ohio.

All Ohioans deserve to have a reliable source of drinking water and dependable water systems that bring this essential need into the home. More than \$22.6 million has been dedicated to water infrastructure projects across the state and more than \$15.5 million has been dedicated to wastewater infrastructure statewide. We look to the future of H2Ohio to continue helping communities.

However, we are not finished with our efforts. Clean, reliable water is the key to bringing opportunities for growth and prosperity to the state. Ohioans thrive when Ohio is strong, and H2Ohio is the path that will make a positive difference in our waterways for decades to come.



Very respectfully yours,
Mike DeWine
Mike DeWine
Governor of Ohio

Executive Summary

H2Ohio is Governor DeWine’s statewide water quality initiative designed to address the complex issues impacting Ohio’s waterways.

H2Ohio is a collaboration between the Ohio Department of Natural Resources (ODNR), the Ohio Department of Agriculture (ODA), the Ohio Environmental Protection Agency (EPA), and the Ohio Lake Erie Commission.



In December 2023, Governor DeWine announced an expansion of H2Ohio to include the H2Ohio Rivers program, a new effort to preserve and protect the health of Ohio’s large rivers. To date, 29 rivers have been sampled for PFAS, and the remaining rivers will be tested by the end of 2024.

The sampling data will provide helpful information to remediate any contamination and will give insight on the potential for any sport fish consumption advisories. Also, through the H2Ohio Rivers program, 31 local governments have been awarded a total of \$1.7 million in grants to upgrade road salt equipment, which is necessary to reduce salt runoff into rivers, lakes, and streams.

The H2Ohio Rivers program will also support litter clean up and prevention, dam removal, and it will give southwest Ohio farmers a new opportunity to enroll in conservation practices.

Because nutrient runoff from farmland is a leading cause of harmful algal blooms in waterways such as Lake Erie, H2Ohio also focuses heavily on nutrient management. Since its launch, H2Ohio has seen tremendous support from Ohio farmers.

The Ohio Department of Agriculture (ODA), with the help of local Soil and Water Conservation Districts (SWCD), works with farmers across Ohio to implement H2Ohio practices on the farm. More than 2.2 million acres of farmland are now enrolled in H2Ohio. Due to strong participation in the northwest part of the state, ODA opened enrollment for farmers statewide for the first time.

The unprecedented number of acres enrolled into a conservation program in Ohio is helping to reduce nutrient runoff that contributes to harmful algal blooms. Farmers are following Voluntary Nutrient Management Plans (VNMPs), which are essential to all other H2Ohio conservation practices and are required for each farmer enrolled in H2Ohio. Farmers use a VNMP to determine the right amount of nutrients needed on their fields, which in some cases, is none.

Thanks to H2Ohio, farmers are developing VNMPs for nearly half of the fields in northwest Ohio, ensuring only the right amount of nutrients are being applied.



ODA also incentivizes other best management practices that focus on water management, like conservation ditches, and land management, like cover crops, subsurface phosphorus placement, and manure management.

ODNR continues to improve Ohio’s water quality and landscape by restoring and improving wetlands. In all, 183 wetland projects have been completed or are in the process of being completed.



H2Ohio has restored more than 16,200 acres of wetlands and associated habitat in Ohio. These wetlands provide essential habitat for Ohio’s native species and help prevent flooding. Wetlands also create recreational opportunities for families and learning opportunities for schools and communities. ODNR also grew the Water Quality Incentive Program (WQIP) in fiscal year 2024, which encourages Ohioans to restore wetlands and stream banks on their private land. There are now 223 WQIP partners that have signed up and 138 of those partners have completed their restoration projects.

Did You Know?

Soybeans are Ohio’s largest produced crop. There are around 24,700 soybean farms in our state.

H2Ohio also ensures that Ohio communities have support for water infrastructure projects, critical water system equipment upgrades, and drinking water projects.

Ohio EPA provides needed “last mile” funding to many communities to ensure water infrastructure projects can reach the finish line. These projects are replacing aging infrastructure, providing water to underserved areas, and regionalizing underperforming water systems. Drinking water equipment grants are providing tools to water operators to better maintain their water distribution systems to ensure the reliable delivery of safe drinking water for all Ohioans.

The following pages provide a detailed description of H2Ohio’s progress and success.

H2Ohio Rivers Program

In December 2023, Governor DeWine announced the expansion of H2Ohio to include a new program, H2Ohio Rivers.

The H2Ohio Rivers program is a comprehensive approach to improve the quality and health of Ohio's rivers, which are critical for wildlife habitat, drinking water, economic development, and recreation.

The expansion was funded with approximately \$47 million from the Ohio General Assembly's total H2Ohio appropriation of \$270 million. With this funding, the H2Ohio Rivers program launched six new initiatives over the course of the fiscal year.

By the Numbers



\$47M

total funding investment for 2024-25 (biennium)



190

river miles will be cleared from litter and debris



29

Ohio rivers sampled for PFAS



18

liveries granted funding for litter clean up programs



343,000

pounds of trash collected



3

lowhead dams funded for removal



1.6M

to help 32 local governments pay for salt storage and upgrade road salt equipment



1,400

acres of high-quality riverbank preserved

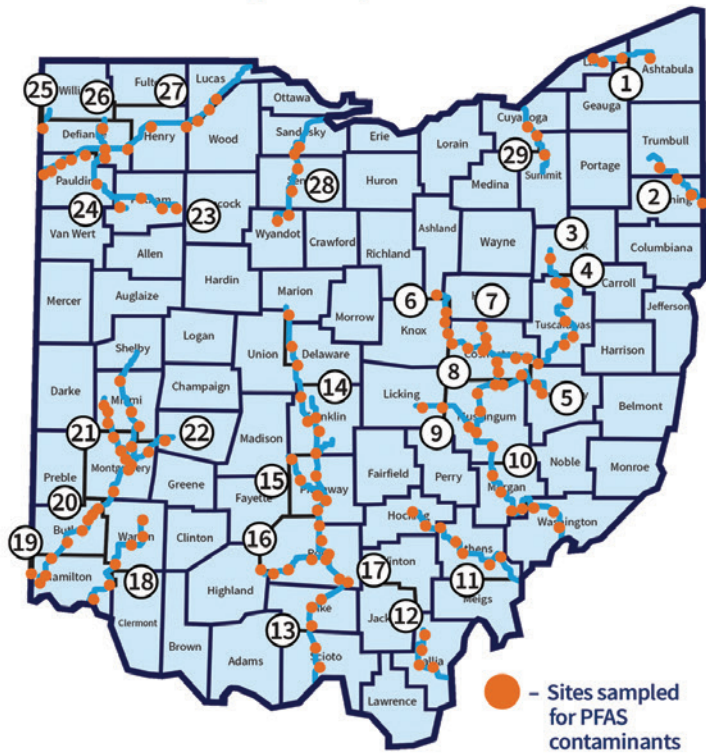
PFAS River Contamination

As part of the H2Ohio Rivers program, Ohio is now undergoing a statewide survey to measure the existence of per- and polyfluoro-alkyl (PFAS) substances in its large rivers. PFAS, often referred to as "forever chemicals," are manmade compounds used in the production of numerous consumer and industrial products that have been linked to severe health issues, including kidney and testicular cancer, thyroid disease, low birth weight, and high cholesterol.

To measure PFAS contamination, Ohio EPA began collecting water samples and aquatic life tissue specimens in 35 of Ohio's rivers. Once analyzed, the baseline measurement findings will inform Ohio's work to remediate any contamination and give insight into the potential for any sport fish consumption advisories.

PFAS Prevalence Study

Study of Per- and Polyfluoroalkyl Substances (PFAS) in Ohio Rivers



1. Grand River

2. Mahoning River

3. Tuscarawas River

4. Sandy Creek

5. Wills Creek

6. Killbuck Creek

7. Mohican River

8. Walhonding River

9. Licking River

10. Muskingum River

11. Hocking River

12. Raccoon Creek

13. Scioto River

14. Olentangy River

15. Big Darby Creek
16. Paint Creek

17. Salt Creek

18. Little Miami River

19. Whitewater River

20. Great Miami River

21. Stillwater River

22. Mad River

23. Blanchard River

24. Auglaize River

25. St. Joseph River

26. Tiffin River

27. Maumee River

28. Sandusky River

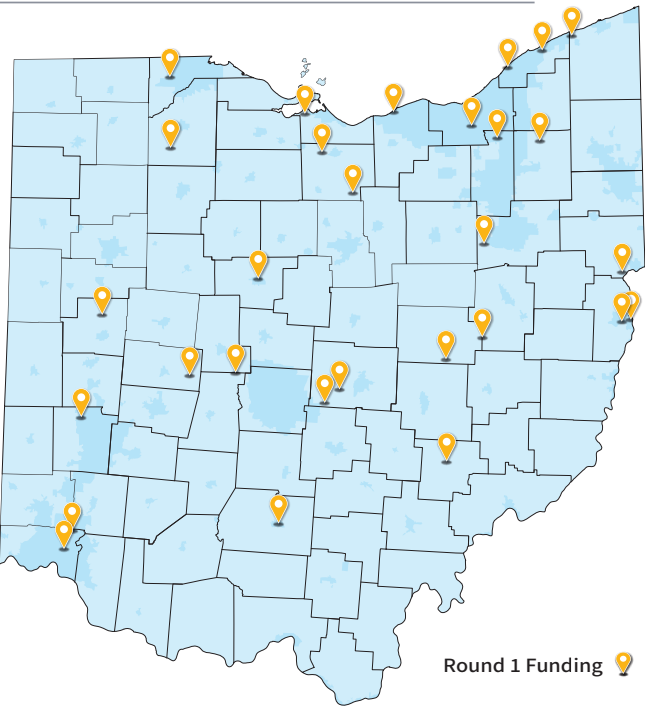
29. Cuyahoga River

Road Salt Runoff

The H2Ohio Rivers program is focused on reducing salt pollution in Ohio’s waterways. The H2Ohio Chloride Reduction Grant Program offers grants to communities to help them improve road salt storage and handling to reduce salt runoff into Ohio streams, rivers, lakes, and groundwater. A total of \$1.6 million has been awarded to municipalities, townships, and counties for equipment and upgrades to salt storage facilities. A second round of grant funding is expected to be awarded in Fall 2024.



Salt Grant Funding Disbursements



“I want to thank Governor DeWine on behalf of the citizens of Lorain for this grant. Not only will the money help us to make the roads safer in less time during snow events but also help with environmental concerns with the elimination of excessive amounts of salt on our streets that often end up in our storm water.”

Jack Bradley, Lorain Mayor



Did You Know?
All native mussels are protected in the State of Ohio (Section 1533.324 of the Ohio Revised Code)

Litter Cleanup

The H2Ohio Rivers program is administering a litter cleanup initiative in and along more than 20 rivers across Ohio. ODNR launched the H2Ohio Healthy Rivers Livery Grant Program which awarded funding to 18 canoe liveries to help increase volunteer opportunities and purchase safety gear and additional equipment needed to collect, haul, and remove large litter items. Through the program, litter will be removed from over 190 river miles.

H2Ohio Rivers is also working to identify and restore sites where people illegally dump materials along the river. As of July 2024, the program has collected over 343,000 pounds of trash at these sites.



H2Ohio Rivers Program clears tires and other large debris from the Tuscarawas River.

Mussel Study

Freshwater mussels are a critical component of a freshwater ecosystem. They are among the biggest groups of living organisms found in our rivers.

ODNR began surveying Ohio’s freshwater mussel populations, which are an important indicator of water quality due to the species’ sensitivity to pollutants. This comprehensive study of ecologic conditions in Ohio’s rivers began in June 2024. The results will be used to inform future strategies to improve and maintain healthy river ecosystems.

ODNR is also conducting fish surveys at low-head dams slated for removal and in select streams recovering from the effects of acid mine drainage. These surveys will help the State document the recovery and expansion of nearby fish populations following H2Ohio-supported projects.

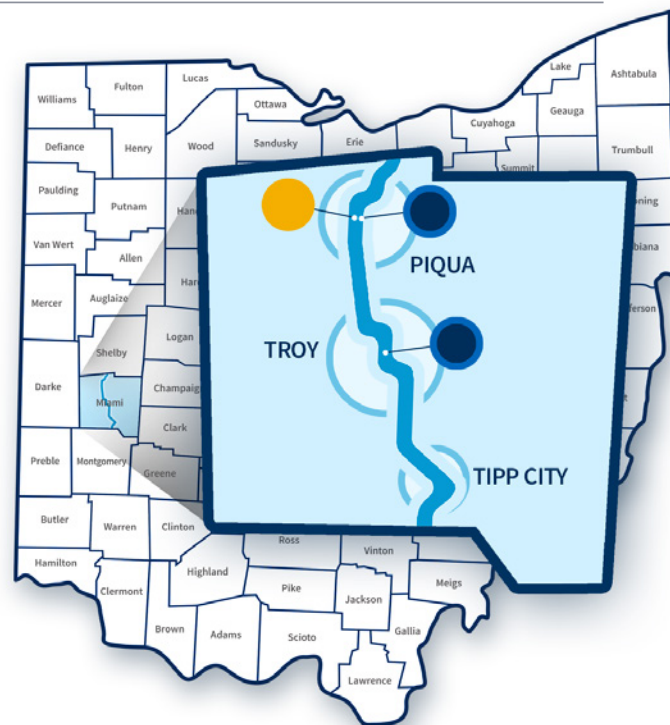


Dam Removal

The H2Ohio Rivers program is also focused on removing low-head dams across the state that have outlived their intended use and are harming water quality through oxygen depletion, trapped sediment, and interrupted fish migration.

Several dam projects were announced during the fiscal year, such as the removal of the Great Miami River dams in both Troy and Piqua and the modification of Piqua's sheet pile dam to allow for fish passage, recreational activities, and habitat restoration. Combined, these dam projects will open five miles of the Great Miami River.

Removal locations along the Great Miami River



 Type of River Dam: Sheet Pile

 Type of River Dam: Low Head

Preserving Healthy Rivers

The H2Ohio Rivers program is also focusing on identifying, acquiring, and preserving high quality riparian areas. Preserving and protecting riparian corridors allows the trees and vegetation in these areas to prevent water quality degradation through the uptake of nutrients. Riparian buffers also have the additional benefits of preserving wildlife habitat for species such as bald eagles and migratory songbirds and providing expanded outdoor recreational opportunities for paddling, birding, and fishing. During the fiscal year, more than 1,400 acres of high-quality riparian property have been preserved as part of the H2Ohio Rivers program.



Captina Creek riparian buffer in southeast Ohio

Ohio Department of Agriculture

From Director Brian Baldridge

“Ohio’s farmers are diligent and dedicated to preserving the health of soil and improving water quality, two priorities for agriculture that remain at the top.”

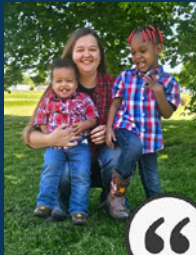
“Governor DeWine’s H2Ohio initiative offers farmers the opportunity to continue making long-term, positive effects on Ohio’s water quality through science-based conservation practices. ODA will continue its commitment to reduce nutrients and protect Ohio’s waterways for future generations.”

Governor DeWine’s H2Ohio initiative, now in its fifth year, continues to gain unprecedented commitment from farmers, recording the highest level of participation in program history with more than 3,200 producers who have enrolled nearly 2.2 million acres of cropland in the program.

This increase is due to the work of the Ohio Department of Agriculture (ODA) and Ohio’s local Soil and Water Conservation Districts (SWCDs) to expand H2Ohio’s footprint by offering incentives to farmers across the entire state. Previously offered only to farmers in Ohio’s 24 Western Lake Erie Basin (WLEB) counties, farmers are now successfully implementing proven, science-based H2Ohio best management practices (BMPs) to help reduce nutrient runoff that contributes to harmful algal blooms in Ohio’s waterways.

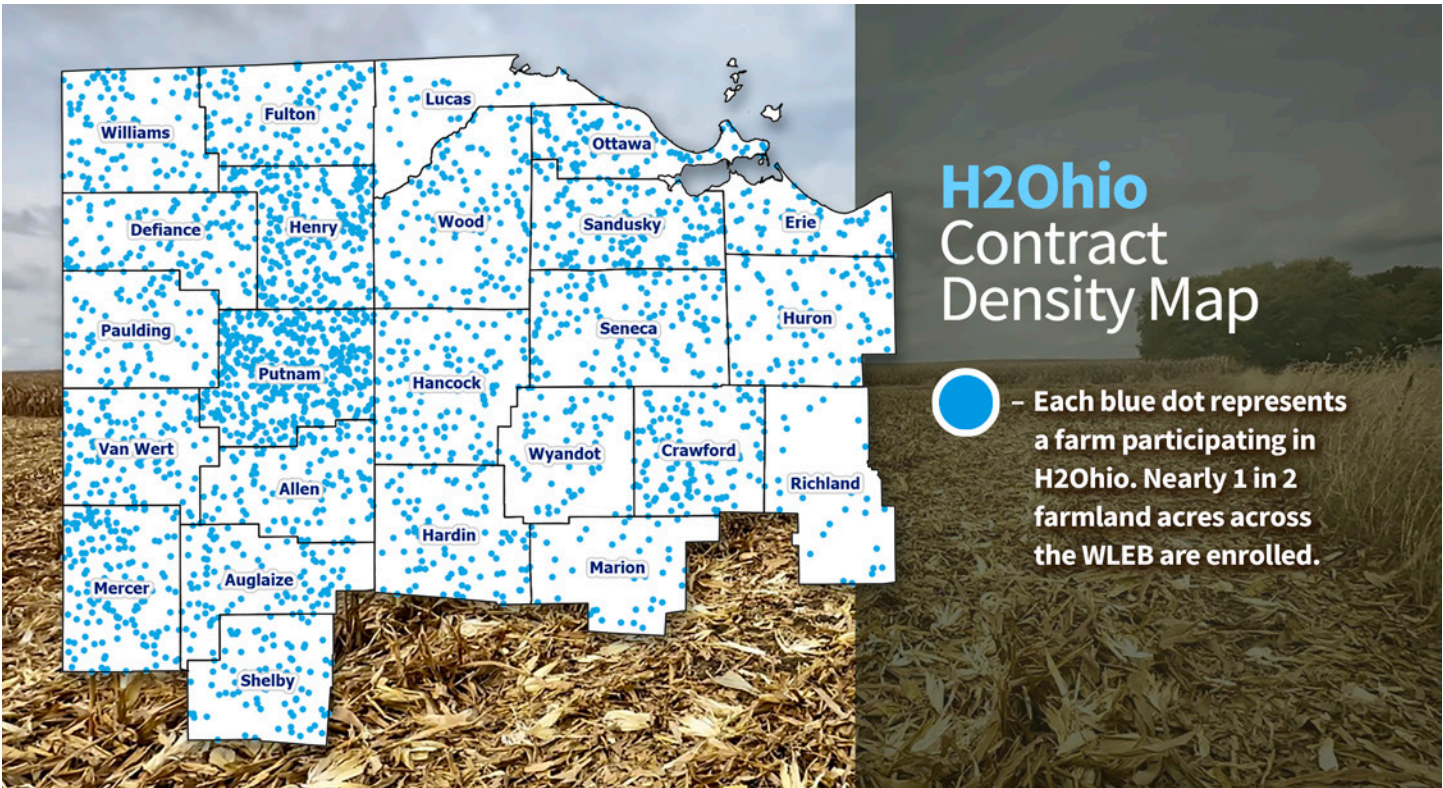
Ohio farmers remain dedicated to improving water quality through the use of Voluntary Nutrient Management Plans (VNMPs), which use soil testing to determine the right amount of nutrients needed on farmland. VNMPs are the cornerstone of H2Ohio and are a requirement for all H2Ohio participants. In addition to the VNMP,

ODA incentivizes other proven, science-based, and cost-effective BMPs that focus on water quality management, like conservation ditches, overwintering cover crops, and manure management.



“H2Ohio is a great program to help us make sure we are keeping our nutrients in our field. I am a fourth-generation farmer, and I want to make sure my farm continues to run smoothly for my kids and their kids. H2Ohio also has great incentives that help offset the cost. The program also makes sure we’re implementing things the correct way.”

Samantha Shaffer, Wood County, H2Ohio Farmer



By the Numbers

3,200+ Agreements



signed by producers to implement practices on the farm

2.2 Million Acres



enrolled in Voluntary Nutrient Management Plans

More than 22,300



acres of watershed improved by conservation ditch projects

100



agricultural retailers and independent crop consultants providing technical assistance directly to producers by supporting H2Ohio practice implementation and verification

Program Successes

After five years, ODA has experienced significant success within H2Ohio. In 2024, a robust re-enrollment in the original 14 counties of the Maumee River Watershed resulted in a 32% increase in acres from previous enrollment years, with approximately 90% of original producers returning to H2Ohio. In total, 1.85 million acres and 2,600 producers enrolled and will be implementing VNMPs across all 24 counties of the Western Lake Erie Basin (WLEB) over the next two years. This represents nearly 43% of the total cropland in the area, or nearly 1 in 2 fields.

Since the launch of H2Ohio, ODA has focused its efforts in the WLEB due to the large concentration of farmland in northwest Ohio. In addition to encouraging producers to enroll acres into other proven, cost-effective BMPs, ODA educates farmers and partners with agricultural retailers to ensure long-term adoption. ODA streamlined practice enrollment and program requirements this year, taking the number of BMPs offered from seven to four. Best management practices include overwintering cover, manure management, subsurface placement, and precision application.

ODA works closely with SWCDs to administer participant contracts, provide technical assistance, and support producers with the implementation of best management practices. H2Ohio provides producers cost-saving benefits, such as financial and technical assistance, to employ conservation practices that are proven to improve soil health and water quality.

Enrolled and Completed Practices 2023

H2Ohio requires farmers to implement and report completed practices to their local SWCD or ODA. Once reported, staff must verify the completion of the practice before payment is processed.

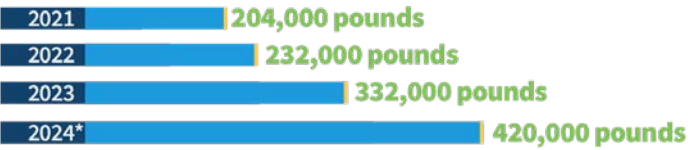
In 2023, producers completed 1.3 million acres of VNMP implementation. In addition, producers implemented BMPs to improve soil health and water quality on another 826,545 acres of farmland.

The below data shows the number of completed acres and incentive payment amounts for each BMP:

WLEB (24 county) Completed BMP and Incentives Crop Year 2023		
Best Management Practice	Completed Practice Acres	Incentive Amount Paid
VNMP Implementation	1,350,000	\$7,117,000
Precision Phosphorus Application	374,000	\$2,370,000
Subsurface Phosphorus Placement	154,000	\$4,451,000
Manure Incorporation	46,000	\$2,344,000
Overwintering Cover Crop	221,000	\$7,196,000
TOTAL	2,144,000	\$23,478,000

rounded to the nearest thousand

Estimated ODA Phosphorus Reduction Progress



*Potential load reduction based on enrolled acres

Based on the 2023 completed BMP data, ODA estimates agricultural producers reduced phosphorus runoff by more than 332,000 pounds last year in the WLEB. As ODA continues to increase program enrollment, H2Ohio practices have the potential to reduce phosphorus by as much as 420,000 pounds in 2024.

Statewide Expansion

In April 2024, ODA began accepting applications from row-crop producers who farm in Ohio counties outside of the WLEB. Thanks to this expansion, over 525 producers in 51 additional counties have enrolled 500,000 acres of cropland in H2Ohio.

SWCDs across these newly participating counties are working with producers, crop consultants, and agricultural retailers to develop VNMPs for 2025 and 2026. Upon VNMP approval, producers will be eligible for H2Ohio incentives over each of the next two years. ODA is considering options for additional H2Ohio incentives in future years for statewide participants.

Drainage Water Management and the Conservation Ditch Program

In the WLEB, H2Ohio also incentivizes farm practices that improve water management. Eighty-six drainage water management structures have been constructed over the last year to store water in the soil, reduce nitrogen loads, and decrease runoff volume. In total, these structures installed through SWCDs control the drainage of approximately 40,000 acres of WLEB cropland.

The H2Ohio Conservation Ditch Program, established in 2022, provides funding to SWCDs and county engineers for the construction of conservation ditches in agricultural watersheds across the state. Conservation ditches are designed to slow water flow, provide additional water storage, reduce erosion, and take up nutrients through the vegetated benches along the channel. Conservation ditches reduce sediment and nutrient loads that flow downstream.



“Through an Ohio Department of Agriculture Conservation Ditch grant, the Mercer Soil and Water Conservation District converted over 5,800 linear feet of traditional man-made drainage channel into a two-stage ditch. The Houts Ditch was originally constructed in the early 1940s because of poor drainage due to a very flat landscape. Houts Two-Stage Ditch is now on the county maintenance program, which is a benefit to all landowners in the affected watershed area to ensure that drainage is maintained.”

Theresa Dirksen, Mercer County Agriculture and Natural Resources Director

Partnerships

Providing leadership and assistance to producers on a local level is critical to the success of H2Ohio. The supervisors and technicians with SWCDs remain ODA’s closest partners in H2Ohio development, management, and delivery. SWCDs cultivate relationships with farmers, offer guidance, and promote the program’s benefits. This trusted connection has been an integral part of H2Ohio’s accomplishments.



SWCDs offered an abundance of assistance to ODA during re-enrollment this year, providing staff for hundreds of door-to-door producer visits and helping make thousands of phone calls ensuring H2Ohio reached new, additional farmers.

All of Ohio’s 88 SWCDs provide technical, financial, and educational resources to farmers and landowners for conservation and work closely with H2Ohio participants to guide farmers through completing each program process.

SWCD staff are currently managing more than 3,000 H2Ohio contracts including nearly 2.2 million acres of cropland for statewide participation. Districts in the 24-county WLEB project area have processed over \$52 million in incentive payments to producers for completed practices since the program began.



“Fairfield County has many producers who participate in the H2Ohio program. H2Ohio provides additional tools to help producers further enhance their farming operations while protecting soil and water resources. Tools like Voluntary Nutrient Management Plans help producers become more profitable and better stewards of the land.”

Nikki Drake, Fairfield County SWCD

Did You Know?
Drones have the ability to grab data quickly with a farm flyover and are becoming more commonplace in Ohio farming.



MyFarms

New software introduced to ODA staff this year put H2Ohio at their fingertips. The development and implementation of the online application, MyFarms, makes accessing and uploading producer data a more streamlined process. The MyFarms platform supports the development of H2Ohio contracts, tracks practice completion information, and verifies completed practices.

This new technology creates the opportunity for new partnerships in the private sector of the agricultural industry, giving MyFarms the potential to foster additional funding from private industry.

Technical Assistance Reimbursement Program

In 2024, ODA offered new funding opportunities for agricultural retailers and crop consultants, which are vital to H2Ohio’s progress. The Technical Assistance Reimbursement Program (TARP) incentivizes the technical assistance work provided by trusted businesses in the agricultural community that provide guidance to producers. More than 100 agronomists and consultants from the private sector are assisting with the creation of VNMPs through H2Ohio.



“We have remained part of the H2Ohio program because offering this service has proven extremely valuable to our customers and aligns with our commitment to improving water quality. Farmers manage numerous aspects of their businesses and are interested in participating in H2Ohio. We saw an opportunity to support our customers while maintaining our leadership in water quality improvement in Northwest Ohio.”

Mark Sunderman, President/CEO,
Legacy Farmers Cooperative

Research

Research is critical to ensure continued advancements in water quality. In the last year, a new partnership developed with the Conservation Action Project (CAP) expanded research and outreach efforts to producers in northwest Ohio. CAP is a grassroots conservation group, striving to improve the quality of Ohio’s soil and water resources. Its members include farmers, agricultural consultants, and SWCD staff.



Agronomists and agricultural consultants receive MyFarms software training.

This year ODA dedicated funding to research and demonstration sites to challenge traditional phosphorus management practices by showing how reduced phosphorus applications maintain yield and crop productivity. CAP is currently managing nine research plots and has released four reports detailing their conservation research. The group is also leading outreach efforts to producers, sharing its research results with the agricultural community and hosting field days for farmers to discuss reduced phosphorus application, cover crops, and soil health.



“H2Ohio funds are supporting soil and plant health testing in the Farmer Phosphorus Plots project. By tracking these plots for five years, we will gather unique data on how the soil and crops respond to various soil phosphorus levels. As a result, farmers will gain confidence in reducing or eliminating phosphorus fertilizer applications.”

Alan Sundermeier, Conservation Action
Project Coordinator

Budget

ODA’s H2Ohio budget includes \$60.6 million per fiscal year to focus on water quality improvement and nutrient load reductions. ODA will commit \$50 million to H2Ohio practices in 2024 and \$10 million for the development and implementation of VNMPs across the rest of the state. This funding, along with carryover funding from previous H2Ohio contracts, will contribute to reaching the 2-million-acre enrollment goal in the WLEB by July 1, 2025.



“NRCS and the Ohio Department of Agriculture are strong partners in getting conservation on the ground in Ohio through programs such as H2Ohio.”

John Wilson, Ohio State Conservationist,
Natural Resources Conservation Service

ODA Watershed Program

The Watershed Program is a statewide program for watershed planning and management established by House Bill 7 in 2021.

Managed by the Division of Soil and Water Conservation, the program is informing H2Ohio program planning across the entire state. The Watershed Program reached a significant milestone over the past year with the publication of seven Regional Watershed Plans. The plans are the result of a broad collaborative effort of partners and stakeholders across each region.

The Regional Watershed Plans provide a comprehensive characterization of each region, water quality impairments, ongoing activities, and best management practices appropriate to each region’s unique land use and water quality concerns.

These plans inform and support conservation efforts at a local, regional, and state level. Information from the plans is already being used in the development of Non-Point Source-Implementation Strategy (NPS-IS) plans and other state and regional conservation work.

The publication of the watershed plans also marked a shift in programmatic focus towards implementation. Since the fall of

2023, ODA’s watershed coordinators have been focused on identifying and supporting local projects through SWCDs and developing larger scale initiatives to address needs across different regions. This includes preliminary ideas for conservation programming for grazing and livestock lands across the south-east portion of the state, solutions for equine manure storage in the northeast, and targeted implementation for phosphorus load reduction in the WLEB.

2023 Achievements

- Published seven Regional Watershed Plans
- Developed a grant resources website to provide up-to-date information on funding opportunities to SWCDs and other partners
- Identified program opportunities to pursue based on regional needs (e.g. grazing/livestock RCPP for southeastern Ohio)

2023 Program Statistics

- Published 7 Regional Watershed Plans**
 - Detailed characterization and water quality data for each region of the state
 - Used to develop 9-element NPS-IS plans and guide regional-scale efforts
- 9-Element NPS-IS Support**
 - Provided technical review for 32 NPS-IS plans
 - Additional coordination and support
- H2Ohio Assistance**
 - Reviewed 22 nutrient management Plans & 2 Comprehensive Nutrient Management Plans
 - Verification for 23 board members
 - 5 Nutrient Management training sessions
 - Participated in division-wide H2Ohio outreach
 - Phone calls to 300+ producers, in-person visits at more than 20 locations
 - Coordination and support for 3 H2Ohio grants
 - USDA-ARS
 - Ohio Farm Bureau – Demonstration Farms
 - OSU Pilot Watershed Project
- Outreach (selected presentations by invitation)**
 - WMAO (52nd) Annual Conference
 - Ohio Watershed Leaders (OWLs)
 - Sustaining Scioto Board Meeting

- Mid-Ohio Regional Planning Committee
- City of Columbus Division of Sewer & Drainage
- TMACOG Agricultural Committee Meeting
- Woodland, Water & Wildlife Conference
- Ottawa River Coalition Bimonthly Meeting
- Upper Maumee Watershed Partnership Meeting
- Ohio Hellbender Partnership
- Ashland SWCD Conservation Chat
- Conservation Tillage & Technology Conference

- Assisted partner agencies with grant proposal evaluation (98 proposals)**
 - Great Lakes Commission – Great Lakes Sediment and Nutrient Reduction Program (24 proposals)
 - Ohio SeaGrant - Harmful Algal Bloom Research Initiative (55 preproposals; 14 full proposals)
 - Muskingum Watershed Conservancy District – Partners in Watershed Management (5 proposals)

Budget

Staffing for the Watershed Management Program has come largely from H2Ohio funding. ODA is currently evaluating this program and considering the options to satisfy program obligations within Ohio Revised Code.

Conclusion

ODA watershed staff continue to engage with regional stakeholders for networking, information sharing, and supporting the development of NPS-IS plans. The team is increasingly involved in H2Ohio program delivery both in the WLEB and across the state through training, Nutrient Management Plan development, practice verification, and public outreach. Program managers continue to evaluate the shared H2Ohio workload to increase collaboration and efficiency in program delivery.

Ohio Department of Natural Resources

From Director Mary Mertz

“At the Ohio Department of Natural Resources, we’re cleaning water before it even reaches rivers and streams by restoring, enhancing, and creating wetlands around the state.”

“Wetlands trap, filter, and remove the excess nutrients that become the fuel for harmful algae blooms. Using wetlands as a natural infrastructure to prevent the growth algae is a cost-effective way to address water quality issues.

Wetland and floodplain restoration can also help reduce flooding along rivers or streams and minimize downstream erosion. At the same time, wetlands are among the most productive ecosystems for wildlife and provide priceless recreational opportunities for outdoor enthusiasts of all kinds.”

The ODNR team, which includes staff from a variety of divisions, works collectively to identify high-impact wetland creation, restoration, and enhancement project opportunities.

The projects are primarily focused on waterways that have experienced increased frequency and intensity of harmful algal blooms in recent years.

The highest priority H2Ohio wetland projects are:

- 1 located in watersheds that contribute high levels of nutrient runoff,

- 2 situated to filter the drainage from a large area of high nutrient landscape,
- 3 sized to have a wetland area that is efficient, relative to the contributing watershed, and
- 4 offer intangible benefits, such as an ease of project execution or the assurance of long-term support from project partners.

By the Numbers for FY 2024



Governor and First Lady DeWine visit the Burntwood-Langenkamp wetland in Mercer County, which positively impacts Grand Lake St. Marys.



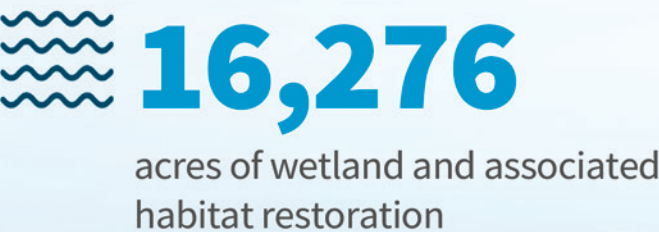
“TNC has been able to collaborate with the state on many projects, including leveraging millions of additional federal dollars toward large-scale Sandusky Bay restoration. H2Ohio has been a catalyst to realizing our vision for an overall healthier system, including improved water quality, a dynamic natural shoreline, and coastal habitat for shorebirds, fish, and people to enjoy.”

Alexis Sakas, Natural Infrastructure Director for The Nature Conservancy

Program Successes

ODNR uses science and data to determine the best locations and designs to restore and build wetlands, which are essential for filtering out excess nutrients harming Ohio’s water quality. With continued funding and the capacity for more projects, H2Ohio has continued to expand its reach, including its first completed wetland in Franklin County, Walnut Creek Treatment Wetland Restoration. As of July 2024, nearly 100 wetlands have been completed through H2Ohio.

By the Numbers - Overall



Among the latest of ODNR’s ongoing efforts is the creation of a barrier wetland along Lake Erie’s coast. In Sandusky Bay, H2Ohio is working on a protected inlet between the Sandusky River and Lake Erie. In Maumee Bay, another unique endeavor will rebuild the Clark and Delaware/Horseshoe islands, which have degraded over time due to erosion. This restoration effort will enhance water quality by collecting sediment and nutrient runoff through a process known as natural sediment capture.

Budget

The H2Ohio budget includes \$61.5 million over fiscal years 2024 and 2025 for ODNR to create, restore, and enhance wetlands around Ohio. Additionally, ODNR leveraged public and private partnerships to fund projects across the state. The agency invested a total of \$30.7 million in fiscal year 2024 for its wetland restoration program.

The H2Ohio wetland restoration program continues to grow with the addition of 49 new projects. H2Ohio has leveraged funding from the biennial budget to bring in federal funding and form partnerships with the private sector.

Partnerships

Every partner is vital, and these collaborative partnerships lead to successful results. Through H2Ohio, ODNR partnered with 82 different conservation partners on 183 projects to restore over 16,200 acres of wetland and other water resources.

This year, ODNR also began its first H2Ohio partnerships with private businesses, such as Intel. In April, Governor DeWine and Lt. Governor Husted joined Intel to announce the company’s donation in support of the new Dillon Wetland Restoration Project, which will protect and improve water quality in the Licking Watershed.

The Ohio Water Development Authority also continued its partnership with H2Ohio by granting another \$1 million in funds to the program.

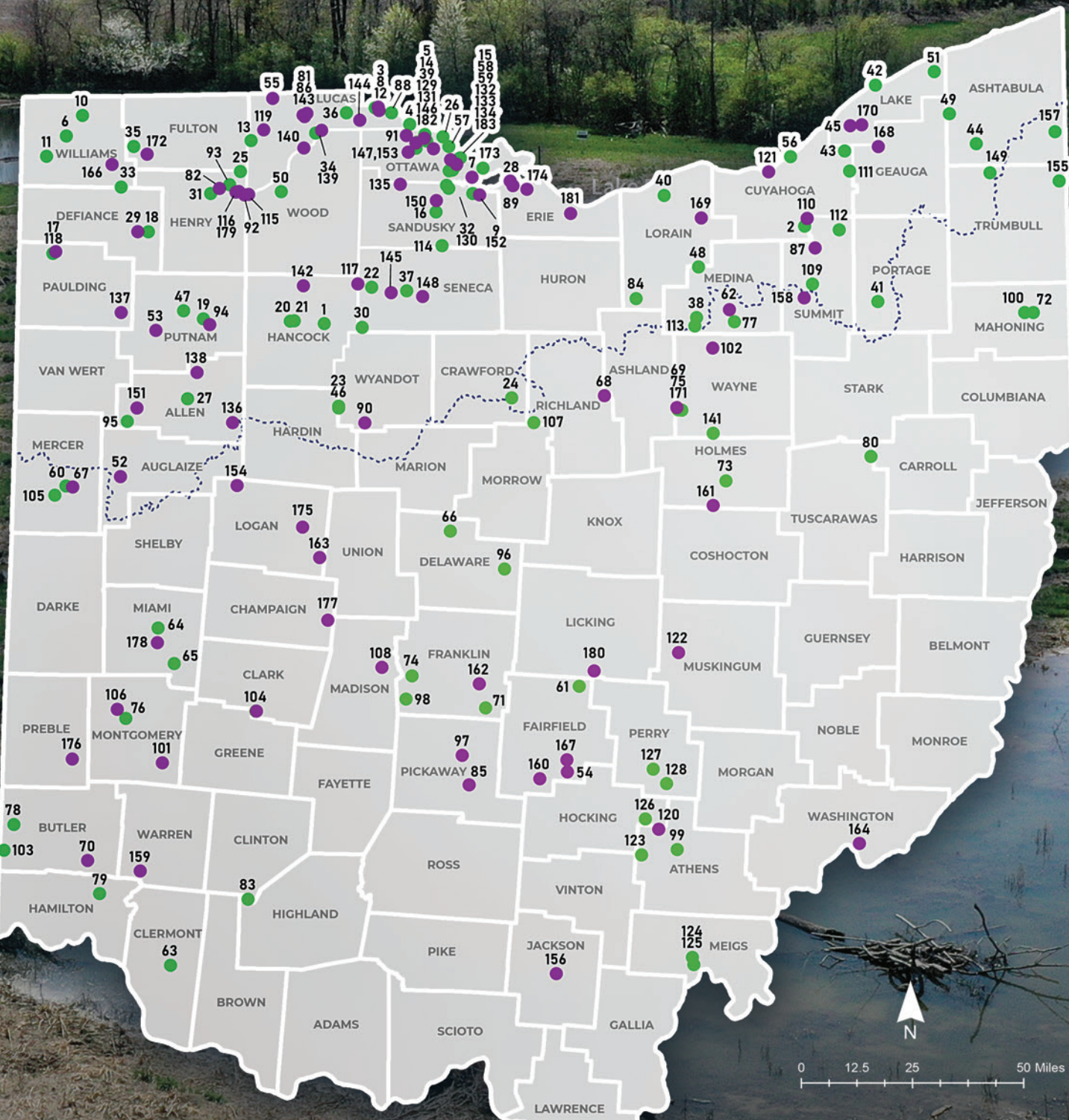


“Local H2Ohio projects are helping improve water quality in the Maumee River and Lake Erie and will have a lasting positive and multi-faceted impacts on our community. The Port Authority is proud to assist ODNR in implementing these important projects in Northwest Ohio.”
Joe Cappel, Toledo-Lucas County Port Authority



“Thanks to H2Ohio funding, Preservation Parks was able to restore more than six acres of wetlands along Perfect Creek in Trenton Township that will preserve, enhance, and restore ecological function to the greater Big Walnut watershed.”
Mary VanHaaften, Executive Director Preservation Parks Delaware County

H2Ohio Statewide Projects - Status



- Completed Projects
- Projects In Progress

- Lake Erie/Ohio River Watershed Divide

Project Key

- | | | |
|--|--|--|
| 1 Bright Conservation Area Wetland Restoration Initiative | 62 Chippewa Lake Wetland Restoration | 125 Casto AMD Doser O&M |
| 2 Old Station Road | 63 Williamsburg Wetland Treatment System | 126 Monkey Hollow AMD Doser O&M |
| 3 Maumee Bay State Park Wetland Reconnection | 64 Springcreek Confluence Off-Channel Wetlands | 127 Jobs AMD Doser O&M |
| 4 Ottawa National Wildlife Refuge Wetland Reconnection Projects | 65 Tripp City Off-Channel Wetland | 128 Pine Run AMD Doser O&M |
| 5 Magee Marsh Turtle Creek Bay Wetland Reconnection | 66 O'Donnell Wetland Restoration and Treatment Train | 129 Dobbelaire Wetland Diversion |
| 6 OSU Montpelier Wetland Restoration | 67 Mercer Wetland Complex Restoration | 130 Gonya Farms Ag Drainage Treatment |
| 7 Raccoon Creek Natural-Based Barrier Wetland | 68 Black Fork Forest Preserve Wetland Restoration Project | 131 Kontz Wetland Enhancement |
| 8 Mallard Club Reconnection, Phase II | 69 Funk Bottoms Wetland Restoration | 132 Marinewood Treatment Wetland |
| 9 Pickerel Creek Floodplain Restoration | 70 Westchester Wetland Restoration | 133 West Lake Shooting Club Wetland Enhancement |
| 10 St. Joseph Confluence Wetland Reconnection | 71 Walnut Creek Treatment Wetland Restoration | 134 Nemecek Wetland Drainage |
| 11 St. Joseph's River Restoration Project | 72 Forest Lawn Stormwater Park | 135 Aldrich Pond Wetland Enhancement |
| 12 Mallard Club Nutrient Reduction and Orchid Restoration | 73 Reconnecting to Killbuck Creek | 136 Village of Harrod Wetland Restoration |
| 13 Oak Openings Preserve Wetland Restoration | 74 Hellbranch Meadows West Wetland Restoration Project | 137 Little Auglaize Wildlife Reserve Project |
| 14 North Ridge Hunt Club Wetland Restoration | 75 East Funk Bottoms | 138 Allen County Riparian Buffer Installation |
| 15 Little Portage Nutrient Reduction and Costal Wetland Reconnection | 76 Spring Run Conservation Area Wetland Restoration Project | 139 Delaware Creek Rain Gardens Retrofit |
| 16 Redhorse Bend Preserve Wetland Restoration | 77 Chippewa Creek Floodplain and Wetland Restoration Project | 140 City of Maumee Towpath Feasibility and Design |
| 17 Forder Bridge Floodplain Reconnection | 78 Indian Creek - Hoffmann Wetland and Stream Restoration | 141 Killbuck Reconnection |
| 18 Independence Dam Canal Reconnection and Wetland Creation | 79 Gorman Heritage Farm Treatment Wetland System | 142 Van Buren Dam Removal and Floodplain Wetland Restoration |
| 19 Blanchard River Floodplain Restoration | 80 Taggarts Wetland Enhancement & Acid Mine Drainage Abatement | 143 Village of Ottawa Hills H2Ohio Project |
| 20 Oakwood's Nature Preserve Wetland Restoration Project, West | 81 Bandore Park Restoration | 144 City of Oregon Wolf Creek Floodplain Restoration |
| 21 Oakwood's Nature Preserve Wetland Restoration Project, East | 82 Dry Creek Wetland Project | 145 Funk-DeWald Wetland Restoration |
| 22 Fruth Wetland Nature Preserve | 83 East Fork Riparian Reserve Wetland Treatment System | 146 Packer Creek Wetland Restoration |
| 23 Andreoff Wetland Restoration | 84 Woodpecker Ditch - Meachland Wetland Restoration | 147 Ottawa Wetland Restoration |
| 24 Sandusky River Headwaters Preserve Wetland and Habitat Restoration | 85 Fleming Bend Protection and Restoration | 148 Hedges-Boyer Park Wetland |
| 25 Van Order Wetland and Forest Restoration | 86 UT CADE Wetland and Stream Restoration | 149 Sugar Island Preserve North |
| 26 Navarre Marsh Wetland Restoration and Reconnection | 87 Cuyahoga River Riparian Forest and Wetland Restoration | 150 Hill Ditch, Toledo Public Schools |
| 27 Baughman Petition Ditch | 88 Cedar Point National Wildlife Refuge Pool 2 Costal Reconnection | 151 Huber Floodplain Reconnection |
| 28 Sanford Agricultural Drainage Treatment Train Project | 89 Moxley Wildlife Area Wetland Reconnection Project | 152 Pickerel Creek East Barrier Wetland |
| 29 Defiance East River Drive | 90 Killdeer Reservoir Wetland Project | 153 Pickerel Creek West Barrier Wetland #4 |
| 30 Springville Marsh Wetland Extension | 91 Hickory Grove Project | 154 Indian Lake State Park Campground Wetland Restoration |
| 31 Rotary Riverside Preserve Restoration | 92 Mary Jane Thurston Wetlands | 155 Kinsman Wetlands Enhancement Project |
| 32 Buehler Farms Treatment Wetland | 93 Juhasz Wetland Restoration | 156 Franklin Valley Wetlands Restoration |
| 33 The Weisgerber-Pohlman Nature Preserve Restoration | 94 Putnam Oxbow Restoration | 157 Andover Meadows Wetland Restoration |
| 34 Clark Island Restoration: Design and Engineering | 95 Elizabeth St Stormwater Control (Village of Spencerville) | 158 Pigeon Creek Preserve Preservation and Restoration |
| 35 Goll Woods Wetland Extension | 96 Perfect Creek Treatment Wetlands | 159 Simpson Creek Headwaters Restoration at Landen-Deerfield Park |
| 36 Duck and Otter Creek Wetland and Stream Restoration | 97 Genevieve Jones Preserve Floodplain and Wetland Restoration | 160 Two Glaciers Wetland Restoration |
| 37 Clary-Boulee-McDonald Nature Preserve | 98 Big Darby Creek Treatment Wetlands | 161 Crane Swamp Preserve & Riparian Wetland Restoration |
| 38 Bluebell Preserve Restoration Project | 99 Hocking River Riparian Restoration | 162 Three Creeks Wetland Creation |
| 39 Rust Tract Wetland Restoration | 100 Stream, Floodplain, and Wetland Restoration at Mill Creek GC | 163 Darby Corridor Treatment Wetlands |
| 40 Martin's Run Wetland and Stream Restoration Project | 101 Holes Creek Restoration and Habitat Enhancement | 164 County Home Creek Stream and Wetland Restoration |
| 41 The Bird Family Bog Rehabilitation Project | 102 Killbuck Creek Headwaters Preservation and Restoration | 165 Rainbow Run Wetland 2 |
| 42 Headlands Dunes Costal Wetland Restoration Project | 103 Dry Fork Streambank Stabilization at Gov Bebb Metropark | 166 Stryker Floodplain Restoration |
| 43 Fosters Run Restoration | 104 Rainbow Run Wetlands | 167 Shelly Lakes Wetland Creation/Restoration - Hocking River Cons. Corridor |
| 44 Ashcroft Woods Scali Preserve | 105 Coldwater Wetlands Park | 168 American-Croatian Lodge Dam Removal and Stream Restoration |
| 45 Chagrin River and East Branch Corridor Restoration and Protection Project | 106 Sycamore State Park Wetland Restoration | 169 Gerber Property Stream and Wetland Restoration |
| 46 Upper Blanchard River Watershed Project | 107 Clear Fork Preserve | 170 Chagrin Floodplain Restoration & Protection (City of Willoughby) |
| 47 Sugarcamp 7 Blanchard Habitat Project | 108 Merriman Floodplain Restoration | 171 West Funk Bottoms Floodplain Wetland Restoration |
| 48 Litchfield Wetland Restoration | 109 Riverwood Project | 172 Village of Archbold ARTS |
| 49 Trumbull Creek H2Ohio | 110 Sagamore Hills | 173 Madison Treatment Wetland |
| 50 Fox-Shank Living Laboratory | 111 Chagrin River Headwaters Restoration | 174 Mills Creek Floodplain Enhancement |
| 51 Madison Village Park Wetlands | 112 Twinsburg Heights Preserve | 175 Myeerah Nature Preserve Wetland Restoration |
| 52 City of St. Marys Treatment Train | 113 Little Killbuck Watershed Divide | 176 Aukerman Creek Stream Restoration |
| 53 Auglaize River Riparian and Wetland Restoration | 114 Abraham Forest Riparian Restoration | 177 Westerheide Wetland Restoration |
| 54 Elias B. Wagner Preserve | 115 Howard Island Acquisition and Feasibility Study | 178 Duke Park Riparian Restoration |
| 55 Ford Two Stage Ditch | 116 Miami Erie Canal Towpath Wetlands | 179 Hickory Grove Wetland Restoration |
| 56 CHEERS Project: Floating Wetlands | 117 City of Fostoria, Mosier Floodplain Restoration | 180 Grosse Brothers Treatment Wetland |
| 57 Toussaint Shooting Club Reconnections: Bob's Bay and Main Marsh | 118 Maumee Floodplain Restoration | 181 DuPont SNP Wetland Preservation and Restoration |
| 58 Bohling Marsh Wetland Reconnection | 119 Wiregrass Restoration | 182 Behnke Farm Wetland Restoration and Water Quality Project |
| 59 Darby Refuge Wetland Reconnection | 120 Snow Fork, Acid Mine Drainage Abatement | 183 Bacak Farm Wetland Restoration and Water Quality Project |
| 60 Burntwood-Langenkamp Wetland Conservation Area | 121 Lakefront Reservation Green Infrastructure | |
| 61 Brooks Park Wetland Creation & Water Quality Initiative | 122 Dillon Reservoir Wetland Treatment Train | |
| | 123 Carbondale AMD Doser O&M | |
| | 124 Thomas Fork AMD Doser O&M | |

Ohio Environmental Protection Agency

From Director Anne Vogel

“Across the state, Governor DeWine’s H2Ohio initiative funds vital infrastructure that expands access to safe, affordable water and fuels economic growth.”


“To date, the program has provided funding to over 115 communities to identify, map, and replace lead service lines so that fewer Ohio children are exposed to lead in their drinking water. We are also using this funding to upgrade drinking and wastewater systems statewide.

Ohio EPA is responsible for protecting human health and the environment for all Ohioans, and we look forward to continued investment in all parts of the H2Ohio initiative and the resulting water quality improvements in Ohio rivers, homes, and communities.”

By the Numbers FY 2024

 **50,700**
Ohioans served by 10 drinking water projects

 **2,800**
Ohioans served by 5 wastewater projects

 **\$27.5M**
invested in water and wastewater infrastructure improvement projects



Water Infrastructure Highlights:

On December 1, 2023, Governor DeWine and Ohio EPA announced more than \$16.7 million for 14 water infrastructure projects across the state. H2Ohio’s goal is to ensure every Ohioan can access clean, safe, and reliable water.

Akron (Summit County) \$625,000

Improvements to Copley Township’s water system will give residents access to higher-quality water and better water pressure. The funding also extends three water mains in the area.

Ashtabula County \$1,000,000

This funding will connect a mobile home park to reliable, safe, and clean drinking water. Park residents currently get their water from a well with a history of E. coli contamination. The project includes the installation of 10,000 feet of waterline, a water booster station, and seven hydrants. The project will eliminate a “dead-end waterline” and improve water pressure.

Bloomville (Seneca County) \$20,000

This funding will help the village determine the most effective options to upgrade its wastewater facilities.



■ Carroll (Fairfield County) \$1,000,000

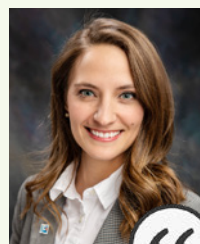
Thanks to H2Ohio dollars, a new wastewater system that uses gravity instead of electricity to move and collect wastewater is being installed in the village. This system is both more sustainable and cost-effective. This funding will help cover the installation costs of new sewers, manholes, and force mains.

■ Coshocton (Coshocton County) \$1,000,000

This funding provided more reliable water services to an area hospital and apartment complex through the installation of new waterlines. The money will also go toward replacing fire hydrant waterlines to ensure firefighters have reliable access to water in an emergency.

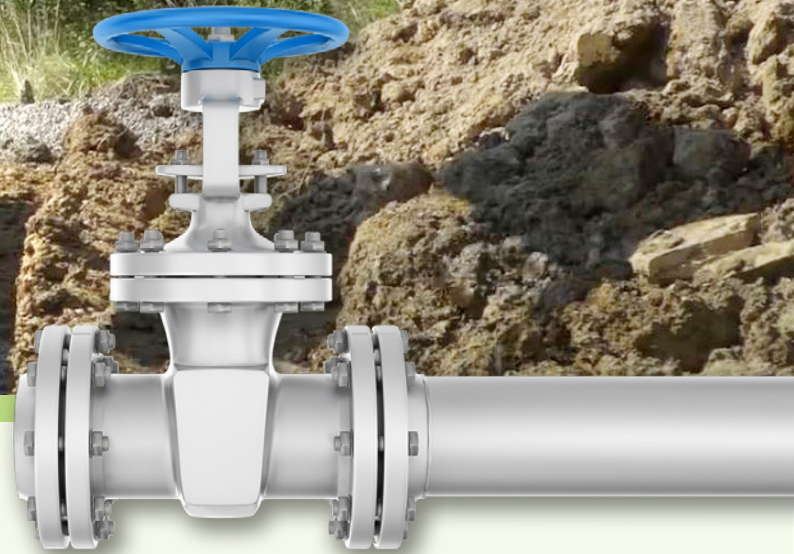
■ Findlay (Hancock County) \$2,000,000

After years of dealing with a private water system that wasn't properly maintained, H2Ohio funding will connect the Eagle Creek subdivision to the city of Findlay's wastewater collection system. The project will also repair long-neglected sewer infrastructure.



"We have a really big responsibility to protect our freshwater resources, and being able to make small projects in any of our communities that help in any incremental fashion is really beneficial and is going to help protect our water for decades and generations to come."

Christina Muryn, Mayor of Findlay



Did You Know?

The Ohio EPA regulates around 4,200 public water systems that serve about 11 million people daily.

■ Granville (Licking County) \$98,000

Children and employees at the Kids Education and Recreation childcare center in Granville now have access to a more reliable source of drinking water after H2Ohio made it possible to connect to the village's public water system.



"Kids Education & Recreation is very thankful that Ohio EPA recognized and supported the need for public water service to our childcare center. This not only assures our children and team have reliable drinking water, but it also allowed us to get rid of a costly well water purification system and eliminated the need for costly weekly well water testing. This grant has changed our childcare center in so many positive ways."

Britney Lang, Kids Education and Recreation

■ Miller City (Putnam County) \$1,000,000

This sanitary sewer project will provide a new gravity sewer to the village's residents. The project will service 71 homes, commercial businesses, and the local school.

■ Matamoras (Washington County) \$1,500,000

More than 6,000 feet of existing cast iron water mains will be replaced with new, reliable pipes. The village is also installing valves, hydrants, and service lines.

■ Muskingum County \$2,000,000

Regionalization will ensure that residents of Maysville have access to a clean and safe water distribution system. The public water system servicing the Maysville area is experiencing contamination from the disinfection process. This project will connect the Maysville public water system to Muskingum County's water distribution system.

■ Perrysville (Ashland County) \$1,000,000

H2Ohio funding will allow the village to improve the reliability of its water distribution system by regionalizing the Ohio Department of Natural Resources and Muskingum Watershed Conservancy District drinking water facilities. This regionalization means the Pleasant Hill Lake Park campground will now get water and sewer services from the village instead of its own aging systems.

■ Portage County \$1,000,000

A new wastewater collection system will be installed for the Chinn Allotment and other surrounding subdivisions to address water quality violations cited by Ohio EPA and Portage County Combined General Health District within the county.

■ Jackson County Water Company (Jackson & Vinton counties) \$2,000,000

In parts of Jackson County, some people still lack reliable access to safe drinking water. This regional project resolves the issue by replacing waterlines to increase output. It also allows for the operation of a new water storage tank in Vinton County.



"Just being able to go to that faucet and know that there is going to be something coming out, is very reassuring."

Terri Fetherolf, Director, Ohio Southeast Economic Development

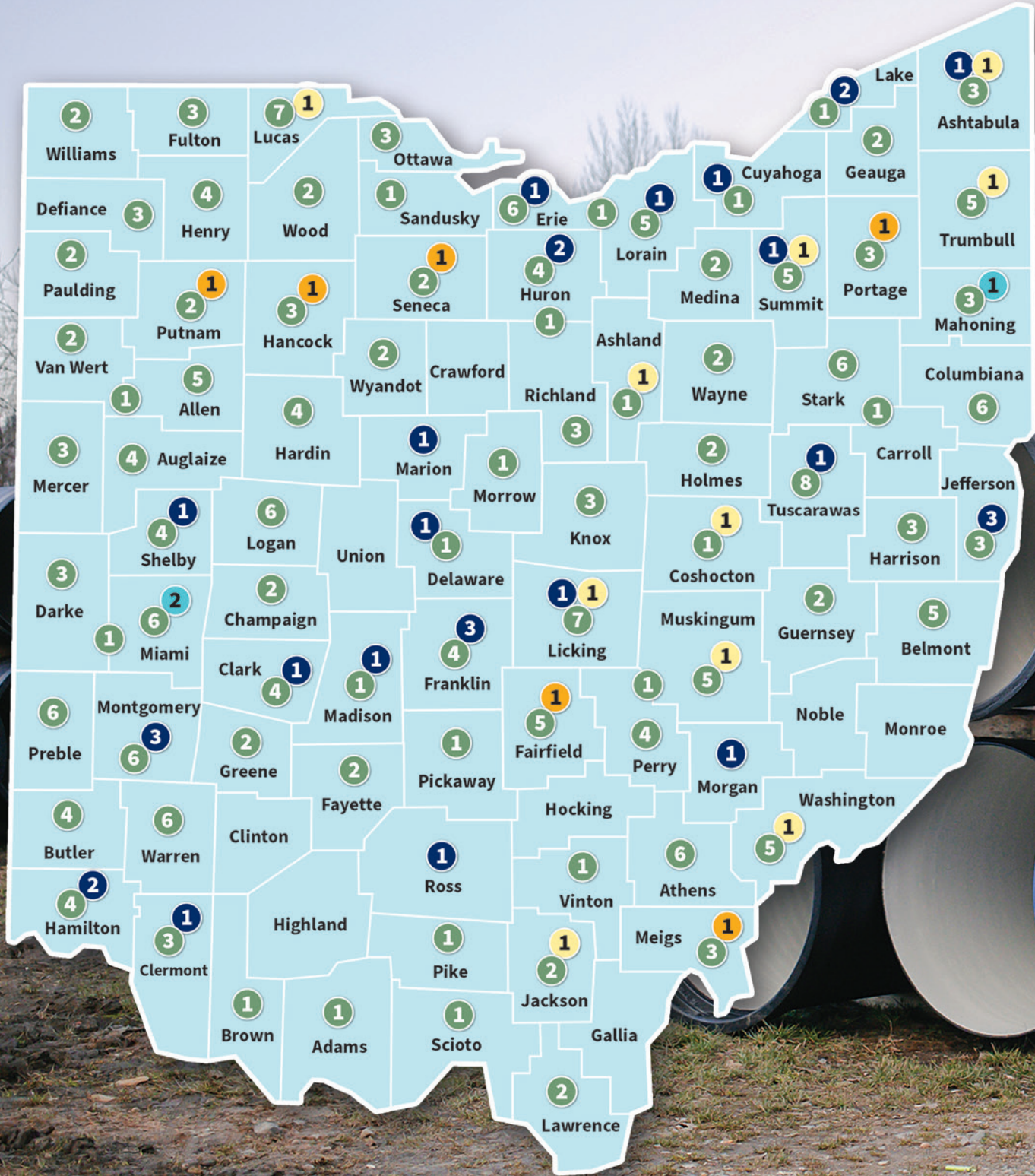
■ Toledo (Lucas County) \$2,500,000

Funding will be used to design a replacement 78" diameter raw water main to reduce the risk of water service failure for Toledo residents. This critical water main sends Lake Erie water from the Low Service Pumping Station to the Collins Park Water Treatment Plant, nine miles away.



EPA H2Ohio Statewide Projects - FY2024

In fiscal year 2024, Ohio EPA awarded more than 300 communities across the state a total of \$27.3 million in grants for water and wastewater infrastructure, equipment needed to maintain drinking water infrastructure, water reuse projects, salt reduction grants to reduce salt runoff from roadways and river improvement projects.



Did You Know?
About 31 percent of all household sewage treatment systems in Ohio are experiencing some degree of failure and are discharging untreated sewage that cause water quality issues. H2Ohio funding helps households repair and replace failing home sewage treatment systems.

Project Count		
<div></div>	Water Infrastructure	10
<div></div>	Wastewater Infrastructure	6
<div></div>	Drinking Water Distribution Grants	258
<div></div>	H2Ohio Rivers Dam Removals	3
<div></div>	H2Ohio Rivers Chloride Reduction	30

Ohio EPA FY 2024 Budget

- Infrastructure: **\$16.8 million**
- Water Reuse: **\$461,000**
- Drinking Water Equipment: **\$2.2 million**
- Salt Grants: **\$1.5 million**
- Rivers: **\$6.4 million**



Ohio Lake Erie Commission

From Executive Director Joy Mulinex

“To support the accountability and transparency of H2Ohio, the Lake Erie Commission worked to coordinate among agencies and convene joint conversations with the public throughout the year.”

Under this initiative, the Commission is primarily tasked with coordinating H2Ohio. The Commission convenes regular meetings among the agencies participating in H2Ohio as well as joint meetings with the public. The Commission supports communication between agencies and the academic community to understand the latest science and serves as a liaison with regional Great Lakes partners participating in nutrient management forums through the Great Lakes Water Quality Agreement.

The Ohio Lake Erie Commission is working to improve H2Ohio’s ability to estimate and forecast outcomes of its nutrient reduction programs. Previous work examined watershed-based outcomes of H2Ohio agricultural practices, and in this fiscal year, the Commission sought improvements on estimating relevant outcomes closer to the edge of field.

The Commission is partnering with ODNR to improve estimates of load reductions from constructed or enhanced wetlands and with ODA to leverage the MyFarms software to model and summarize field-based nutrient reductions that are more closely tied to actual practice implementation, including stacked practices and pre-existing conditions.



Program Successes

In the previous biennium, the Commission was funded under H2Ohio to test scenarios as a method to cross-check programmatic estimates for H2Ohio nutrient reductions. This model explored specific questions such as: where are the pre-existing practices and when are they used; what are the projections of conservation practice effectiveness in the Maumee River watershed when considering the type and number of installed and implemented practices and their distribution across the landscape; and what might be estimated outcomes for the Lake Erie western basin specific nutrient reductions.



Preliminary results from the watershed modeling team show that the selected H2Ohio conservation practices work as expected to reduce nutrients going to the WLEB. Some practices reduce phosphorus more than others, and water quality improvements will be accelerated with increased adoption of practices. The Ohio State University, University of Toledo, and their academic partners conducted this work in coordination with the Commission and state agencies.

The Commission is partnering with ODNR and Tetra Tech on a project to improve the calculations of phosphorous reduction for H2Ohio wetland grant and Water Quality Incentive Project (WQIP) projects. In coordination with the Lake Erie Aquatic Research Network (LEARN), Tetra Tech will update the methodology with new data or information that has since become available.

In addition to the collaboration with ODNR, the Commission is using H2Ohio funds to address program tracking to improve estimates of nutrient reductions. The Commission is working to establish a process to determine baseline figures of nutrients in the field prior to implementation of new BMPs. This phase 1 project will determine the feasibility of constructing a GIS-based tool to use ODA’s MyFarms platform and other models to calculate baseline values for load reduction estimates for H2Ohio.





With funding from the FY 24-25 budget, the Commission will continue efforts to build tools to collect better data for adaptive management and to provide better accountability for H2Ohio decisions. The Commission plans to work with agency partners to develop methodology to improve the effectiveness and performance measures for H2Ohio management practices with better benchmarking of traditional or pre-existing practices and placement.



Did You Know?
Approximately 11 million people get their drinking water from Lake Erie.



Budget

The Commission received \$132,000 in the budget for the year which is being used for projects that will improve H2Ohio's ability to estimate and forecast outcomes of its nutrient reduction programs. These dollars will leverage ODNR's investment in wetlands and ODA's investment in the MyFarms software package being used to administer the H2Ohio agricultural practice programs. The Commission appreciates the General Assembly's financial support for H2Ohio.



"The funding from the state has allowed our team to develop a high-resolution watershed model capable of answering questions about the potential benefits of conservation practices at both field and watershed scales. We aim to make this tool useful in predicting nutrient runoff from the Western Lake Erie basin. This project has provided the opportunity to collaborate with state, federal agencies, non-profits, and other organizations in Ohio who are working to preserve Lake Erie for years to come."

Asmita Murumkar, PhD Assistant Professor - Ecosystems Services Field Specialist, The Ohio State University

H2Ohio Conclusions

As H2Ohio continues to track nutrient reduction progress with modeling, monitoring, and edge-of-field data, a strong measurement of success is the estimated source reduction of phosphorus.



With H2Ohio's continued effort and investment, calculations show that phosphorus runoff continues to decrease year after year. ODA estimates continued phosphorus reductions through enrolled and completed best management practices (BMP) on farm fields.

With the current enrollment of 1.85 million acres in the WLEB, H2Ohio producers have the potential to reduce phosphorus up to 420,000 pounds. With statewide enrollment, ODA looks to reduce sediment and nutrient loads not only in the WLEB, but to all of Ohio’s waterways.

H2Ohio Summary - Year 5

Agency	Appropriation	Expended	Encumbered	Remaining at year-end
Agriculture	\$60,659,574	\$3,061,987.95	\$57,597,586.05	\$0
Environmental Protection	\$27,538,157	\$22,350,766.59	\$5,186,248.85	\$1,142
Natural Resources	\$50,915,863	\$10,468,487.01	\$40,446,860.80	\$515
Lake Erie Commission	\$132,000	\$0	\$98,000	\$34,000
Total	\$ 139,245,594	\$35,881,242	\$103,328,696	\$35,657

Cash Balance - 07/02/24 \$297,610,692.19
Years 1 through 5 Encumbered \$160,474,054.18
Unencumbered cash available \$137,136,638

ODNR is committed to making increasingly accurate measurements of the phosphorus reduction that is achieved through wetland restoration. Based on an early analysis of data collected by the Lake Erie and Aquatic Research Network (LEARN), ODNR estimates state-wide wetland restoration projects constructed or in the construction process have an estimated annual phosphorus source reduction ranging between 55,295 and 137,335 pounds. That includes between 13,000 and 31,881 pounds for projects that began in FY24. All wetland projects in the WLEB have a total estimated phosphorus source reduction ranging from 29,624 to 68,671 pounds.

Ohio EPA’s investments to improve large-scale wastewater facilities, home sewage treatment systems, and other infrastructure projects have reduced phosphorus runoff by an estimated 2,000 pounds in the WLEB and an estimated 6,500 pounds statewide.



All H2Ohio practices and projects combined are making an impact on phosphorus load reduction from the source, indicating H2Ohio is progressing on the right course for long-term results.

In the coming year, H2Ohio will remain focused on the long-term plan of improving water quality in Lake Erie and in Ohio’s large rivers.



H2Ohio Accomplishments for Fiscal Year

2024



Department of Agriculture

Department of Natural Resources

Environmental Protection Agency

Lake Erie Commission



MIKE DEWINE
GOVERNOR OF OHIO

www.Governor.Ohio.gov