

Good morning Senator Ballweg and members of the committee:

My name is Tamas Houlihan. I am the Executive Director of the Wisconsin Potato & Vegetable Growers Association based in Antigo, Wisconsin. We represent the interests of approximately 110 potato and vegetable producers and a total of over 400 members across the state. I live in Stevens Point.

I am pleased to testify in favor of Senate Bills 677 and 678 related to improving water quality in Wisconsin.

Wisconsin growers are committed to working on solutions to improve water quality in our state. Both of these bills contain provisions that will be important in continuing to improve water quality.

Wisconsin ranks in the top five nationally in the production of eight major vegetables:

- 1st in snap beans, beets and cabbage for kraut
- 2nd in carrots and peas
- 3rd in potatoes and sweet corn
- 4th in cucumbers for pickles
- Also Top-10 in onion production.

Together, specialty crop production in Wisconsin is valued at over \$1 billion annually, with an additional \$5 billion in associated economic activity and over 35,000 jobs.

Senate Bill 677 creates and funds a nitrogen optimization grant program designed to incentivize farmer-led water quality improvements. We strongly support this new program. The WPVGA and our growers have been committed to water quality research and developing improved practices through our research projects for decades.

Research is the watchword for the entire Wisconsin potato and vegetable industry. The Wisconsin Potato Industry Board spends upwards of \$850,000 annually on research, with a strong emphasis on environmental concerns. The total budget of the WPIB is just over \$2 million annually, so research represents over 40% of the spending.

If you look at agricultural statistics you will notice there are fewer acres of potatoes grown in Wisconsin than there were even 25 years ago and this is due in part to increased yields from improved varieties as well as proper water and nutrient management. To supply the ever-growing population with a consistent food supply, growers need to increase yields while lowering the inputs used. This can only be accomplished through research.

Water Task Force Fuels Need for More Research

In increasing our understanding of the hydrology of the Central Sands, the WPVGA's Water Task Force has initiated a program to measure groundwater depths in privately owned irrigation wells across space and time; we have worked with the UW Dept. of Atmospheric and Oceanic Sciences to use the latest technology to accurately measure evapotranspiration which is another word for crop water use. The Water Task Force has also continually funded software maintenance to keep the Wisconsin Irrigation Scheduling Program and the Agricultural Weather Data Service operational.

In irrigation technology, we have developed and implemented new irrigation scheduling software to match water use to crop need; conducted on-farm research with drip irrigation, deficit irrigation and site-specific, precision irrigation; and we are currently conducting multiple on-farm trials in cooperation with University of Wisconsin researchers in an effort to fine-tune nitrogen use rates by potato variety, investigate new varieties that perform well in low Nitrogen environments; all with the goal to further reduce nitrate leaching.

The Water Task Force also funded research looking at nitrate and chloride concentration in irrigation water applied as well as total loads during the growing season in the Central Sands. The research results provide important information for studies investigating nitrogen use efficiency, developing improved nutrient management programs, or those investigating leaching losses to groundwater.

More work is needed in all of these areas, and the outstanding team of potato researchers at UW-Madison does not have the capacity to conduct all of the research that is needed. There is a great need for more hydrogeology positions in Wisconsin with an emphasis on water quality issues.

We also support the programmatic changes to the DNR's well-testing grant program and the producer-led watershed program contained in SB 678.

The WPVGA worked closely with the Wisconsin Wetlands Association and UW-Extension on a Producer Led Watershed Protection Grant in 2021. Six farms participated in the Little Plover River/Wisconsin River watershed with great success. The Little Plover River continues to flow above the public rights stage and has not dried up in over ten years; irrigated ag land has been converted to a wetlands restoration site; a high capacity well near the river was taken out of use; rotational grazing practices are being used along with the extensive use of cover crops, native prairie plantings and pollinator plantings. We've recruited another grower in the region to join the existing Producer-Led group and hope to receive another grant in 2022 to continue the good work in all of these areas.

Farmers are true environmentalists.

Most Wisconsin potato and vegetable farms are family-run operations that have been in the family for several generations. Growers live, work and raise their families on their land. They have a deep, abiding love for their land and they know they have a responsibility to maintain it and use their resources wisely. In the past 50 years, through funding and applying the results of field research, growers have adopted many practices of precision farming including grid soil sampling, grid fertilization, variable rate irrigation and other environmentally-friendly practices that reduce pollution, reduce runoff, reduce costs and increase quality and yields.

Farmers want to be the solution to water quality issues in our state. These bills go a long way toward helping them achieve that. We greatly appreciate the leadership of Senator Cowles and Representative Kitchens and the other legislative co-authors of these bills for supporting efforts to improve rural water quality.

Thank you for allowing me to testify today. I would be happy to answer any questions.