## Testimony of the Center for Great Lakes and Watershed Studies

Chair Dolan, Vice Chair Cirino, Ranking Member Sykes and members of the committee, thank you for allowing us to submit proponent testimony for the H2Ohio funding provisions in HB33.

The faculty who serve as lead scientists at the Center for Great Lakes and Watershed Studies at Bowling Green State University (BGSU) strongly support the H2Ohio Wetlands Program in the Operating Budget, including funding for the Wetlands Monitoring Program. The funding in this line item allows us and the Center, in collaboration with the other lead scientists of the Lake Erie and Aquatic Research Network (LEARN), to play vital roles helping to determine the effectiveness of wetland restoration for nutrient removal. We work with dozens of students, both graduate and undergraduate in this project and their education and professional preparation is meaningfully enhanced by the opportunities this program provides for their experiential learning. The H2Ohio Program has already approved the construction or restoration of more than 140 wetlands projects. As stated in testimony given to the Ohio Senate Agriculture and Natural Resources Committee earlier in May, the Wetland Monitoring Program is determining how effective these wetlands are in reducing the phosphorus and nitrogen that drive the formation of Harmful Algal Blooms (HABs) in Lake Erie and other inland water bodies.

HABs pose a massive economic, environmental, and health threat that is estimated by some to jeopardize the jobs of more than 100,000 workers and could be very detrimental to the more than \$17 billion dollars of economic activity in the eight Ohio counties along the shore of Lake Erie. This certainly justifies major investment by the State to reduce the problems and impacts of HABs to a safe level. While there is substantial scientific evidence that wetlands can contribute well to achieving this goal, wetland effectiveness can vary greatly. The factors that determine wetland effectiveness are not yet fully understood. That is why the Governor, this Legislature, and the ODNR have been wise to allocate a portion of the money in the current H2Ohio Wetlands Program for a comprehensive program to assess wetland success and advance scientific understanding of the factors that determine that. To our knowledge, there are no comparatively comprehensive studies of wetland nutrient reduction effectiveness. Thus, *Ohio could take the lead* in achieving the critical goal of determining the most cost-effective use of wetlands for mitigating HABs.

It is essential that the efforts to reduce HABs are maximally cost effective. *The Wetlands Monitoring Program (WMP) will provide the guidance* needed now and in the future by improving the understanding of how to construct, restore, and manage wetlands to achieve the greatest benefit at the lowest cost. The WMP is led by 12 LEARN scientists at six universities in Ohio, that function as a highly collaborative team to optimize data collection, analysis, and modeling so that we can produce a strong and robust evaluation of wetland nutrient reduction.

A relatively small portion of the total H2Ohio wetlands budget has already been invested in this initiative, but this amount has enabled the generation of a wetlands monitoring plan that has been evaluated, advised, and recognized by nationally prominent wetlands scientists as well as

by the agency managers who need the findings of wetland evaluation to guide their future policy and practices. As the second year of wetlands monitoring is underway, it is clear that the protocols and methods being employed are producing the vital data needed for the thorough assessment of wetland nutrient mitigation. However, wetlands change over time, thus consistent, long-term monitoring is essential for understanding the evolution of this effectiveness so that future investments in wetlands can maximize the long-term benefits.

We applaud this historic investment in the H2Ohio Program and Wetland Monitoring and urge this body to keep this funding fully intact. Truly, *this is an investment in the future of Ohio* – an investment that can lead to some of the most cost-effective means of battling HABs. By learning how to optimize wetland nutrient removal, the monitoring program can help reduce the algal blooms that detrimentally impact large segments of the Ohio economy while also devastating valuable parts of our environment and posing a serious threat to human health. The economic impact alone would be far more costly than the line item for this program. We ask that the legislature continue to make this a high priority until we have optimized our understanding of wetland function sufficiently to guide all future efforts to resolve this problem and assure a safe and prosperous future for all Ohioans.