

## Ohio EPA

### SB 1 Testimony before the Joint Agriculture Committee

June 5, 2018

Chairmen Hackett and Hill, Vice-Chairmen Hoagland and Koehler, Ranking Members O'Brien and Patterson, members of the joint committee thank you for the opportunity to testify before you today on behalf of Ohio EPA Director Craig Butler. My name is Karl Gebhardt, and I am the Deputy Director of Water Resources at Ohio EPA. I am also the Executive Director of the Lake Erie Commission. I am grateful for the opportunity to testify before the Joint Agriculture Committee to provide a brief update on where Ohio EPA stands on the implementation of Senate Bill 1 of the 131<sup>st</sup> General Assembly.

The passage of SB 1 was an important step toward the improvement of water quality in Lake Erie, along with all of Ohio's rivers and streams. I would like to specifically address three areas in which SB 1 had a direct impact in which Ohio EPA was involved: the prohibition of the disposal of dredge material in the open waters of Lake Erie, the requirement of municipal wastewater treatment plants to monitor and evaluate their ability to limit the discharge of total and dissolved phosphorus, and the creation of the Harmful Algal Bloom (HAB) program.

#### Banning of Open Lake Disposal of Dredge Material

SB 1 prohibits the disposal of dredging material into the open waters of Lake Erie beginning July 1, 2020. Since the passage of SB 1, Ohio EPA and the Ohio Department of Natural Resources (ODNR) have worked diligently with Federal agencies and local stakeholders to find alternatives to open Lake disposal. Our goal is to identify alternatives where the dredged material adds value and when possible involve the private business sector. Those alternatives identified include the following: 'Dredge to Habitat', which seeks to develop and improve fish and wildlife habitat, enhanced recreation, and improved water quality. 'Dredge to Marketable Soil' which describes a process that essentially converts the material into a product that can be sold. This process includes the dehydration and blending of the material with compost, and then distributing it into the marketplace. And finally, 'Dredge to Farmland', which repurposes the dredged material to enhance near-lake farmland.

These alternatives were developed in conjunction with local governments and other stakeholders, allowing them to determine which alternatives would add the most value to their communities. This effort resulted in a portfolio of potential projects across Lake Erie which in some harbors will address the open-lake disposal issue. Toledo Harbor—by far the heaviest dredged harbor in the Great Lakes—is pursuing multiple simultaneous alternatives to address the 850,000 cubic yards of material annually removed from its channels. The goal continues to be keep our harbors open while finding beneficial uses for dredged material.

#### Municipal Wastewater Treatment Plant Phosphorus Monitoring Requirements

SB1 required major municipal wastewater treatment plants to monitor for total and dissolved phosphorus. As well, if the treatment plant did not already have a total phosphorus limit, SB1 required a technical and financial capability study to achieve a 1 mg/l total phosphorus limit. All 142 major municipal wastewater treatment plants now sample for the total and dissolved phosphorus as required, and the data generated from this has been used in the in the OEPA Nutrient Mass Balance study. Out of

the 142 plants, 112 were also required to submit the technical and financial capability study, of which 100% of plants have completed.

Ohio EPA provided a form to assist municipalities in complying with this provision. Information provided includes: historic influent and effluent total phosphorus concentrations, if available; current ability to achieve a 1 mg/l monthly average; the processes that are, or have been, used to reduce phosphorus; the operational and/or facility changes necessary to achieve a 1 mg/l monthly average and the associated estimated costs.

The information provided shows that 20% of the facilities would have no additional capital cost for achieving a 1 mg/l TP limit, 20% would cost less than \$50,000, 20% would cost less than \$500,000, 20% would cost less than \$2,000,000, 10% would cost more than \$2,000,000 and 10% did not provide cost information. The total amount of total phosphorus reduced would exceed 2,500,000 pounds annually. OEPA through the State Revolving Loan Fund also made zero or low interest loans available to communities in order to up-grade wastewater nutrient reduction at their facilities.

### **Creation of the Harmful Algal Bloom (HAB) Program**

SB 1 established ORC 3745.50 and directed Ohio EPA to serve as the coordinator of harmful algae management and response. In 2016, Ohio EPA's Division of Drinking and Ground Waters utilizing existing staff established a new program section dedicated to harmful algal blooms (HABs). Ohio EPA's new HAB program provides oversight and implementation of the new rules for public water systems and coordinates Ohio's HAB response strategy for drinking water and recreational waters. Analytical protocols, establishment of health advisories and public notification protocols and triggers, sampling, treatment technique, algaecide application and reporting requirements all were established through the subsequent Ohio EPA rules for the HAB program, which became effective on June 1, 2016. Ohio EPA also conducted extensive outreach across the state to ensure that public water systems, local health districts and EMAs were aware of the new rules and response strategies in the event of a bloom. This also included our travel and tourism industry along Lake Erie.

In spite of the increasing bloom occurrence and improved monitoring, we have not had any HAB-related drinking water advisories since 2014 in Toledo due to proactive efforts at the respective public water systems: source water monitoring, rapid treatment optimization, and prevention at the source. We continue to coordinate with U.S. EPA, NOAA and others for improved science, technical guidance and to quickly share knowledge with our state and local partners. OEPA continues to develop new monitoring and treatment options for HABs.

### **Conclusion**

Chairmen Hackett and Hill, Vice-Chairmen Hoagland and Koehler, Ranking Members O'Brien and Patterson, members of the joint committee, thank you again for the opportunity to testify before you today. Ohio EPA looks forward to partnering with the legislature to continue to identify the next steps for improving water quality in Lake Erie. I am happy to answer any questions you may have at this time.