

Testimony to the Ohio House of Representatives' Finance Committee

**Submitted by Cathann A. Kress, Vice President for
Agricultural Administration and Dean of the
College of Food, Agricultural, and Environmental Sciences
June 4, 2019**

Chairman Oelslager, Vice Chairman, Ranking Member Cera, and members of the Ohio House of Representatives' Finance Committee, I am Dr. Cathann Kress, Vice President of Agricultural Administration and Dean of the College of Food, Agricultural, and Environmental Sciences (CFAES) at The Ohio State University. I represent the 429 faculty, 1,488 staff, 3,647 students, 43,000 living alumni, 47,000 animals, and 11,000 acres that make up CFAES. We are one college with three campuses (Columbus, Wooster, and statewide, with our faculty/staff split evenly among the three) and three missions (research, teaching, and extension) all dedicated to one essential purpose: We sustain life.

I am grateful for the opportunity to submit our support of House Bill 7. Action to address water quality in Ohio is a primary focus for our college.

Our college is a driver of discovery with over \$41 million of projects underway, and we are getting increasingly better at translating our research so it can be used in ways that change practices, change the bottom line, and change the world.

For example, in Ohio, we have about 140 researchers working on some aspect of water quality.

We advance science by:

- studying how the built environment and stormwater systems impact surface and groundwater.
- using soil testing and precision agriculture to guide nutrient applications.
- refining best management practices as a result of edge-of-field studies.
- designing livestock diets to maintain animal performance while minimizing nutrient losses in manures.

- helping shape farmers' ability and willingness to adopt best management practices.

We apply innovation by:

- developing new precision farming technologies that allow farmers to map variations in soil properties and guide nutrient applications.
- creating new methods to use manures as sources of plant nutrients.
- using a system of sampling buoys, fixed stations, and charter boat volunteers to monitor Lake Erie water.

And, through collaboration and extension, we:

- publish *eFields*, a summary of on-farm field trials to benefit farmers, scientists, and policymakers.
- use our Nutrient Stewardship Program to partner with farmers to explore and demonstrate effective nutrient management practices.
- provide independent advice and support to farmers working to develop and implement nutrient management plans.
- used our On-Field Ohio project to develop a new phosphorus risk index tool to help farmers identify effective practices to minimize phosphorus losses.
- provide training to meet state requirements for fertilizer application certification.

Through this important work, we strive to also be a good investment, leveraging opportunities and funds. Our basic premise is that we believe in combining our strengths with key partners and investors.

For example, some farm fields in the Maumee River watershed have more phosphorus than their crops can use. Dr. Jay Martin and others secured \$5 million from USDA for a five-year study to learn about those fields and lower that risk by creating new public-private partnerships.

In collaboration with the National Resources Conservation Service (NRCS) and counties both matching our funding, we are hiring additional OSU Extension educators to focus solely on water quality in the Western Lake Erie Basin, with the goal of increasing the number of acres under best management practices known to protect water quality.

We are now standing up the OSU CFAES Water Quality Research Consortium, a strategic partnership of education, business, and government formed specifically to address research and educational needs to support knowledge-based water quality solutions and efforts in Ohio. Through the WQRC we seek to serve as a catalyst for interdisciplinary thinking, acting, and education leading to the development of highly collaborative partnerships.

The WQRC seeks to increase awareness of the research underway throughout Ohio which can best inform decision-making, policy-setting, program development, and best practices implementation. The goal of the WQRC is to create a unique team-research culture to drive science rapidly from ideas to new approaches. Within this innovative environment, today's research leaders collaborate with key partners with the unified goal of addressing water quality challenges. With this approach, the WQRC connects research across multiple disciplines, organizations, and boundaries to create a holistic understanding of water quality.

Water Quality is the one of the highest priorities of our researcher and extension personnel. House Bill 7 creates an opportunity for us to ensure the best possible practices are being employed and the resources are getting to the parts of the state where they are needed the most. Thank you for your partnership and support of CFAES.

We sustain life. Thank you for supporting us.

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