

# 2021 Water Quality Report

Launched by Gov. Mike DeWine in late 2019, the H2Ohio program is a first-of-its-kind comprehensive water quality initiative that strategically invests in targeted, long-term solutions to ensure safe and clean water across the state of Ohio.

Farmers have been eager to learn about the funding available to agriculture to help mitigate water quality issues, including harmful algal blooms on Lake Erie caused by phosphorus runoff from farm fertilizer.

By the end of February 2020, more than 2,000 farmers in the 14 counties that make up the Western Lake Erie Basin in northwest Ohio had attended informational meetings and were excited about participating in H2Ohio. Then the COVID-19 pandemic came and everything in the state was put on the back burner.



## H2Ohio continues despite the pandemic

After a lot of anxiety about whether the H2Ohio water quality initiative would be delayed or cut entirely due to the pandemic, \$50 million to fund the first year of H2Ohio was allocated and money was made available to farmers already en-



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**Kris Swartz, Wood County farmer and chair of the Ohio Agriculture Conservation Initiative (OACI)**

rolled in H2Ohio programs in May 2020.

By mid-October, the Ohio Department of Agriculture requested funding to continue the H2Ohio water quality initiative through 2021. The \$28 million ask was granted by the State of Ohio Controlling Board.

“This shows a real commitment to improve water quality, even during these tumultuous times,” said Kris Swartz, Wood County farmer and chair of the Ohio Agriculture Conservation Initiative (OACI). OACI is a collaboration of Ohio agricultural organizations, including Farm Bureau, along with conservation, academia and environmental groups.

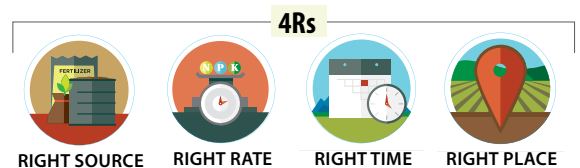
## Voluntary nutrient management plans

Voluntary nutrient management plans are a major part of qualifying for H2Ohio funding, and they can involve a lot of detail and time. Swartz said soil tests alone, part of creating a VNMP, help farmers learn new things about their farms.

In 2020, the Ohio Department of Agriculture and the Ohio AgriBusiness Association joined forces to streamline the approval process of voluntary nutrient management plans for farmers participating in the state’s H2Ohio water quality initiative to reduce phosphorus runoff into Lake Erie.

With this new partnership, OABA and Ohio’s Soil and Water Conservation Districts will approve VNMPs that have been developed as part of the 4R Nutrient Stewardship Certification Program, a proactive, responsible commitment aimed at the long-term improvement of water quality.

This voluntary, annual third-party auditor verified program will provide a science-based framework for plant nutrition management and sustained crop production, while considering a specific farm’s individual needs. The certification program requires participants to adopt proven best practices through the 4Rs, which refers to using the right source of nutrients at the right rate and right time in the right place. Thousands of farmers are already established with the 4R program through their certified ag retailer.



## OACI enrollment

Beyond establishing a VNMP, another requirement of H2Ohio is enrolling in the Ohio Agriculture Conservation Initiative Farmer Certification Program, which will help farmers take conservation programs to the next level. Farmers who have enrolled in H2Ohio must also enroll in the certification program.

OACI’s Farmer Certification Program will not only help improve soil health, but also will improve yield, cost-efficiency and deliver cost savings for farmers through practical, workable soil health solutions. The no-cost program is administered by the Ohio Federation of Soil and Water Conservation Districts and is available to farmers throughout Ohio.



More than 2,000 farmers from northwest Ohio attended informational meetings in early 2020.



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Dorothy Pelanda, Ohio Department of Agriculture director

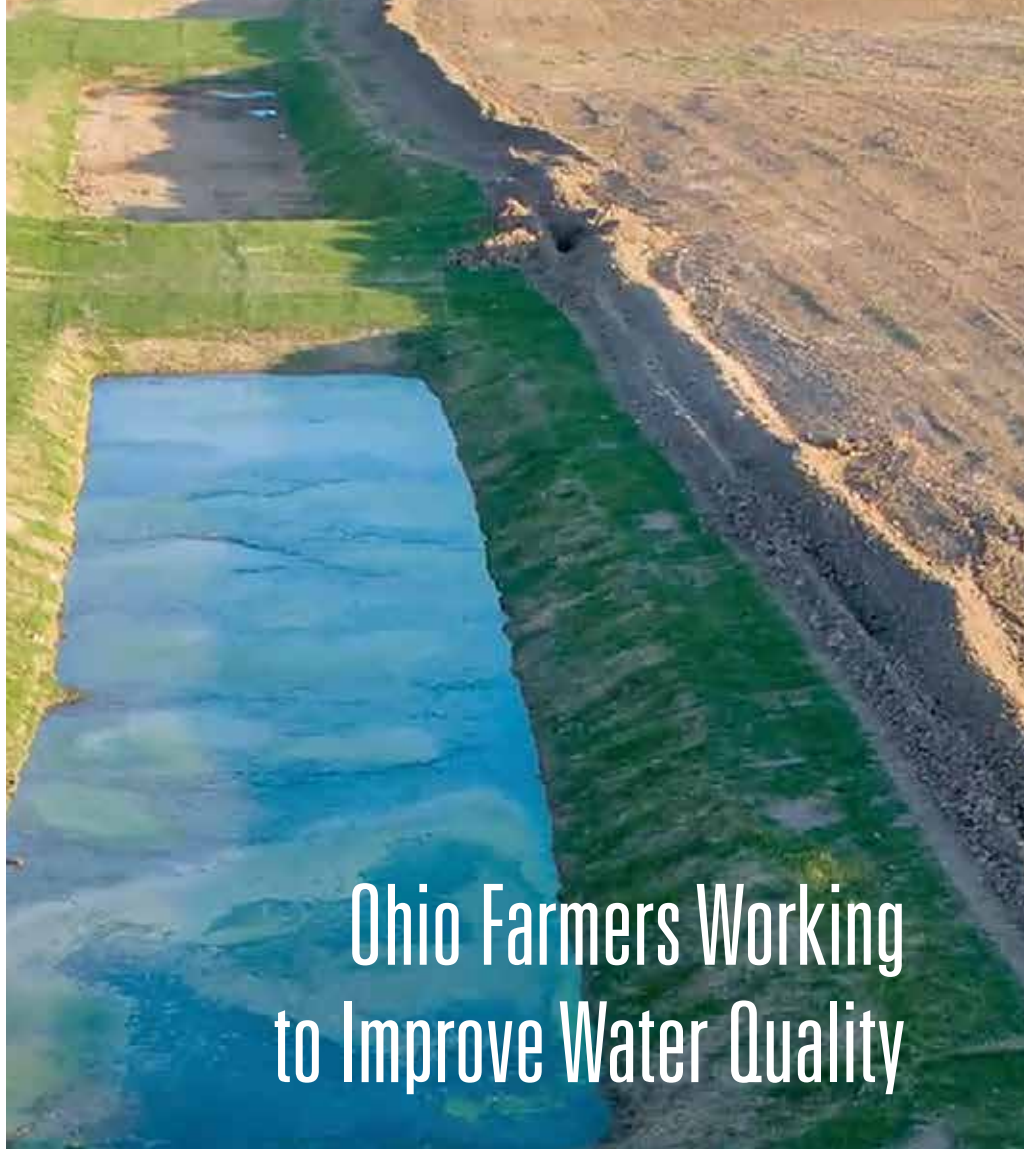
## The Future of H2Ohio

The first H2Ohio payouts began taking place in October 2020 and continued through spring, based upon verification that producers were putting conservation measures in place. The Ohio Department of Agriculture also has begun engaging producers in a program that enables them to sign an acknowledgement that they will be participating in these same practices in the ensuing second and third year of the program.

“In 2021, we intend to expand the program to the additional 10 counties in the Lake Erie region by beginning with a basic nutrient management plan,” said Ohio Department of Agriculture Director Dorothy Pelanda. “We think the legislature is on board with us and very committed to the H2Ohio program, and we will continue to demonstrate our passion and commitment in moving forward with this program with them.”

As far as the future of H2Ohio, there is a lot of optimism. Additional funding has been proposed in the 2022-2023 biennial state budget for H2Ohio in hopes of expanding opportunities to even more farmers in the Western Lake Erie Basin to become involved in water quality programs through ODA, Ohio EPA and the Ohio Department of Natural Resources.

Pelanda emphasized that the long-term plan is to expand H2Ohio statewide, carefully and thoughtfully, with funding that is “absolutely necessary” to expand the program. 



# Ohio Farmers Working to Improve Water Quality

## About the Blanchard River Demonstration Farms Network

The demonstration farms project is a 10-year, \$2 million project, initiated in 2015 through a unique partnership

Blanchard River  
**DEMONSTRATION**  
 **FARMS NETWORK**

between the U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS) and Ohio Farm Bureau and is a Great Lakes Restoration Initiative project designed to showcase and demonstrate leading-edge conservation practices to improve water quality in Ohio.

Three demonstration farms in Hardin and Hancock counties were selected to reflect the makeup of agriculture in the Western Lake Erie Basin concerning crops and livestock, farm sizes, soil types, topography and current farming practices. The three farms are within the Blanchard River Watershed, which has been identified as a major source of sediment and nutrient loading into Lake Erie.

## Conservation practices in action

The three farms showcase both traditional and new techniques for reducing agricultural nutrient runoff and for other conservation measures. Staler Family Farms in McComb, Ohio; Kurt Farms in Dunkirk, Ohio; and Kellogg Farms in Forest, Ohio each serve as a real-world teaching laboratory with scientists conducting research, such as edge-of-field monitoring, to better understand nutrient runoff and how to contain it.

Since 2015, the demonstration farms have implemented more than 18 different conservation practices over hundreds of row crop acres. These farms are dedicated to finding the right combination of management practices that individual farmers can implement on their own farms to know with confidence that they are meeting water quality goals.

### Conservation Practices Implemented:

|                                      |                                 |
|--------------------------------------|---------------------------------|
| Variable rate manure application     | Zone soil testing               |
| Cover crops                          | No-till                         |
| Drainage water management            | Edge-of-field monitoring        |
| Animal mortality composting facility | Subsurface nutrient application |
| Wetland with pollinator habitat      | Two-stage ditch                 |
| Phosphorus removal beds              | Strip tillage                   |
| Home septic system replacement       | Water well decommissioning      |
| Filter strips                        | Grassed waterway                |
| Blind inlets                         | Grid soil testing               |



Variable rate manure application



No-till



Cover crops



Edge-of-field monitoring



Animal mortality composting facility



Two-stage ditch



Phosphorus removal beds



Grassed waterway

## Innovative approaches

As part of the project, the Ohio demo farms team has expanded its reach to additional demonstration sites across the state of Ohio through engaging in partnerships with various water quality research groups. These additional research sites are primarily testing new innovative conservation practices, such as saturated buffers and subsurface nutrient placement.

In 2020, the Ohio demo farms project supported a three-year saturated buffer research site within the Grand Lake St. Mary's (GLSM) watershed, in conjunction with Wright State University's Lake Campus. With over a decade of experience in water quality monitoring, researchers at the Lake Campus have been extensively involved in conservation and water quality efforts, making this partnership a perfect fit to determine whether new conservation practices like this one are effective in reducing nutrient runoff.

In addition to the saturated buffer research site, the Ohio demo farms team has also secured a spot as one of six water quality groups across the Midwest to participate in the Conservation Innovation Grant (CIG) in collaboration with Wisconsin's Water Resources Monitoring Group that seeks to understand the impact of soil health on water quality. Through this alternative water quality monitoring project, the team is working with George Family Farms in Arcadia, Ohio to test the effectiveness of subsurface nutrient placement in a no-till setting. This project will compare, both agronomically and economically, the differences between subsurface nutrient placement versus broadcasting nutrients on top of the soil surface.

Over the next five years, the Ohio demo farms project will focus on farmer-to-farmer engagement through small group and farmer-led meetings, continue to research and develop the economics of conservation practices and pair it with water quality data to determine the conservation practices' effectiveness, and serve as a resource for the public to share the progress being made toward addressing Ohio's water quality concerns.

## Explore the Demo Farm sites & conservation practices

For more information and resources, including how farmers can implement conservation practices to help meet their own land management and water quality goals, please visit the Ohio Demo Farms' newly updated website at [blancharddemofarms.org](http://blancharddemofarms.org), or follow Ohio Demo Farms on Facebook, Twitter or YouTube. 