Senate Finance Committee
Testimony in Support of Governor DeWine's FY 2026-2027 H2Ohio Budget
Provided by Stephen J. Jacquemin, Professor of Biology and Water Quality, Wright State University
05.30.2025

Chair Cirino, Vice Chair Chavez, Ranking Member Hicks-Hudson, and members of Finance Committee. My name is Stephen Jacquemin and I am a Professor of Biology and Water Quality at Wright State University – Lake Campus. Thank you for the opportunity to provide written testimony about the upcoming FY 26-27 Budget as it pertains to H2Ohio and water quality.

Water quality issues related to harmful algal blooms (HABs) as a function of nutrient runoff have ramped up considerably over the past few decades translating to several issues for Ohioans. These issues include:
- disrupting the environment and destabilizing ecosystems through proliferation of near monocultures of algae that can cause swings in oxygen creating dead zones that impact fishes and other wildlife
- damaging the aesthetics of our waterways by leaving rivers and lakes looking like spilled paint and smelling of rot
- producing dangerous algal toxins with real human health effects that have been linked on a global scale to illness and even death in extreme cases
- causing devastating economic swings with some experts estimating hundreds of millions of dollars annually of impact to the state of Ohio coming in the form of tourism and recreational effects, drinking water impairments, and diminished property values just to name a few

And while HABs are most notably associated in Ohio with Lake Erie, particularly the western basin, they also occur statewide in a myriad of inland lakes, including Grand Lake St Marys where I am coming to you from today. Unfortunately, the frequency and effects of HABs are not expected to stabilize or diminish with just time – in fact quite the opposite is projected. Fortunately, however, algal blooms and water quality issues are not all that mysterious on their surface. To thrive, they require nutrients running off our landscapes and entering our waterways unabated. They (HABs) require that we do nothing to stem what we understand to be the issue – nutrient runoff that stimulates their growth. But doing nothing or doing less has not been and cannot be what defines our approach to this problem facing us today. Water quality can be improved, and real benefits can be realized.

As I said, I am communicating with you today from the Grand Lake St Marys region of the state where just a few decades ago, GLSM was ranked among the most polluted watersheds in the country in terms of elevated nutrient concentrations, algal biomass, and algal toxicity according to several nationwide studies. These surveys led to the passing of the 2011 Distressed Watershed Ruling in addition to a new conservation focused mindset to do what needed to be done. Since this period of time, a series of obligatory as well as voluntary conservation practices have been adopted across the watershed. These have resulted in real changes and real improvements to lowering nutrient runoff in the watershed as well as reducing the algal biomass and toxicity in the lake. Grand Lake is not fixed by any metric. It is improving and there is real reason to hope. Most notably, these conservation practices in the watershed have included the funding and

restoration of over 1,000 acres of wetland habitat. Natural habitats like wetlands can play a vital role in nutrient reduction as these systems have numerous ways to reduce nutrients and act as sinks, preventing excess nitrogen and phosphorus from running downstream into larger rivers or lakes. It is worth noting though that the wetlands in GLSM were not funded, designed, and grown overnight – they took time. That said, looking back over the past decade plus of restoration we have real reason to be optimistic.

This optimism is perhaps best encapsulated in a peer reviewed scientific publication that just came out a few months ago in one of the premier water quality journals that details just how effective these habitats have been in reducing nutrients – with one of our wetlands noted as being capable of reducing 5+% of the entire annual phosphorus load while sitting on around a quarter of a percent of the land area in the watershed – thus, a conservation practice pulling far above expectation and easy to extrapolate out to larger watersheds.

I, and many in our local/statewide community that I speak with feel strongly that funding wetland and other conservation / restoration initiatives focused on reducing nutrient runoff to mitigate the effects of harmful algal blooms should be a continued priority across the state of Ohio. The H2Ohio program which began in 2019 has been unprecedented in making Ohio a leader in the fight for water quality. I ask that monies not be cut from the proposed $270 million budget. I am testifying today to ask that we maintain our approach and continued commitment to making the long-term investment in our future.

Members of this Committee – thank you again for giving me the opportunity to provide written testimony. Please contact me with any questions.

Thank you

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