OFBF Water Quality Status Report

Five years ago, Ohio Farm Bureau made an unprecedented announcement — it was investing $1 million of member funds to develop a comprehensive Water Quality Action Plan. The goal was to show farmers were committed to doing their part to clean up and preserve the state's waterways and be part of the effort to find a solution to help protect water resources. So far, Ohio Farm Bureau has committed $2.63 million of member funds to this multipronged approach that has required a high degree of cooperation and collaboration among farmers, universities and federal, state and local agencies. This water quality report is the fifth in a series of reports Ohio Farm Bureau has produced to show the strides farmers have made in improving and protecting one of the state's most valuable resources and that clean water and productive farming can coexist.

> "Ohio's farmers are focused on two important goals — growing affordable food for everyone's families and protecting the water of Ohio and Lake Erie."
>
> **~ Adam Sharp, Ohio Farm Bureau executive vice president**

Blanchard River DEMONSTRATION FARMS NETWORK

Innovation:

The Blanchard River Demonstration Farms Network is the signature project of the Water Quality Action Plan. The five-year, $1 million project is a unique partnership between Ohio Farm Bureau and USDA's Natural Resources Conservation Service. Three farms in northwestern Ohio are serving as real-world teaching laboratories by demonstrating how new and traditional conservation practices can improve water quality and which ones work best for each individual farm.

Research:

Ohio Farm Bureau is helping fund on-farm research being done by researchers at Ohio State University, USDA's Agricultural Research Service and other groups. For example, edge-of-field testing equipment was installed at two of the Blanchard River Demonstration Farms as well as 40 fields throughout Ohio. Scientists have been capturing water samples during rain events and testing the amount of nutrients in the samples. This research is helping researchers determine how applying different conservation methods to fields affects the amount of nutrients coming off farm fields.

Regulation:

While the preference is to have voluntary conservation measures, farmers and Farm Bureau have recognized the need to create a stronger regulatory framework around nutrient use. Farm Bureau supports Gov. Mike DeWine's current $900 million H2Ohio initiative and supported a law (Senate Bill 150) creating a fertilizer application certification program and a law (Senate Bill 1) that restricts manure application within the Western Lake Erie Basin to times when weather and soil conditions are safe. Ohio Farm Bureau has worked to increase the number of farmers with Nutrient Management Plans, which exceed state legal requirements.

Education & Outreach:
More than 1,500 people have visited the Blanchard River Demonstration Farms in Hardin and Hancock counties to learn about both new and traditional conservation methods that help improve water and and nutrient conservation. Thousands more have learned about these science-driven efforts through Ohio Farm Bureau's numerous communications pieces including Our Ohio magazine, Buckeye Farm News, Town Hall Ohio radio shows, Field Day with Jordan Hoewischer podcasts and videos of conservation practices found at blancharddemofarms.org.

FIELD DAY
WITH JORDAN HOEWISCHER

Water Quality By the Numbers

Member investment:
$2.63 million of member funds have helped farmers improve and protect water quality for all Ohioans

40% phosphorus reduction by 2025: Goal of the Great Lakes Water Quality Agreement in reducing the phosphorus load into Lake Erie.

Getting results: Between 2006 and 2012, farmers have voluntarily reduced phosphorus applications in the Western Lake Erie Basin by more than 13 million pounds, according to a NRCS study. A federal report shows farmers' conservation practices reduce sediment losses from fields by about 80% and reduce the amount of sediment going into Lake Erie by about 40%.

4R certification for applicators:
More than 3.1 million acres and about 7,100 farm clients are serviced by fertilizer applicators who have earned the certification.

4Rs

Blanchard River Demonstration Farms Network: Three farms, five years, $1 million investment, more than 1,500 tour participants.

National recognition: Ohio Farm Bureau has twice won American Farm Bureau's prestigious New Horizon Award for its water quality efforts.

Community investment: Ohio Farm Bureau and partner organizations have invested more than $1 million in county water quality projects. From 2016-2018, 32 county Farm Bureaus have partnered with 130 groups on 49 local programs.

ONMRK App:
Developed by the Knox County Farm Bureau and Knox County SWCD, this is the state's only weather forecast and fertilizer and manure application record keeping app. The free app has been downloaded more than 2,000 times.

Blanchard River Demonstration Farms

Blanchard River Demonstration Farms Network farmers Chris Kurt, left, and Duane Stateler were honored for their conservation practice efforts by Congresswoman Marcy Kaptur, center, in October. She visited Stateler Family Farms to learn more about the edge-of-field monitoring and water conservation practices being used there.

The cornerstone project of Ohio Farm Bureau's $2.63 million Water Quality Action Plan is now halfway done. The Blanchard River Demonstration Farms Network is a unique five-year partnership between Ohio Farm Bureau and USDA's Natural Resources Conservation Service.

Three farms in Hardin and Hancock counties have opened their fields up to the public to showcase different types of leading-edge conservation practices that can improve water quality. These demonstration farms in the Western Lake Erie Basin are helping farmers find the right combination of practices that reduce nutrient and sediment loss while minimally affecting their bottom line. The three farms have been sharing information about the cost and pros and cons of their conservation practices while researchers have been documenting the reduction in nutrient loss.

Halfway through the $1 million project, experts have identified the three best conservation management practices that are the most effective in helping improve water quality:

- Following the 4R approach (applying fertilizer or manure from the right source and at the right rate, right time and right place) by using methods such as subsurface placement of nutrients, soil testing and variable rate manure/fertilizer application
- Developing a water management plan that includes practices like phosphorus removal beds, two-stage ditches, blind inlets, drainage water management and wetlands
- Reducing soil erosion through cover crops, filter strips, grassed waterways, no-till and other practices.

Conservation Practices:

- Soil Testing
- Variable Rate Technology
- Variable Rate Fertilizer Application
- Cover Crops
- Drainage Water Management Structures
- Animal Mortality Composting Facility
- Edge-of-Field Monitoring
- Wetland with Pollinator Habitat
- Home Septic System Replacement
- Subsurface Nutrient Placement
- Water Well Removal
- Phosphorus Removal Beds
- Blind Inlet
- Filter Strips
- Two-stage Ditch
- Grassed Waterway
- No-Till

> "This is probably the best thing in 33 years of teaching that I've seen for kids."

~ Marysville High School teacher Bill Keck, whose students visited the demonstration farms.

Video, pictures and graphics of the different types of conservation practices can be found at blancharddemofarms.org

Meet Our Farmers

Stateler Family Farms

Stateler Family Farms is located in McComb in Hancock County and owned and operated by Duane and Anthony Stateler. The Statelers farm corn, soybeans and wheat on approximately 600 acres and also operate a 7,200-head wean to finish swine operation. The Statelers have committed 243 acres to the demo farms project and love sharing their story with visitors while they get up close with the pigs via their specialized viewing room.

Kurt Farms

Chris Kurt owns and operates Kurt Farms, a 470-acre corn and soybean operation in Dunkirk in Hardin County. Kurt has committed 168 acres to the demonstration farms' project and is always eager to try new conservation practices on his farm. Previously, he worked with The Nature Conservancy and Hardin Soil and Water Conservation District to construct a two-stage ditch on the demonstration farm site.

Kellogg Farms

Bill and Shane Kellogg own and operate Kellogg Farms in Forest in Hardin County. The farm consists of 5,000 acres of corn and soybeans. The Kelloggs have committed 305 acres to the demonstration farms project and showcase their subsurface nutrient placement toolbar, which allows for precise placement of fertilizer while putting it under the soil, providing an efficient method for ensuring nutrients stay in place.

PARTNERSHIPS

Strong partnerships with key water quality stakeholders has been an important part of the Water Quality Action Plan. For example, the Blanchard River Demonstration Farms has two dozen supporting partners that helped get this critical research project off the ground. And Ohio Farm Bureau's Healthy Water Ohio initiative gathered input from more than 200 individuals and organizations with diversified interests in Ohio's water to create a long-term water strategy report. Gov. Mike DeWine's H2Ohio initiative closely resembles an idea documented in Healthy Water Ohio from Farm Bureau and The Nature Conservancy for a water trust. Finally, a new and unique collaboration of stakeholders representing the agriculture, conservation, environmental and research communities have joined forces to develop and eventually deploy a statewide water quality initiative. This unprecedented partnership, called The Agriculture Conservation Working Group, includes Ohio Farm Bureau.

WATER QUALITY GRANTS

Over the past four years, Ohio Farm Bureau and partnering organizations have invested more than $1 million in county Farm Bureau-led projects to help improve water quality in local communities. In all, Ohio Farm Bureau has awarded nearly $450,000 to county Farm Bureaus who in turn garnered about $700,000 in matching funds from outside groups that include businesses, universities, soil and water conservation districts, federal agencies and local park districts. Thirty-nine county Farm Bureaus have partnered with 130 groups on 49 programs.

2018 PROJECT HIGHLIGHTS:

County Farm Bureaus receiving funding and their projects:

- **Adams and Brown counties:** The purchase of a survey grade GPS device for the two counties allowed local Soil & Water Conservation Districts to work through a backlog of conservation projects.
- **Auglaize County:** Educational events taught the public about water quality, nutrient and manure management, best management practices and the importance of cover crops.
- **Delaware County:** A Drive-It-Yourself Tour invited the public to farms and businesses to see different soil, water and other stewardship practices in place throughout the county.
- **Gallia County:** Gallia County Farm Bureau and Gallia County SWCD purchased a no-till drill and offered it to area farmers to help them reduce soil erosion and nutrient runoff.
- **Mercer County:** Researchers are using two different methods to study the differences in soil health between a long-term no-till system and a minimum tillage system. Data results will be shared with the public.
- **Wayne County:** Funding supported a pre-plant nutrient trial that compared the effectiveness of injected manure (a practice that protects water quality) to commercial starter fertilizer.