

**Speaker's Taskforce on Water Quality**  
**April 3, 2019**  
**Testimony on Water Quality Initiatives by Farmers**

Good morning, Chairman Novak and members of the task force.

Thank you for the opportunity to testify today. My name is Jim Holte and I am a grain farmer from Elk Mound and President of the Wisconsin Farm Bureau Federation. I am here to talk to you today about Wisconsin farmers' longstanding commitment to water quality. Throughout my testimony this morning, I plan to cover several main themes about farming and water quality. Those include:

- Farmers are stewards of the land and are continuously improving their methods;
- Farmers support research;
- Farmers are committed to participating in the regulatory process; and
- The ongoing need for scientific studies, including on-farm data collection.

**Farmers are the original stewards of the land** and I'm proud to be one of them. I'm not sure how many of you have ever had the opportunity to ride in a tractor but I think it's the best therapy. I remember back to when I was a young farmer, which I'll admit was longer ago than I'd like it to be. I remember driving the tractor while working the land with a plow; prepping it for the planting season. The first time on the land after a long winter is like Christmas to a farmer. I remember feeling so proud that much like my dad and grandfather did before me, I was caring for this resource to the best of my ability. They left it in my hands and that is quite the legacy to follow!

As Wisconsin farmers, our story includes our continuous evolution of farming practices to do more with less. Today, we can harvest more corn per acre using less fertilizer and applying fewer pest management products, all while improving soil health and water quality. We rely on science in order to help us understand the complexities of our management practices and how those practices impact our farms and the environment. Much of that science is done through research at our land-grant university, UW-Madison, in the College of Agriculture and Life Sciences and with our integrated research specialists that work jointly with CALS and UW Cooperative Extension.

**Wisconsin farmers are committed to continually implementing improvements in their farming practices.** Wisconsin farmers live on the land that they farm and drink the water that flows under their fields. Arguably, there isn't anyone who cares more about water quality than those who are immediately impacted by it.

We consider ourselves to be stewards of the land and we have a very personal stake in this discussion. I am here to ensure that farmers tell you about how we farm today and how our current farming practices have evolved and improved based on continuous scientific study.

It is the combination of science and our willingness to continually change that has helped Wisconsin farmers play a critical role in the improvement of both surface and groundwater quality. We know there is more that must be done to improve water quality standards and, in order to do so, we must engage in additional scientific research on water quality impacts of

farming practices. As such, part of our message today is to encourage you to support increased investment in research dollars at UW-Madison and Cooperative Extension for applied agricultural research. This can be accomplished by funding research and positions for state integrated research specialists. These specialists conduct research and develop training programs that directly affect the issues facing production agriculture in Wisconsin today. In the last four years, funding for integrated research specialists at UW-CALS has decreased by \$865,000 and resulted in the loss of eight specialist positions. The loss of these research specialists means that the research needed for our agricultural community to address current areas of concern is not being done. Applied research and evolving science allows farmers to remain relevant and competitive. We need this research to keep farms in Wisconsin.

**Wisconsin farmers have a long-standing commitment to participate in the regulatory process.** Wisconsin Farm Bureau Federation was part of the original stakeholder group that worked to design our current nonpoint source pollution regulatory program, which includes DNR, DATCP and County Land and Water Conservation Departments. Farm Bureau was, and continues to be, committed to being at the table when regulatory changes are developed. We understand that farmers need scientifically supported guidelines in place, but these same regulations must also provide enough flexibility to allow farmers to farm in ever-changing weather and economic conditions.

Farm Bureau has been involved in the NRCS Standards Oversight Committee that updates the standards for nutrient management development and improvement of these standards aimed at protecting both groundwater and surface water safety.

We were at the forefront of DATCP's Producer-led Watershed grant program and supported its inception and continued growth. This program has been widely-successful throughout the state. Farmers enjoy working together to find solutions to problems that directly impact their farms and rural communities. This collaboration of stakeholders allows farmers to have a direct voice in how and why practices are implemented on their farms. They have an opportunity to work with and learn from other farmers in their area that may be implementing different practices on their farms. These practices could be replicated or adjusted to suit the specific needs to improve water quality on other farms.

Wisconsin Farm Bureau has long supported the county Land and Water Conservation offices because the local staff help our farmers implement conservation practices. There is a direct correlation between these conservation practices and water quality. Our farmers value the collaboration and assistance that they receive from our county Land and Water Conservationists.

Recently, Wisconsin Farm Bureau participated in the NR151 Stakeholder Committee at the Department of Natural Resources. Stakeholders assisted the department with the design of a targeted performance standard for the counties in Northeast Wisconsin for liquid manure application over Silurian Dolomite bedrock. As farmers, we know a 'one-size fits all' approach does NOT work for our industry. This committee was intended to address that specific concept.

In the case of specific situations for Silurian dolomite features, the one-size fits all approach to the traditional NR151 standards needed to be reevaluated. Science showed us that this was the case and the stakeholder group utilized very specific scientific standards to ensure that reasonable on-farm practices were put in place to ensure we were meeting water quality standards for groundwater and surface water.

Fortunately, the nonpoint source pollution regulations were designed to allow the development of such a “targeted” performance standard. This is the kind of flexibility that is so important in any regulatory program that addresses farming in Wisconsin. It is a critical balance of regulatory certainty and flexibility.

We support ongoing implementation of the nonpoint source pollution program through increased cost-share funding to assist more farmers with implementing additional nonpoint source pollution practices. We support the development of targeted, science-based regulations that recognize the needs and challenges of different geographic regions of the state. We ask that you allow farmers to continue to help develop local water quality solutions by supporting grassroots water quality initiatives such as DATCP’s Producer-led Watershed Grant program as one of the keys to success.

**Finally, the collection of on-farm data is also a critical part of this discussion.** While farmers understand the need to create models for scientific study purposes, actual on-farm data holds the most weight. It is based on actual outcomes that are measured and not just predicted. Some of the best on-farm research and data has been done by UW Discovery Farms. Through UW Discovery Farm’s leadership, working farms implement a variety of on-farm practices and then measure the impacts on surface water quality from the field’s edge. Current project areas of study include nitrogen use efficiency, edge of field surface runoff monitoring, edge of field tile monitoring and soil health. What better way is there for us to capture and measure what is leaving a farm field than to study the water that left a farm field?

I’d like to elaborate a little more on these three areas of study. The nitrogen-use efficiency monitoring project assists farmers in evaluating their nitrogen practices based on several variables; soil type, season and field. The nitrogen project assists farmers in utilizing the 4Rs to evaluate the efficiency of their nitrogen application rate. “The 4Rs” include, Right Source, Right Rate, Right Time & Right Place. At the end of the season farmers evaluate their nitrogen use efficiency. Adjustments in nitrogen material, rate, timing, placement or technology can be made the next year based on established benchmarks. While there is no measure of water quality after this monitoring, the implications for a farmer that is more efficient when applying fertilizers by effectively implementing the 4R principles, reduces the risk of losing inputs to groundwater.

I personally have participated in this project and plan to again this year. Please feel free to ask me questions on my experience at the end of my testimony.

The edge-of-field surface runoff monitoring program is another important project done by UW Discovery Farms. There are currently three regions of the state with two collaborative partners in each region who have installed these edge-of-field surface runoff monitors. The monitors stay in place for five to seven years and samples are taken, and educational outreach can occur. Two years of baseline data is collected and then the sites move into the experimental phase of monitoring which tests the impact of cover crops on surface runoff.

The edge-of-field tile monitoring studies are currently occurring on 24 sites in five counties in Northeast Wisconsin. The project is currently monitoring intensive, intermediate and basic sites where the goal is to better understand the timing and mechanisms for soil and nutrient loss through the tile systems. In both the nitrogen use efficiency and tile projects, there are ongoing soil health evaluations occurring. The goal is to identify how management and the soil properties impact soil health. The plan is to develop a better understanding of the biological, chemical and physical measurements of soil health.

We have learned a tremendous amount of information about the effectiveness of on-farm practices and their impacts on surface water quality from these project areas performed by UW Discovery Farms partnering with working farms.

Pictures and explanation of conservation practices implemented on farms that help improve water quality standards. (power point presentation)

As spring slowly arrives and farmers hop back in their tractor cabs, I know many of them are thankful for the soil caregivers before them. However, a farmer's mindset is always looking ahead on what can be improved. To make these decisions they need sound research from on-farm data and flexibility to allow farmers to farm in ever-changing weather and economic conditions. Just like we are committed to our land we are committed to participating in the regulatory process. I hope as you see farmers in the field these next few months you are reminded of just how much they care for their families, their communities and their land.

Thank you for your time.