OHIO RIVER VALLEY WATER SANITATION COMMISSION

Summary of the Roundtable Issues Forum Embassy Suites Covington-RiverCenter Covington, Kentucky Wednesday, February 10, 2016

Session I America's Watershed Initiative

America's Watershed Initiative Report Card for the Mississippi River watershed was released on October 14, 2015. ORSANCO staff participated on the Recreation Review Team and the Water Supply Review Team for this report. The release was in the form of a report card that includes specific information and grades for the five main river basins that make up the 31-state Mississippi River Watershed, including the Ohio and Tennessee River Basins. In the Report Card, five goals for the Ohio and Tennessee are measured including water supply, flood control and risk reduction, the economy, ecosystems, recreation and transportation. Overall, the Ohio and Tennessee river basins received an average grade of "C-" for these six goals. Jordy Jordahl, Director of the America's Watershed Initiative, briefed the Commission on the process used to complete the assessment, results of the effort, and next steps for the initiative.

Report Card Process

Mr. Jordahl stated the mission of the America's Watershed Initiative was to develop collaborative solutions to watershed-wide land and water use challenges that can optimize benefits for society, the economy, and for nature. The goal is to work with leadership groups throughout the Mississippi River Basin to develop a stronger and more consistent cross-sector voice to address broad ranging issues. The report card serves as a simple communication tool to present the issues and opportunities facing the Mississippi River Basin to local, regional, and national leaders.

The report card was developed through a collaborative process bringing together over 700 participants from more than 400 businesses, government agencies, watershed groups and academic institutions. More than a dozen major workshops, meetings and summits and numerous webinars were held across the watershed over a two-year period to facilitate discussions and receive feedback on the key issues. From this interactive process, key indicator data sets were identified and evaluated to develop scores for six broad areas including water supply, flood control, the economy, ecosystems, recreation and transportation.

Report Card Results

The Mississippi River Basin overall received a composite grade of "D+" over the six main scoring categories. Individual scores for the five major sub-basins in the Mississippi watershed (*i.e.* Ohio River, Upper Mississippi, Lower Mississippi, Missouri, and the Arkansas/Red Basins) were also determined. The Ohio River Basin received an average grade of "C-". Individual category scores included "C" grades for economy, flood control, water supply, and ecosystems. Recreation was graded as a "D" due to declining participation in outdoor activities and issuance of hunting and fishing licenses. Transportation, likewise, received a "D" based on poor condition and maintenance of river transportation infrastructure.

Discussion

Peter Goodman commented that US EPA has invested considerable resources in other watersheds such as the Chesapeake Bay and the Great Lakes based not only on the challenges in these watersheds, but also due to the quality of the natural resources. He noted that it is important to not lose sight in these broad assessments of the abundance of high quality waters in the Ohio Basin, such as in the Green and Cumberland watersheds, that support such an incredible diversity of threatened and endangered species and critical habitat. Highlighting the outstanding natural resources in the watersheds and the need for protection must be part of the conversation when making the case for additional funding needs.

Mr. Goodman also noted surprise in the "D" grade assigned to the Treatment Violations indicator for the Ohio River basin despite high treatment compliance rates. Water utilities in Kentucky, for example, had a compliance rate of 99.86% in the previous year. That is a remarkable achievement, especially given the number of small treatment facilities in the state. Mr. Jordahl responded that these positive stories and examples can get lost in the scope and scale of such large assessments. He offered to meet by conference call to follow-up with those interested in reviewing the data used for the treatment violations indicator. Richard Harrison commented that in this assessment, a compliance rate of 96% or lower resulted in a failing grade; however, US EPA has set a target in their strategic plan to have 92 percent of community water systems meeting all applicable health-based water standards by 2018.

Commissioner Flannery inquired why the water quality indicator was limited to only phosphorus and nitrogen levels and did not include other water quality parameters. He also questioned why US EPA's 305(b) data set was not used to evaluate the suitability of the water resources to support recreation in lieu of the less direct measures that were employed, such as hunting license sales. Mr. Jordahl responded that the 305(b) data set was evaluated for use, but it was determined not suitable for this assessment due to the inconsistencies in the methods employed by the states to determine impairment.

Melanie Davenport commented that the visual representation of the grade wheel which is dominated by areas shaded in yellow representing "C" grades is inconsistent with an overall grade of "D+". Mr. Jordahl noted that the grading is geographically weighted and that the watershed-wide indicators on Gulf dead zone size and coastal wetland change are not part of the grade wheel, but are included in the overall grade assessment.

Mr. Jordahl concluded that he hopes to repeat this assessment process in approximately five years, incorporating lessons learned from this first iteration to improve the process.

Session II 2015 Ohio River Harmful Algal Bloom (HAB) Monitoring and Response Continued Review

On August 19, 2015, ORSANCO received notification through the National Response Center (NRC) of a report identifying a green sheen on the Ohio River at Pike Island Locks and Dam, Ohio River Mile 84.2, just upstream of Wheeling, WV. Through a coordinated response, the sheen was determined to be a HAB that contained microcystis algae and microcystin toxin. This HAB ultimately extended some 700 miles downstream of its originally reported location. During the October 9, 2015 ORSANCO Roundtable Issues Forum, staff secured feedback as ORSANCO continues to update its HAB Monitoring and Response Plan.

The purpose of this session was to continue the discussion and secure additional feedback as ORSANCO and its Partners had the opportunity to conduct internal debriefing regarding last year's significant HAB event. Additionally, staff developed several questions to serve as discussion items for the session. These include:

- 1) Did staff's communication content and frequency during the 2015 Ohio River HAB's event meet the needs of our Stakeholders?
- 2) How should ORSANCO distribute sample results for samples that were not generated by ORSANCO?
- 3) How can ORSANCO better coordinate individual State activities with other States?
- 4) Do States and the US EPA have updated HAB guidelines?

Introduction of Topic

Executive Director Richard Harrison introduced the topic for discussion noting that staff has been working to incorporate comments received from the October 2015 Roundtable discussion into the Commission's HAB Monitoring and Response Plan. The intent is to finalize the plan for presentation at the June Commission meetings. In working through the technical details with the HAB Workgroup, staff identified some additional questions that need to be addressed to finalize the draft plan.

Communication Content and Frequency

As a starting point, Mr. Harrison noted that ORSANCO was looking to get a list of key contacts from the various agencies in place for the upcoming summer season which would serve as the primary contact list to communicate information should another HAB event occur. This list would include at a minimum health department and water quality contacts from each state. Mr. Harrison also asked for feedback on the content and frequency of communications during the 2015 HAB event. The general consensus of the group was supportive of the approach presented to develop a primary contact list and felt the content and level of communication during the HAB event were appropriate.

Distribution of Data Not Generated by ORSANCO

Mr. Harrison posed a question to the group on how the Commission should handle the distribution of data for samples that were not collected by ORSANCO. During the 2015 event, staff only disseminated data collected by ORSANCO; however, data collected by partner agencies could be compiled by staff and made broadly available if desired. He noted that West Virginia had already provided feedback that they want ORSANCO to publish their HAB data.

Tiffany Kavalec commented that Ohio is currently undergoing a restructuring with the formation of a new HAB office. With this realignment, a new communications plan will be developed and suggested that Ohio and ORSANCO meet individually to discuss the plan going forward.

Mr. Harrison noted that staff will work with the HAB Workgroup to address the data dissemination issue and will present the recommended approach as part of the final draft of the monitoring and response plan in June.

Coordination of Activities Among States

Mr. Harrison encouraged the States to provide guidance to clarify the desired role of ORSANCO in coordination of activities among states during HAB events. He noted developing a consistent message among partners on the potential human health effects was an important communication need. Commissioner Lovan commented that the 2015 Ohio River HAB event highlighted a challenge between issuance of recreational advisories and drinking water advisories. He felt there needed to be more consistent messaging to communicate the advisories and sees facilitating consistent messaging as an appropriate role for the Commission to play. Bruce Whitteberry noted that Greater Cincinnati Water Works worked closely with the Cincinnati Health Department to coordinate on advisory communications. Mr. Harrison stated that early on in the HAB event it became clear that ORSANCO did not want to be the primary point of contact for each individual health department. Some local health departments expressed frustration when ORSANCO referred them to the state health departments for guidance.

Martha Clark Mettler commented the HAB Workgroup could develop a consistent set of talking points that could be provided to the media every time there is a HAB event. These could include distinguishing the differences between recreational and drinking water advisories and proactive steps that individuals can take to protect themselves from exposure. Developing consistent basic core messages may help to minimize sensational reporting.

Ms. Kavalec noted that with the realignment of responsibilities for HAB events among Ohio departments, she sees a need for the state health department to have a seat at the table on the HAB Workgroup for making decisions.

Ms. Mettler commented that in Indiana the public information officer is the point person and they would relay information to the Department of Health and Department of Natural Resources. Ms. Kavalec noted that in Ohio the decisions regarding issuance of advisories are made by technical staff and communicated by public information personnel. Richard indicated that ORSANCO will work with the state public information officers on advisory messaging and will keep all individuals on the primary contact list in the loop.

Updated HAB Guidelines

Chris Impelliteri from US EPA reported that drinking water health advisory levels have been published for cyanotoxins. The advisory level for children is 0.3 ug/L for microcystin and 0.7 ug/L for cylindrospermopsin. For individuals 6 years of age and older, the microcystin advisory level is 1.6 ug/L and 3.0 ug/L for cylindrospermopsin. Anatoxin-a was also considered; however, there wasn't enough health data to establish an appropriate level. He also noted that ambient water quality for total microcystin and cylindrospermopsin are under development with the goal to have draft recreational ambient water quality criteria by late summer 2016 and final cyanotoxin criteria by winter 2016.

Ms. Mettler asked what the concerns were with the ELISA method. Mr. Impelliteri responded that the ELISA method has a number of positive attributes including lower cost and ease of use; however, the method has been found to give false positive results. This can pose a significant issue when major decisions are being made regarding the closure of drinking water intakes. Mr. Goodman agreed there is value in the use of ELISA, but LC/MS is necessary when making major decisions.

Mr. Goodman posed the question if there were other water quality parameters that we should be collecting to better understand cyanobacteria in flowing waters such as the Ohio River. Mr. Impelliteri noted that US EPA is evaluating many different parameters, but no conclusive results have been observed yet. The ultimate goal is to understand the dynamics well enough to be able to notify water utilities days in advance of an impending HAB.

Mr. Goodman also commented that Kentucky is eager to work with the other states along the Ohio River to make sure everyone is on the same page regarding what triggers an advisory.

Mr. Harrison concluded the discussion stating that staff will work with the HAB Workgroup over the next several months to incorporate the feedback received to have a final draft of the HAB Monitoring and Response Plan ready for the June Commission meetings.