



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

**Heather Raymond
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Proponent Testimony – Ohio Senate Bill 2
February 19, 2020**

Chairman Vitale, Ranking Member Denson and members of the Ohio House of Representatives Energy and Natural Resources Committee, I am Heather Raymond, Water Quality Initiative Director for College of Food, Agricultural, and Environmental Sciences (CFAES) at The Ohio State University. We are one college- with three campuses (Columbus, Wooster, and State-wide; with our faculty/staff split evenly among the three) and three missions (Research, Teaching, Extension) all dedicated to one essential purpose: We sustain life.

For some, our field of study likely seems like a throwback- after all, as the cornerstone college we are celebrating our sesquicentennial – 150 years. We have built our success around being a trusted partner and a convener that provides sound science to help guide decision making. One example is our recent partnership with the Natural Resource Conservation Service to hire six new water quality Extension Associates that will help farmers, businesses, and non-governmental entities implement best management practices funded through H2Ohio and other sources to improve agricultural and environmental sustainability in the Western Lake Erie Basin.

We appreciate the opportunity to testify in support of SB2. We would like to highlight and comment on four sections of the bill that relate to data collection and evaluation:

First, Sec. 940.36 (B)(1) calls for the collection and compilation of information on conservation practices funded by public money. At a minimum, we recommend that all H2Ohio funded projects be tracked at the Hydrologic Unit Code (HUC) 12 scale. It is critical that projects be associated with HUC 12 scale watersheds so that the impact of H2Ohio funded practices on water quality can be evaluated. For reference, a typical HUC 12 watershed covers approximately 25,000 acres and a HUC 8 watershed covers over 500,000 acres (over 700 square miles). Tracking by county is insufficient, since counties cover multiple HUC 8 level watersheds and each watershed has different nutrient load reduction targets. For example, Fulton County covers four different HUC 8 watersheds: River Raisin, Ottawa, Lower Maumee, and Tiffin. Only two of those HUC 8 watersheds feed into the Maumee watershed and are covered by the draft 2020 Domestic Action Plan. If tracking of H2Ohio program implementation is only done at the county level, and all funded Fulton County projects are in the River Raisin watershed, then no associated nutrient reduction loads could be expected in the Maumee River watershed. If data is collected and aggregated at the HUC 12 level, practice implementation information can be better tied to water quality data and integrated into models, to help determine the impact of practices. This type of data can also be used to help with adaptive program management and ensuring the practices with the largest possible impacts on water quality receive continued H2Ohio funding. We agree that confidentiality is important to encourage enrollment into H2Ohio programs but also agree that aggregated information (we propose on HUC 12 scale) can be shared by the director with institutions of higher education, such as ours. Sharing of aggregated data with key partners is critical to measuring success of the program and course correcting if some practices are not resulting in expected water quality outcomes.

Second, Section 940.36 (C) (2) calls for establishing a baseline of existing “water quality and nutrient best management practices in a statistically valid, randomized manner.” Baseline information is a critical first step. We recommend that this process be repeated on a periodic basis to help measure changes in management practice implementation over time. We also recommend that this data be collected at the HUC 12 (minimally, HUC 8) scale. As with the first comment, county level data associations are insufficient due to critical differences between watershed and county boundaries.

Third, we are in strong support of Sec. 940.37, which calls for collaborative establishment of a water quality certification program for farmers. This program could help recognize farmers for their water quality protection efforts and help promote additional practice implementation. The Ohio Agricultural Conservation Initiative is an excellent group for implementing this program. We encourage state support for the certification program.

Finally, Sec. 6119.091 Section 3 calls for establishment of a pilot program to assist in reducing phosphorus and dissolved reactive phosphorus in a watershed selected by the director. We feel this is an important section of the bill. We understand that it will take time to both implement H2Ohio and demonstrate improvements to Lake Erie. By selecting a pilot watershed, or even several smaller pilot sub-watersheds, the state can accomplish multiple objectives. First, by focusing resources on a smaller geographic area, higher adoption rates could be achieved more quickly and the resulting impact on water quality could be demonstrated. The pilot watershed could also help fill data gaps on the efficacy of H2Ohio practices on reducing Dissolved Reactive Phosphorus (DRP) loads and the impact of stacking multiple practices on the same field. Barriers to project implementation on rented ground could also be more thoroughly evaluated on a pilot scale. Finally, the pilot watershed could include modeling, so that results could be scaled up to the entire basin. Overall, we are supportive of a pilot watershed approach. We encourage coordination on site selection and project implementation with institutions of higher education. Universities could leverage their expertise and applied research funding and focus efforts on the selected pilot watershed(s). At a minimum, the director should have the authority to at share at least aggregate data from any pilot watersheds with institutions of higher education, so we can assist with data interpretation, collaboration with ongoing applied research projects, and integration of data into models to improve predictions. Data sharing was specifically called out in the prior highlighted sections but was not included in this section.

Thank you for the opportunity to testify in support of SB2. We look forward to continued collaborations with the state on implementation of H2Ohio and associated applied research, education, and outreach.



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