

Testimony before  
The Subcommittee on Conservation and Forestry  
House Committee on Agriculture

Regarding “Focus on the Farm Economy: Impacts of Environmental Regulations  
and Voluntary Conservation Solutions”

Submitted by  
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Chairman Thompson, Ranking Member Grisham and members of the subcommittee, I appreciate the opportunity to come before you today to discuss the important issue of voluntary conservation practices in Ohio. My name is Terry McClure and along with my family, I operate McClure Farms – a corn, soybean, wheat and swine and cattle operation – in Paulding County, in Northwest Ohio. Our farm and our residence is in the Western Lake Erie Basin (WLEB) watershed. We are a fifth generation farm.

I am proud of the measures that my fellow farmers have been taking to address nutrient run-off and I appreciate the opportunity to share with you the studies and practices that have been taking place on my farm. From what I share with you today, I hope that one key component you take away is that Ohio is unique and successful because our conservation efforts have been an amazing demonstration of all sectors and entities working together as one for the collective good. The measures taken have been no less than an “all hands on deck” approach.

So, while I could provide you with a history of how farmers have responded to environmental challenges, starting with the dust bowl of the 1930s or soil erosion in the 80s and 90s, instead, I will begin with a letter written in 2012 that was signed onto by 20 agricultural groups that was a commitment to lawmakers and the public that agriculture would do its part to create healthy water in Ohio.

In a demonstration of unprecedented collaboration, Ohio’s traditional and organic commodity organizations, the Federation of Soil & Water Conservation Districts, and The Ohio State University sent a joint letter to all of our organizations’ members stating that farmers must proactively solve the issue of nutrient run-off. The letter launched the agriculture community’s immediate “4R” effort while we supported and sought out further research for long-term solutions. Education, training and advice began in earnest on “4R” nutrient stewardship – using the right fertilizer source, at the right time, at the right rate and with the right placement.

Farmers began implementing these voluntary 4R measures on their farms as a win-win proposition of reducing fertilizer costs while continuing to be good stewards of the environment.

Soon thereafter was the launch of Healthy Water Ohio. An initiative led by the agricultural community that included a voluntary and diverse partnership of stakeholders charged with developing a 20- to 30-year water resource management strategy for Ohio. I had the privilege of serving on the steering committee of this partnership along with representatives from business and industry, conservation and environment, finance, food and farming, lawn and horticulture, municipal water systems, public health, recreation and tourism and research, education and outreach.

The group conducted multiple information gathering sessions throughout the state and conducted meetings with water quality experts and public officials. The final report from Healthy Water Ohio provides a roadmap of innovative research, policy, education and infrastructure proposals along with an implementation schedule. Voluntary implementation of components of the report has begun including the pursuit of a Water Trust that can fund a variety of water-related needs such as research, monitoring and improvement of gray and green infrastructure.

The agricultural community has committed to address water quality through numerous combined and individual measures. Beyond the study on my farm, there is extensive research being conducted both in the lab and in the field. Farmers have invested tens of millions of dollars of their own money in establishing conservation practices on their farms. Between 2006 and 2012, they have voluntarily reduced phosphorous applications in the Western Lake Erie Basin by more than 13 million pounds.\* As farmers are stepping up to implement conservation practices now, they are committed to finding additional solutions in the future.

Ohio Farm Bureau, Ohio Corn and Wheat Growers Association, Ohio Soybean Association, Ohio Agribusiness Association and others joined together with United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) to fund a project of over \$2 million to conduct edge of field research throughout the state to better learn how to prevent nutrients from escaping from fields. I am proud to say that edge-of-field water quality testing research, on both surface and subsurface drainage, has been conducted on my farm for three years. The combined efforts of Ohio's agriculture community with the Ohio State University and USDA researchers now have important baseline data, measures, practices and results. The information being collected is invaluable and will be used to modify Ohio's Phosphorus Risk Index as well as help identify good management practices.

While the findings are still being finalized, preliminary results about how phosphorous leaves the field include:

- Controlling erosion continues to be important. Particulate bound phosphorus makes up over 73% of the total phosphorus in surface runoff and over 52% of the total phosphorus in tile flow.
- There is a strong relationship between soil test phosphorus levels and the amount of particulate bound phosphorus transported off site in surface runoff.

- Fertilizer application is a high risk practice – timing and placement is important.
- Incorporation of fertilizer during or after application can result in more than a 90% reduction in phosphorus runoff.

Building upon the foundation of these findings will be a critical component to our continued success in reducing run-off. To that end, Ohio Farm Bureau is collaborating with USDA National Resources Conservation Service along with other partners in creating only the second in the nation Demonstration Farms project. This project is located in the heart of the WLEB along the Blanchard River. The farm organizations involved with this endeavor have voluntarily taken on this project as have the three farmers – two row crop and one swine – whose acreage will be used. Here with me today is Anthony Stateler from Stateler Family Farms who is one of the farm owner/operators. We appreciate that Anthony's family is allowing the use of their 243 acres of corn, soybeans, and wheat and 7,200 head wean to finish swine operation to further study conservation practices.

These demonstration farms will serve as models for new innovations that reduce and prevent agricultural runoff and those discoveries will be shared with farmers across the watershed and the region, land management agencies, policy makers, the media and the public. It is my hope that some of the conservation measures deemed successful due to the research on my farm will be put into practice on these demonstration farms.

In addition to the Edge of Field Study, farmers are also committed to coordinating water research and programming through our land grant's "Field to Faucet" initiative as well as through increased educational opportunities. Ohio Farm Bureau, Ohio Soybean Council and other agricultural organizations have funded three new OSU staff to work with farmers to develop Nutrient Management Plans in the WLEB and one new staff to work with retailer 4R certification.

I would be remiss if I did not note that advisors to farmers are also contributing significantly to conservation efforts. Over 1.5 million acres in the WLEB are now under guidance of Agriculture Retailers and Nutrient Service Providers that have voluntarily earned certification from the 4R Nutrient Stewardship Certification Program.

Ohio's agriculture and conservation organizations also took an active role in supporting the Farm Bill's Regional Conservation Partnership Program and committed resources to this public-private partnership. Farmers have been eager to participate in this voluntary program that allows them to implement on-ground conservation practices for sediment and nutrient management. The Environmental Quality Incentive Program is the perfect marriage of allowing farmers to keep land in production while practicing effective conservation programs. The projects being funded with RCPP dollars are making a significant difference with over \$17.5 million committed to the Great Lakes Region. We appreciate that Congress, and this committee specifically, saw the importance of these programs. In Ohio in 2015 alone, there were 81 contracts signed totaling over \$3.5 million. These dollars were used for critical on-farm needs including animal waste systems and storages, lot covers and roofs, controlled drainage structures, cover crop contracts,

drainage water management, nutrient management plans, waterways, crop rotations and multi-year cover crops.

Ohio farmers and our membership organizations have been diligent in pursuing unique grassroots opportunities for connecting with all Ohioans and making them aware of our efforts to protect Ohio's waters. Through educational displays at fairs, radio and print outlets, in our classrooms and local water grant projects, we have spread the word that farmers want to be part of the solution. Farmers recognize their role and are working hard to be proactive for water quality. We appreciate the recognition that we are not the only cause of phosphorus loading. We are also committed to work with those who are addressing municipal water and sewer systems, septic systems, and urban run-off as well as other contributors.

In addition to the voluntary measures being taken by farmers across Ohio, two important pieces of legislation have also been passed and are being implemented. Ohio Senate Bill 150 was fully supported by the agricultural community and requires farmers to obtain a commercial fertilizer certification. The materials in the course provide the latest information on the 4Rs I discussed earlier and provide an understanding of how a nutrient management plan can be used on the farm. Ohio was the first state in the nation to require certification for commercial fertilizer application. Farmers have worked hard to be compliant and though certification was not required until three years after passage, farmers immediately began filling classrooms and to date over 10,000 farmers have already received their certification.

The second bill, Senate Bill 1, places restrictions in the WLEB on the application of manure and commercial fertilizer on frozen or snow covered ground or under certain weather conditions. This bill was also supported by agriculture because it had a scientific foundation and was based on conservation methods that had been proven effective in reducing run-off. While farmers overwhelmingly prefer voluntary measures, they are not adverse to policies that have been fully researched and allow for input from scientific experts as well as farmers that are working the ground every day.

Farmers also have begun to think creatively on how to best comply with the nutrient application laws with the Knox County Farm Bureau and Soil and Water Conservation District teaming together to create ONMRK (Ohio Nutrient Management Record Keeping), a record keeping smartphone and tablet app that allows farmers to easily record their manure and nutrient applications while they are in the field. The app is a great tool for farmers to comply with both record keeping requirements and weather and soil condition guidelines on when nutrients can be applied in the WLEB.

With nearly 1000 downloads and nearly 800 nutrient applications logged in the first several months of use, ONMRK is off to a great start in providing a useful tool for not only compliance with laws but improving farming's impact on water quality. ONMRK is currently an Ohio based app with plans to expand nationally by the end of 2016. While ONMRK is one great example, there have also been multiple county Farm Bureau grants leading to local projects such as much needed farm equipment purchases, soil analysis courses and demonstrations, watershed education, rain garden installations and the Ohio Manure Science Review.

With any issue, funding is always a concern. As such, Ohio agriculture has supported state funding that continues water quality research and conservation efforts by lobbying for and obtaining budget increases for OARDC, OSU Extension and the Sea Grant program. Agriculture also won support for additional dollars for the Healthy Lake Erie Program and for dollars to be set aside for Soil and Water Conservation Districts in the WLEB, specifically to provide technical assistance to farmers for SB 1 compliance. Ohio agriculture also worked with lawmakers and Ohio's State Treasurer, Josh Mandel, to establish a loan interest rate reduction program to serve farmers making capital improvements needed to comply with SB 1. Our efforts also prevented a reduction in funding for the Heidelberg University Water Quality Lab.

For many Ohioans, the Toledo water crisis brought our state's water quality issues home. In its aftermath, Ohio Farm Bureau and the Ohio Soybean Council organized and sponsored a special "Food Dialogues" through a grant from the US Farmers and Ranchers Alliance. The Food Dialogues was a media and community event that brought together farmers, environmentalists, researchers and officials in charge of Toledo's drinking water system to focus on water quality.

Our state's farmers were interested in learning more about the algae blooms in Lake Erie and so Ohio Farm Bureau organized a "Farmer Road Trip" taking 100 farmers from across the state to Lake Erie. Once there, they headed out in research boats to pull water samples and see first hand the challenges facing our great lake.

While the results of the edge of field study conducted on my farm are beginning to show us solutions, we also know that the measures farmers are taking to reduce run-off voluntarily are also showing success. USDA-NRCS recently released (end of March 2016) a Special Study Report titled "Effects of Conservation Practice Adoption on Cultivated Cropland Acres in Western Lake Erie Basin, 2003-06 and 2012". This study was designed to quantify the environmental benefits that farmers and conservation programs in the WLEB provide to society. The report, based on farmer survey data in the Basin, shows that voluntary conservation is making significant headway in reducing nutrient and sediment loss from farms. Even so, there is opportunity to improve conservation management across the basin and no single conservation solution will meet the needs of each field and farm. Let me emphasize that there are no silver bullets or no single conservation practice or solution that will meet the needs of each field or farm.

Key findings of the survey on conservation practices in the WLEB include:

- 99% of the cropland acres are managed with at least one conservation practice
- 96% of the cropland acres are managed to prevent average annual sediment losses of more than 2 tons per acre
- 70% of the nitrogen applied is removed by crop harvest
- 58% of the cropland acres are managed with phosphorus application rates at or below crop removal rates
- The cost of conservation practices in place represents a significant annual investment. Regardless of funding source (federal, state, local or private) the annual regional investment in conservation is \$277 million or \$56.98 per acre.

- No single conservation solution will meet the needs of each field and farm. WLEB croplands are diverse in terms of soils, farm fields, farming operations, and management, which creates differences in conservation needs and potential solutions. Field-scale conservation planning and conservation systems are needed to accommodate different treatment needs within and across farm fields, while maintaining productivity.
- Additional progress in nutrient and erosion control will depend on advanced precision technologies directed to unique zones or soils within field boundaries.

As a farmer in the Western Lake Erie Basin, I know these important findings reflect the sentiment of those that work every day to make sure that our land and our water are the healthiest they can be. I have been a farmer my entire life and I have seen many changes in the way we grow our country's food. We have become more efficient, increasing yields while decreasing inputs. We have taken extensive measures to become aware of soil health and we take great pride in being good stewards of both Ohio's land and water. We are committed to implementing voluntary measures that are science-based and that will yield results. No-till farming is a widely adopted practice across Ohio. The same is true of growing cover crops, creating filter strips and windbreaks and conducting variable rate application of nutrients. Farmers stand ready and willing to implement voluntary measures that address water quality and food production simultaneously.

I appreciate the opportunity to address you today and provide just a brief overview of the efforts Ohio's farmers are making to ensure a long future of clean water in our state. If you want to learn more about our numerous efforts go to [www.farmersforwater.com](http://www.farmersforwater.com).

\* USDA-NRCS Special Study Report titled "Effects of Conservation Practice Adoption on Cultivated Cropland Acres in Western Lake Erie Basin, 2003-06 and 2012". (March 2016)