

Memo

Ohio River Valley Water Sanitation Commission

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Since 1948
*Improving Water Quality in the
Ohio River for over 70 Years*

DATE: September 16, 2021

TO: Technical Committee

Bruno Pigott, Chair
Scott Twait, IL
Eileen Hack, IN
Katie McKone, KY
Melanie Stein, NY
Audrey Rush, OH
Kevin Halloran, PA
Melanie Davenport, VA
Scott Mandirola, WV
Erich Emery, USACE

Josh Miller, USCG
David Pfeifer, USEPA Region 5
Jeff Frey, USGS
Ex Officio
Cheri Budzynski, PIAC
Betsy Mallison, Chair, PIACO
Alex Novak, Chair, POTW
Angie Rosser, Chair, WOAC
Chris Bobay, Chair, WUAC
Richard Harrison, Chief Engineer

SUBJECT: Announcement of 227th Technical Committee Meeting, October 6, 2021, Virtual Meeting

FROM: Jason Heath, P.E., BCEE

Commissioner Bruno Pigott, Technical Committee Chair, wishes to welcome everyone to the 227th meeting of the Technical Committee, which will take place virtually on Wednesday, October 6, 2021, from 8:00 AM to Noon (ET). In addition, there will be a virtual tour of the new Shell Polymers facility located on the Ohio River in Pennsylvania on Tuesday, October 5, from 2:00 to 3:30 PM (ET) for Commissioners, Technical Committee members and ORSANCO staff only.

Approximately one week prior to the virtual meetings, Technical Committee members, Commissioners and ORSANCO staff will receive an email that includes detailed information and instructions on how to participate in the Shell Polymers virtual tour. For participation with the TEC meeting, TEC members do not need to register; however, members of the public and other interested parties will be required to register to attend by October 4. To register, please visit www.orsanco.org/registration and submit the registration form. A link to register is also available on www.orsanco.org under the “News” section.

The Technical Committee meeting will be held in conjunction with the 231st Commission meeting being held on Thursday, October 7, also virtually. Notes on agenda items are as follows:

Item 1: Minutes of the 226th Technical Committee Meeting

Draft minutes of the 226th Technical Committee meeting are attached. Chair Pigott will ask TEC members for revisions or approval of the minutes.

Item 2: Chief Engineer’s Report

Executive Director Harrison will report on selected items including the ORBA strategic plan abundant clean water objective.

Item 3: Ohio EPA's First Far-Field Nutrient TMDL

Ohio EPA is developing the Maumee Watershed Nutrient TMDL to address far-field recreational, drinking water and aquatic life use protections/impairments in the Western Lake Erie Basin. Tiffani Kavalec with Ohio EPA will provide an overview of the project.

Item 4: PFAS Ambient Survey of the Ohio River

The first round of sampling for the Ohio River ambient PFAS survey has been completed. Staff will report on the status of the project and plans to complete a second round of sampling.

Item 5: Report of the 305b Work Group

The 305b Work Group met virtually on August 19 to review proposed assessment methodologies for the 2022 Ohio River Biennial Assessment of Water Quality Conditions. Staff will provide a report of the 305b Work Group.

Item 6: Technical Committee Member Roundtable Reports

TEC members are asked to report on water quality issues of importance to their organization.



**227th Technical Committee Meeting
Virtual Meeting
October 6, 2021
Beginning at 8:00 A.M. (Eastern)
Chair Bruno Pigott, Presiding**

TECHNICAL COMMITTEE MEETING AGENDA

CHAIRMAN'S WELCOME AND ROLL CALL (8:00 A.M.)

ACTION ITEMS AND REPORTS

1. Action on Minutes of 226th Technical Committee Meeting*
 2. Chief Engineer's Report
 3. Ohio EPA's First Far-Field Nutrient TMDL (Western Lake Erie Basin)
 4. PFAS Project Status
 5. Report of the 305b Work Group
 6. TEC Member Roundtable Reports
-

OTHER BUSINESS

- Comments by Guests
 - Announcement of Upcoming Meetings
-

ADJOURNMENT (NOON)

*attachment

**MINUTES
226th Meeting of the Technical Committee
Virtual Meeting
June 8-9, 2021**

Chairman Bruno Pigott, Presiding

Call to Order

The 226th meeting of the ORSANCO Technical Committee was called to order by Chairman Pigott at 1:00 P.M. on Tuesday, June 8, 2021. Seven states, four federal agencies, and five Commission advisory committees were represented (for Roster of Attendance see on page 14). Chairman Pigott welcomed all to ORSANCO's virtually-held meeting of the Technical Committee.

Minutes of 225th Committee Meeting

ACTION: Motion passed to accept the minutes of the 225th Technical Committee meeting.

Chief Engineer's Report

Director Harrison reported that the Commission's proposed FY2020 budget will be considered on Thursday which incorporates new monitoring sites and parameters in ORSANCO's fixed station, ambient monitoring program. Seasonal Biologists have started to assist with biological field work which will resume sampling four pools of the Ohio River this year. He also reported that staff provided reports through virtual meetings to each of the Commission's advisory committees on the PFAS survey plan.

Ohio River Ambient PFAS Survey

An update was provided to the Technical Committee on the Ohio River ambient PFAS monitoring project to characterize ambient levels of PFAS compounds in the Ohio River. A secondary objective of the study is to investigate the distribution of PFAS in the Ohio River water column. Staff has been working, with guidance from the PFAS Work Group, to finalize the sampling plan and quality assurance plans, and the six week sampling regime scheduled to begin the week of June 14. Staff reported on the following items:

- Project oversight through the PFAS Work Group and collaboration with partners.
- Review of the monitoring sites and spatially-balanced, probabilistic site selection process.
- Addition of one monitoring site each on the Allegheny and Monongahela rivers as requested by the WV Water Research Institute.
- Proceeding with the USGS EDI cross-sectional sample collection methodology.
- In addition to EDI sampling at all sites, planning to collect discrete samples at three of the sites to investigate PFAS distribution in the water column. Discrete sampling will involve collecting surface, mid-depth, and bottom samples at three points across the stream.
- Discussed the sampling schedule, QA/QC samples, and analytical services.
- Reviewed the pre-survey quality assurance study to ensure that sampling equipment and methods do not result in sample contamination.
- A USEPA passive sampler project that they are planning at ORSANCO sampling sites.

ACTION: Motion passed in concurrence with the proposed Ohio River ambient PFAS study plan.

Microplastics in Freshwater Aquatic Environments

Dr. Sherri Mason is a professor at Penn State Erie and is the Sustainability Coordinator at The Behrend College. Her research group is among the first to study the prevalence and impact of plastic pollution within freshwater ecosystems. Dr. Sherri Mason provided a primer on the history, sources, transport and fate of plastic pollution in freshwater aquatic environments. Dr. Mason discussed the most common sampling and analysis methods employed to determine the prominence of this emerging contaminant within freshwater systems. The presentation included an overview of the ecological occurrence, impacts and potential human health concerns associated with freshwater plastic pollution within our region.

Ohio River Basin Alliance Abundant Clean Water Objective Update

Director Harrison reported on the Ohio River Basin Association (ORBA) Restoration Initiative and strategic plan which is aimed at securing Congressional geographic program funding. He remarked that there are a number of strategic objectives, and that Jordan Lubetkin with the National Wildlife Federation is chairing the healthy and productive ecosystems objective, while ORSANCO is chairing an abundant clean water objective. A work group has been established of the chairs of each of the plan's multiple goals. All of the basin states as well as the Cumberland River Commission have been included. March 4th was the first meeting of the subcommittee addressing the abundant clean water objective and TEC members were asked to participate. The abundant clean water goal has a number of objectives including supporting Clean Water Act work, Safe Drinking Water, HABs and nutrients, water resources, and water-related infrastructure needs. Director Harrison thanked the Kentucky Division of Water for providing funding support for development of the plan for the Ohio River Basin.

Biological Programs Update

Staff reviewed the results of the 2019 Smithland macro data with the Biological Water Quality Subcommittee following the February TEC meeting, which concluded that the data did not meet quality control standards. The BWQSC agreed to assess Smithland Pool using only fish index scores. The final report for all pools sampled in 2019 will be finalized and published via ORSANCO's website. Trends analysis of PCBs in fish tissue is in progress as staff await return of 2019 & 2020 data. Staff reported that in the interim, refinement of standardization methods and confirmation of PCB quantification methods used by the various contract labs since the early 1980s will continue. Macro analyses are also awaiting the collection of new data. Collections in Hannibal pool will complete the dataset to be used in investigating potential nutrient criteria, while also provided additional insight into the effects of submerged aquatic vegetation on macro index scores. Staff detailed a plan to return to normal field efforts in 2021. Fixed station collections, fish tissue collections on behalf of IDEM, and pool surveys in Dashields, Hannibal, Markland, and McAlpine are all planned for completion. Staff reported that all ORSANCO biological staff, and the four seasonal biologists, meet ORSANCO's COVID Protocols for vaccinated crews, facilitating the return to normal field efforts.

Source Water Protection Programs Update

Staff provided an overview of the ongoing activities associated with the Commission's Source Water Protection and Emergency Response programs. This included an update on the Organics Detection System detailing the operational status of the system, software upgrades and ODS equipment replacement. The Committee was also briefed on the status of the continuous harmful algal bloom (HAB) monitoring stations and a review of current emergency response planning efforts.

Status of Abatement of Ohio River CSO Systems

Staff gave a presentation on implementation of the Nine Minimum Controls by combined sewer overflow (CSO) communities along the Ohio River. This update is provided to the Technical Committee annually. There are currently 48 Ohio River CSO communities. This is down from the previously reported 49 communities, as Vanceburg, KY has converted to stormwater outfalls and no longer has CSOs. Implementation has improved slightly over the past decade, with Ohio River CSO communities achieving 90 percent or greater implementation for all of the Nine Minimum Controls except Pretreatment and Proper Operation & Maintenance. All 48 CSO communities have submitted their Long Term Control Plans (LTCPs). Forty-one of those plans have been approved.

Member Updates and Interstate Water Quality Issues

Illinois

Scott Twait reported on the following:

Chloride Variance

We are still waiting on the Illinois Pollution Control Board to finalize the Chloride Watershed Variance. After the Illinois Pollution Control Board finalizes the Chloride Watershed Variance, we will send it to Region 5 for approval. Once the Variance is approved, the Agency will be issuing an overlay permit to all participants in the variance. The overlay permit will supersede all chloride requirements/limits and will require the approved BMPs.

Integrated Report

The 2018 Integrated Report has been formally approved by USEPA. The Agency will begin working on a "Combined" cycle-2020/2022 Integrated Report.

PFAS

Previously, I mentioned that Illinois developed a monitoring plan for sampling PFAS of the finished water at the public water supplies. The Agency began the PFAS sampling in the middle of September 2020.

- 758 out of 1021 systems (74%) have been sampled.
- 13% of the sampled systems had detections.
- 5% of the sampled systems had detections greater than the Draft Guidance Level.
- The analysis consists of 18 PFAS chemicals.
- Only 6 of the 18 chemicals have been detected
 - o PFOA
 - o PFOS
 - o PFBS
 - o PFHpA
 - o PFHxA
 - o PFHxS

The Agency has a webpage for PFAS, which can be found on our website:

<https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/default.aspx>

An interactive map showing the community Water Supply Sampling can be found at:

<https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-statewide-investigation-network.aspx>

Groundwater rules

Public comment on IEPA's draft proposed amendment to the Part 620 regulations (groundwater rules) ended on June 25, 2021. The proposed amendments to the groundwater rules, which update toxicity data for various listed chemical, update exposure factors, and introduce groundwater standards for five PFAS compounds (PFOA, PFOS, PFNA, PFHxS, and PFBS).

Coal Combustion Residual (CCR) Rules

The Agency had a rulemaking to change the Coal Combustion Residual (CCR) disposal rules (Part 845) to make them consistent with the new Federal Rules. Part 845, regulated the location, design, construction, operation, closure, and post-closure of CCR surface impoundments, as well as the remediation of releases from those impoundments. They were approved by the Illinois Pollution Control Board.

Power plant Closing

The Electric Energy – Joppa Power Plant has announced it will retire the facility by September 1, 2022. The Joppa Power Plant uses the Ohio River for its source of water and discharges its' heated effluent to the Ohio River.

Indiana

Eileen Hack reported on the following items:

COVID Update

Indiana state employees are returning to the office full time, on a phased return to the office approach. Managers and senior staff returned full time Monday, June 7. Remaining staff will return to the office on a 50% office/50% remote work schedule on Monday, June 21. All staff will return to a full time office presence on July 6. Masks are required only for those who are not completely vaccinated.

IDEM Water Quality Standards

Metals Rulemaking

As reported at the February TEC meeting, IDEM held a Zoom public hearing for the draft metals rule before the Environmental Rules Board on November 18, 2020. The draft rule for preliminary adoption was approved, and the proposed rule as preliminarily adopted was public noticed for 21 days, ending at the May 12, 2021 ERB hearing, where the board accepted comments about the rule. We anticipate that the proposed rule will be considered for final rule at the next ERB hearing, August 11, 2021.

This rule proposes to update Indiana's aquatic life and human health surface water quality criteria for metals and was initiated in 2014. Since the first notice, EPA updated several aquatic life criteria for metals. We are proposing to adopt the updated selenium and cadmium (both 2016) aquatic life criteria but not the aluminum criteria (2018). The aluminum criteria will be adopted in a future rulemaking.

2021 Water Quality Standards Review (aka, Triennial Review)

IDEM conducted a water quality standards review this year. The public comment period ended May 23, and a public hearing was conducted on May 12 during the Environmental Rules Board hearing. IDEM is in the process of completing an internal review of priorities to revise and update our rules, and to complete the written record for the review.

CSO Wet Weather Limited Use Designation

Indiana approved a second application for a CSO wet weather limited use designation (Fort Wayne). The CSO wet weather limited use designation suspends the recreational criteria after a qualifying rainfall event in specific stream segments downstream of CSOs for not more than four days after the date the overflow discharge ends.

IDEM is drafting a wet weather limited use subcategory rule that will be presented to our Environmental Rule Board at their August hearing. Once the ERB approves the rule, IDEM will submit it to EPA for review and approval.

NPDES Updates

NPDES WWTF Permits - Industrial Ohio River dischargers 2021:

Municipal Permits:

- IDEM issued the South Dearborn Regional Sewer District, a major municipal treatment facility, on February 12, 2021. The permit included updated ammonia-N limits based on the ORSANCO PCS.

Industrial permits issued since our last meeting:

- AEP Rockport permit modification
- Cleveland Cliffs (formerly AK Steel, Rockport) permit renewal

Industrial permit renewal applications due later this year:

- Countrymark Refining and Logistics

- Lawrenceburg Power
- AB Brown Generating Station (Evansville/Mt Vernon) (Vectren)
- FB Culley Generating Station -Newburgh (Vectren)
- Indiana Kentucky Electric Corporation-Clifty Creek (Madison)

General Permits

- MS4 General permit is currently off public notice, and IDEM is preparing a response to comments.
- Coal General Permit is in the draft stage.

PFAS

Sampling PFAS at Community Water Systems

IDEM initiated our project to collect and analyze source and finished water at all non-transient public water systems in May 2021. During the first round, we are sampling the 133 Indiana community water systems that serve 3300-9999. In our second round, we will sample the 570 community water systems that serve less than 3300. Our third and final round will include the 86 utilities >10,000; these were sampled as part of the 2012 UCMR 3, between 2013-2015.

IDEM and Indiana Department of Health (IDOH), who will analyze the water samples, are partnering on this effort. IDOH has received equipment, finalized quality control criteria, and has started analyzing samples.

Sampling PFAS in Fish Tissue

Fish tissue has been collected for PFAS for four years, as part of IDEM's fish tissue monitoring program. Generally, fish tissue samples selected for PFAS analysis are collected during probabilistic monitoring, at sites near potential source areas (e.g., fire training areas). Analyzing the fish tissue samples for PFAS is limited by funding.

After results from the 2018 sampling season were reported, IDOH posted two fish consumption advisories (a "do not eat (>200 µg/kg in fillet and >700 µg/kg in whole fish) and "One meal per month (56 µg/kg)" based on PFAS fish tissue results). Great Lakes Consortium best practice which uses USEPA RfD of 2×10^{-5} for calculating lifetime health advisory for drinking water.

IDEM Assessment and Monitoring

- HABS: IDEM samples 18 locations on 15 lakes for cyanobacteria, beginning two weeks prior to Memorial Day weekend until Labor Day. IDEM analyzes five toxins including: microcystin, cylindrospermopsin, saxitoxin, anatoxin a, and β-methylamino-L-alanine (BMAA), all by automation using the Cyanotoxin Automated Assay System (CAAS).
- Supplemental Clean Water 106 Grant: IDEM has been awarded \$83,000 in Supplemental Clean Water Act 106 funding to work with ORSANCO for additional fish tissue monitoring in five of the six navigation pools adjacent to Indiana's boarder. This monitoring will augment ORSANCO's existing fish tissue data set with additional sampling that includes two trophic feeding guild levels (TL3 and TL4) analyzed for Methylmercury and PCBs. The purpose is to provide IDEM a more robust dataset for making CWA 305(b) assessments, particularly with regard to PCBs. Previous assessments for PCBs have relied on water samples. By providing fish tissue data, this project will allow a more direct measure of fish consumption use support. This project will also include additional analyses for PFAS, which will provide the initial results needed to begin evaluating the current concentrations of PFAS in mainstem Ohio River fish. ORSANCO will conduct all the monitoring for this project over a five-year period (2021-2024) coinciding with its regular monitoring schedule for fish tissue.
- Fish tissue sampling: IDEM collected fish tissue samples in 2020 from tributaries of the Ohio River in 2020, including Tanners Creek, Laughery Creek, Silver Creek, Indian Creek, and Anderson River.
 - a. All samples are being analyzed for PCBs, metals, organochlorine pesticides, and PFAS (35 analytes). These will be the first PFAS fish tissue data from the Ohio River basin in Indiana. We have not received sample results.
 - b. Fish Tissue sampling will take place in the West Fork and Lower White River Basin as well as the Patoka River basin in 2021.
- Program development:
 - c. IDEM is working with U.S. EPA Region 5 and Tetra Tech to develop a Diatom Index of Biotic Integrity for rivers and streams.

- d. IDEM initiated the Coolwater Index of Biotic Integrity (IBI) project with U.S. EPA Region 5 and Tetra Tech to revise the biological indices for coolwater streams. In April 2021, IDEM began deploying temperature loggers at 90 sites statewide for a two-year duration. Over that two-year period, IDEM will collect macroinvertebrates and fish at least once, and water chemistry sampling three times. IDEM will have 45 additional sites for water chemistry and biological sampling in 2021 and 2022.
- e. IDEM purchased equipment to participate in the U.S. EPA Stream Regional Monitoring Network (RMN) which tracks changes in biological, thermal, hydrologic, habitat, and water chemistry data at high quality, wadeable sites over time. IDEM will deploy the equipment (weather station, continuous temperature loggers, and field cameras) at 3 fixed station sites that also have a USGS gaging station for monthly water chemistry and flow. IDEM will assess macroinvertebrate and fish communities at these stations annually.
- Targeted and Probabilistic Monitoring Program
 - a. IDEM continues targeted monitoring for watershed characterization studies (TMDL and NPS monitoring). In 2021, the watershed characterization project will take place in the [Vernon Fork Muscatatuck River](#) which is a tributary to the East Fork White River which eventually flows into the Wabash River and subsequently, the Ohio River.
 - b. IN continues probabilistic monitoring for water quality, E. coli, algae, diatoms, macroinvertebrate, and fish communities in the Patoka River Basin in 2021 (we are in the 5th cycle of probabilistic monitoring in the State of Indiana). The Patoka River is a tributary to the Wabash River which flows into the Ohio River. At a subset of 18 probabilistic sites, dissolved oxygen loggers will be deployed for a minimum of two weeks near the end of August to collect DO measurements every 15 minutes; and Ortho Dissolved Phosphorus in addition to Total Phosphorus will be collected

2021 Legislative Session

A modified form of Senate Bill 389, to eliminate Indiana’s Isolated Wetlands Rule, discussed during the last meeting, was passed in both legislatures and signed by Governor Holcomb, despite a multitude of objections from citizens, municipalities, business groups, and environmental organizations. This bill in its original form proposed to repeal Indiana’s Isolated Wetland Law, enacted in 2004 by the Republican legislature. A modified form of the bill was passed that eliminates protections for one class of isolated wetlands and weakens the protection for the remaining two classes. A task force will be convened to evaluate further revisions. Bruno will provide an update and further details about SB 389 and other IDEM legislation from the 2021 session.

Kentucky

Katie McKone reported the following:

Effective May 16, we have a new Division of Water director – Carey Johnson.

Coronavirus update

- Beginning transition to staff occupying our office again; starting June 28, staff are expected to be in the office 3 days a week as outlined by a new telecommuting policy.
- Vaccinated staff can now ride in vehicles together, making fieldwork much more achievable.
- We anticipate the Governor to make an announcement that the Commonwealth is open for business on June 11.

Water Quality Branch

- 60-day comment period opened June 4 for the combined 2018/2020 303(d) impaired waters list.
 - New to this reporting cycle is a dedicated [public notice site](#) with maps and video tutorials.
- 60-day comment period began June 7 for the 2021 Triennial Review. A virtual public listening session is scheduled for June 22 at 6 pm.
- Additional information is available on the [DOW Public Notice webpage](#) for both.
- We continue to work on assessments for the 2022 Integrated Report, where we will be updating assessments to the Ohio River, where appropriate.

Drinking Water

- A 2021 source water survey is under development, we expect to send it out this summer to public water systems, including those who treat both surface and ground water
- Source water protection story map and viewer are now available on our website
 - [Story Map](#)
 - [Viewer](#)

Surface Water Permits Branch

- Our Surface Water Permits Branch continues to develop a KPDES permitting strategy for nutrient optimization for POTWs
- We're also exploring the possibility of addressing nutrients via the MS4 program.
- We have been working closely with DNR to explore innovative ways to address coal reclamation and KPDES permitting issues.

Water Quality Certification/Water Resources Branch

- Effective September 11, 2020: Due to changes in federal regulation, the process for receiving a §401 Water Quality Certification has changed. Application instructions and requirements are [online](#).
- We're keeping a close eye on the Upcoming CWA Section 401 Certification Outreach and Engagement activities by EPA. A Federal Register notice announcing the Agency's intention to revise the 2020 Rule was published on June 2, 2021. A copy of the Federal Register notice is available at <https://www.epa.gov/cwa-401>. EPA is accepting written feedback through a docket for 60-days at [Docket ID EPA-HQ-OW-2021-0302](#).
- We're close to completing rehab work on Bullock Pen Lake Dam in Grant/Boone Counties. Serves as primary drinking water source for Bullock Pen Water District
- We're participating in FEMA Hazard Mitigation Grant Program (HMGP) briefings related to the two federally declared disasters from earlier this year – one for the ice storm and the other for the March flooding.

Watershed Management Branch

- The Kentucky Division of Water (KDOW) updated its [2019 Loads and Yields Study](#) that determines ongoing trends and evaluates progress in reducing Kentucky's nutrient load contribution to the Gulf of Mexico. This update uses new KDOW data (2018-2019) and partner data from the Ohio River Valley Water Sanitation Commission (ORSANCO). Overlapping the two data sets expands coverage of Kentucky's drainage area from 76% to 82%, while identifying out-of-state nutrient contributions.
- The KDOW [2021 Update to the 2019 Nutrient Loads and Yields in Kentucky Study](#) serves as a critical foundation for Kentucky's upcoming 2021 Nutrient Reduction Strategy (NRS) Update. The 2021 NRS Update prioritizes high yield watersheds in a data-driven approach to nutrient reduction in Kentucky. The KDOW interactive [Nutrient Reduction in Kentucky](#) map improves nutrient data and decision-making transparency by allowing users to explore nutrient loads in local watersheds, review land use, and view watershed investments from the KDOW and EPA 319 Non-Point Source Program.

Water Infrastructure Branch

- The focus is currently on figuring out how the America Recue Plan Act (ARPA) funds are going to be allocated. In addition, we are assessing the potential workload impact that the volume of projects is going to have on the review timeframe for Plans and Specifications. More communities have been ready to move forward with SRF projects in the last several months. This has resulted in an increase in the number of projects presented and approved by the KIA board and the active SRF projects the WIB is managing.
- On the SRF, KIA is due to share drafts of the Intended Use Plans any day. There will be public notification of the IUPs this month (June 2021).
- The 2021 Drinking Water Infrastructure Needs Survey Assessment (DWINSA) is under way. We are approximately 3 months into the data collection period which will end in October. There are about 50% (35 of 70) of Kentucky's Survey participants who are currently completed or actively working to complete the Survey. This is an ongoing assistance effort to be completed near the end of this FFY.

New York

Commissioner Wilson reported that NY TEC member, Jeff Konsella, has retired. Mayville, New York, in western New York, has had a major PFAS impact on its ground water drinking water supply. A study was completed and a new ground water well was constructed to avoid the PFAS contamination. However, the well is not able to deliver enough water to its communities. As a result, the communities are suing 30 entities associated with the PFAS contamination, many of which are associated with fire suppression materials.

There is a movement in NYS to address climate change through the development of wind and solar farms in western New York to supply electricity to New York City. There have been a number of drilling mud spills related to the ground work needed for electric transmission lines associated with these electric generating farms. This may become an environmental justice issue in the future as there are many poverty-stricken areas in western New York.

Ohio

Audrey Rush reported on the following items:

Surveys

In 2020, Ohio EPA conducted a bioassessment of Ohio's large river assessment units (LRAUs) in 2020. We will continue that survey and complete in 2021.

Planned large river survey sampling includes the Scioto, Hocking, Tuscarawas, Mahoning, Sandy Creek, Mohican, Walhonding, Killbuck, Wills Creek, Olentangy, Big Darby Creek, Salt Creek, Paint Creek, and Raccoon Creek.

A nutrient survey conducted in 2016 revealed a robust macroinvertebrate community and in 2020 we expected assemblages supporting our Exceptional Warmwater Habitat use designation. However, data collected during the 2020 field sampling season revealed impairment of the macroinvertebrate community in the lower Great Miami River beginning downstream of Middletown near Liberty-Fairfield Road at river mile 44. The poor macro signature continued all the way to the mouth.

In 2021, this section of the lower Great Miami River will be re-sampled for habitat, biology and water quality and evaluated to identify the causes and sources associated with the suppressed macroinvertebrate signature. Data will also be collected at select sites along Dicks Creek, which converges with the lower Great Miami River at river mile 47.61, to identify any potential contributions to the impairment observed in the lower Great Miami mainstem. The most recent biological data collected by Ohio EPA along Dicks Creek is 23 years old, so its inclusion in this targeted survey will also serve to update historical sampling data.

DERR assistance - Duck Creek – Washington County – has a once per month fish advisory for common carp and sauger due to DDT from Township Road 329, Stanleyville, to State Route 26, Norwood (Washington County). We will be either collecting fish or observing fish collection from the PRP – Cytec Industries.

Rules

1. HH rules adopted, the MCLs for the Lake Erie basin were not approved by US EPA, all other criteria were approved
2. Beneficial Use Designations – Wave 2 [3745-1-09, -16, -17, -21] Scioto, SE Ohio Tribs, SW Ohio Tribs, and Great Miami River – Interested Party Review (IPR) began 06/07/21 – comment period ends 7/7/2021
3. Biocriteria Narrative (new rule– 3745-2-03), and Use Designations and Biological Criteria 3745-1-07 – the implementation piece for NPDES that was formerly in -07 has been moved to a new NPDES rule. Clarifies when biocriteria can be used in permit decisions. IPR began 5/19/2021, comment period ends 6/18/2021
4. Beneficial Use Designations – 2020 [3745-1-08, -15, -18, -22] Updates to four basin rules (Hocking, Little Beaver, Little Miami, Chagrin) Preparing for IPR
5. Definitions and Analytical Methods, References 3745-1-02, -03 ESO began 5/24/21

6. Triennial review – sorting internal comments to send out to external stakeholders

Pennsylvania

Kevin Halloran reported on the following:

1. Shell Cracker:
 - Started water intake in January
 - Wastewater treatment plant discharging
 - First fire of cogen plant next week
 - Production spring 2022
2. Water Quality Criteria updates: published final triennial review in October 2020, approved by EPA.
 - EPA Aquatic Life Ambient Water Quality Criteria for Ammonia – equation with temperature and pH
 - EPA E. Coli criteria for Water Contact use to replace coliform based criteria
 - Toxic Substances – 73 compounds have updated criteria, 11 new human health criteria
3. The Proposed Rulemaking for Water Quality Standard for Manganese was published in the *Pa Bulletin* on July 25, 2020 (50 Pa.B. 3724). The Public Comment Period just closed on September 25, 2020. The Department is currently reviewing all the comments received during the public comment period and 3 public hearings to develop recommendation for final rulemaking that will be presented to the Department’s Advisory Committees before being considered by the Environmental Quality Board (EQB). The proposed rulemaking that was approved by the EQB establishes 0.3 mg/L for human health, and discusses two possible approaches with respect to the point of compliance – either statewide as would be consistent with our other toxic substances criteria, or it will be only applied at the PWS withdrawal as per 25 Pa. Code § 96.3(d) to be consistent with Act 40 of 2017.
4. Anticipating 2 rulemakings being published in the *Pa Bulletin* sometime in mid- to late-July; for the Final Rulemaking for the Class A3 Stream Redesignations to HQ Waters (approved at the Nov 2020 EQB) and Proposed Rulemaking for Dunbar Creek, et al Stream Redesignations (approved at the April 20, 2021 EQB)
5. PFAS statewide results were released last week. 412 totals samples, detections at 112 locations, only 2 above HAL. Two of the results were above the U.S. Environmental Protection Agency (EPA) Health Advisory Level (HAL) of 70 parts per trillion (ppt) for the combined concentrations of PFOS and PFOA: State of the Art, Inc. in Centre County, and Saegertown Borough in Crawford County. Results were non-detect for the other 10 PFAS that were tested.

Virginia

Melanie Davenport reported that VADEQ does not currently have a plan or date for employees returning to the office. Working remotely has gone well thus far. She reported that environmental justice is currently a hot topic, and they have recently created an environmental justice office. Environmental justice language is not included within their regulations, but they are currently addressing it through citizen outreach and education.

Virginia is experiencing a large expansion of solar farms at least in part due to financial incentives. Facilities are being constructed on renewable forest land and cropland, and the department is working to educate them regarding water quality protection issues.

They are currently in triennial review of standards. Areas of note are the development of instream criteria for free flowing rivers, implementation procedures for narrative criteria, and development of criteria for turbidity.

They are working with their southwest communities to obtain funding to address wet weather overflows through a new USEPA grant program available to address these issues. This a significant concern in the southwest part of the state.

West Virginia

Scott Mandirola reported the following:

Aquatic Life Assessment Rule

The Procedural rule on how to make assessment decisions is currently under EPA review to determine whether they consider it a WAS change.

WV PFAS Study update

The USGS has completed all sampling of the 277 PWS sites and has received preliminary data on 273 sites. It consists of all the state-wide drinking water intakes regulated by the WV Department of Health and Human Resources. This has been underway and an update is listed below.

- Of the preliminary results received we have 5 sites with levels above the EPA health advisory for PFOA or PFOS.
- All results are still preliminary and subject to change upon review.
- The next step is data review and report generation which is scheduled to be complete by June 2022.

WQS Update

May of this year, the DEP proposed a WQS rule change for human health criteria as required by the legislature in 2021. We have proposed to update the remaining 33 of the 56 criteria that we currently have in the rule which EPA updated in 2015. The 24 proposed during the last session have been passed. The Environmental Protection Advisory Committee met monthly from June 2020 through May 2021. The group has made recommendations to the Secretary that include updating all 33 criterion based on EPA recommendations and include a paragraph outlining a path to update any one with additional scientific data. The group did not agree on all approaches but recommended both to the Secretary.

Legislative Update

Air rules to stay consistent with federal rules.

WQS HH updates of 33 compounds.

Mining Rule update to be consistent with the Feds with penalties.

US Army Corps of Engineers

Erich Emery reported that the Corps is working on a project to investigate the effects of reservoirs on Ohio River flows during low-flow conditions, and if there are opportunities to augment Ohio River flows during those times. Another project is looking at how dams and reservoirs can be operated to maximize the ecological benefits to the Ohio River.

US Geological Survey

Jeff Frey reported that the USGS has maintained its field work during COVID, but they are still largely working remotely. They are working with OEPA to conduct sampling for load and yield analyses for suspended sediments and nutrients in a number of Ohio watersheds. They are starting a second year of HABs sampling at several sites on the Ohio River for nutrients, algal biomass, and microcystins with the intent to develop a regression model of HABs on the Ohio River. He mentioned that a report has been released on microbial source tracking for fecal contamination. The National Water Quality Network has put together a new website which allows users to look at loads and yields, also with links to the new SPARROW model.

United States Environmental Protection Agency

Dave Pfeifer reported that the USEPA has filed a notice of intent to reconsider and revise the section 401 certification rule. They will be conducting outreach and engagement on the 401 certification program. Listening sessions have been scheduled to obtain input, and registration through the website will be required for attendance. They have not returned to office work as of yet.

Power Industry Advisory Committee

Cheri Budzynski reported that utilities are concerned about implementation of the CCR rules and ELGs. They have been working on permits due to changes at facilities to address these issues. In addition, July 1 will be the first TRI reporting period for PFAS, and utilities are looking at their fire suppression systems in this regard. They are also paying close attention to House Bill 175 which would deregulate ephemeral streams because utilities have transmission lines which pass through headwaters.

Public Information Advisory Committee

Betsy Mallison reported that the committee has not met recently, but that many members are working on mini-Sweeps. Mini River Sweeps were conducted in 2020 due to COVID, and the same is being planned for 2021. They are encouraging citizens groups to engage in these mini-Sweeps.

Watershed Organization Advisory Committee

Randi Pokladnik reported the following:

1. **Quarterly meeting.** The committee met on May 28 and discussed:
 - Vice-chair update:
 - WOAC's current vice-chair, Robin Blakeman, is leaving OVEC and will be stepping down as vice-chair as of 5/31.
 - Angie Rosser agrees to stay on as chair until a new vice-chair and leadership transition plan is in place.
 - Strategic planning update: WOAC's strategic planning subcommittee met and laid out a process for a planning session to be scheduled in the upcoming quarter.
 - PFAS update:
 - Chris Tavenor continued as WOAC's representative on ORSANCO's PFAS Committee.
 - Angie and Robin were guests on WUAC's recent meeting which included a PFAS update from ORSANCO staff.
 - ORSANCO staff offered a presentation to WOAC. No major changes to the project noted since last update.
 - Member updates; areas of focus of watershed-wide included:
 - Climate, water quality, infrastructure
 - PFAS – testing, standards, biosolid issues
 - Ecosystem restoration plan research/evaluation
 - Environmental justice, water/waste water infrastructure, water affordability, septic in low-income communities
 - Mapping projects – proposed petrochem facilities, CAFOs
 - Potential conversion of recreation infrastructure to industrial sites
 - Pipelines – Falcon, MVP
 - State water quality standards
 - Regional restoration plan workgroups
 - Federal infrastructure package and Ohio River restoration
2. **Presentation to Water Users Advisory Committee.** WOAC leadership was invited to provide a presentation to WUAC focused on overlapping source water protection efforts and concerns, and included an overview of OVEC's mapping project featuring proposed petrochem related facilities in the Upper Ohio. Groups agreed to continue cross-communications and alert each other to comment opportunities on proposed facilities/permits.

POTW Advisory Committee

Alex Novak reported that the committee met last week after not meeting for some time before that. Staff presented on the Ohio River ambient PFAS study. The issue is of importance to utilities due to the presence of PFAS in biosolids, and their ability to dispose of biosolids through land application which may become difficult in the future. Landfills are presently becoming less willing to take biosolids. Adrienne Nemura with Geosyntec presented information on a petition to USEPA from several environmental groups to develop numeric nutrients criteria for the Ohio River.

Water Users Advisory Committee

Bruce Whitteberry reported the following:

The Water Users Advisory Committee (WUAC) last met on May 26 via video conference.

Sam Dinkins provided an update on preparations for ORSANCO's PFAS Study, and the committee discussed the study timing and communication strategy. Sam also provided an update on ORSANCO's source water protection and emergency response activities.

Lila Ziolkowski provided an overview of spills data from 2018-2020.

None of the facilities in attendance reported any abnormal challenges or concerns with river conditions over the past few months except for Louisville Water Company, which has started treating for atrazine run-off. This is a recurring water quality issue in their part of the river.

On behalf of the committee, I invited Angie Rosser and Robin Blakeman from the Watershed Organizations Advisory Committee to attend this past Water Users Advisory Committee Meeting. The committee had a very beneficial discussion on information exchange and potential opportunities for collaboration. Angie and Robin gave an excellent overview of WOAC priorities and an update of industrial oil and gas facilities in the Basin. We appreciate their willingness to talk with our group.

Starting in July, Chris Bobay from the Louisville Water Company will take over as Chair, and Erica Pauken with West Virginia American Water will become Vice-Chair. I look forward to Chris and Erica's leadership and fresh ideas. I have enjoyed my time as chair and look forward to staying involved with the Water Users Advisory Committee.

Review of Bimonthly/Clean Metals Monitoring Programs

A review of ORSANCO's fixed station Bimonthly and Clean Metals monitoring programs was initiated following the June, 2020 TEC meeting. A review work group of mainstem states has convened four times to develop recommendations regarding the Commission's fixed station ambient monitoring network for the Ohio River and major tributaries. The work group developed the following final recommendations:

- 1) Add DOC (dissolved organic carbon), orthophosphate, and BOD (biochemical oxygen demand) to all sampling stations.
- 2) Add four new fixed monitoring stations (Ohio River in PA, Green River, Kentucky River, and Salt River).
- 3) Evaluate Ohio River pH data to ensure that accurate sampling data are being collected.
- 4) Add alkalinity, MBAS, and osmotic pressure to monitoring stations in Pennsylvania.

Recommendations 1 and 2 have been included in the Commission's proposed budget for FY2022. Recommendation 3 will be completed in FY2022 as well, while staff will continue to evaluate the potential to include recommendation 4 in future budgets.

Proposed FY2022 Technical Program

Staff reported on several aspects of the Commission's proposed FY2022 technical program.

- Planning regular field activities for FY2022.
- Will complete four Ohio River biological pool surveys.
- Collect approximately 40 composite fish samples for fish tissue contaminants analyses.
- Complete trends analysis of PCBs in Ohio River fish tissue.
- Develop methodology for mercury in fish tissue trends analysis.
- Collection of fish tissue for PFAS analysis under IDEM 604b grant.
- Complete the Ohio River ambient PFAS survey.
- Consider development of Ohio River 305b assessment methodology for the occurrence of HABs.
- Add new stations and parameters to the Commission's ambient monitoring network.
- Consider options for utilizing available funds for ODS unit replacement.
- Investigate relocation of the St. Albans, WV ODS station to another facility on the Kanawha River.

Adjournment

The 226th meeting of the ORSANCO Technical Committee was adjourned by Chairman Pigott at 11:41 am on Wednesday, June 9, 2021.

Approved:

Bruno Pigott

Roster of Attendance

Technical Committee

Chairman	Commissioner Bruno Pigott
Illinois	Scott Twait
Indiana	Eileen Hack
Kentucky	Katie McKone
New York	Not present
Ohio	Audrey Rush
Pennsylvania	Kevin Halloran
Virginia	Melanie Davenport
West Virginia	Scott Mandirola
US Army Corps of Engineers	Erich Emery
US Coast Guard	Josh Miller
US Environmental Protection Agency	David Pfeifer
US Geological Survey	Jeffrey Frey
Chemical Industry Advisory Committee	Not present
Power Industry Advisory Committee	Cheri Budzynski
Public Interest Advisory Committee	Betsy Mallison Bialosky
POTW Advisory Committee	Alex Novak
Water Users Advisory Committee	Bruce Whitteberry
Watershed Organizations Advisory Committee	Randi Pokladnik
ORSANCO Chief Engineer	Richard Harrison
Staff Liaison	Jason Heath

Commissioners/Proxies

Douglas Conroe, Charles Duritsa, George Elmaraghy, David Flannery, Toby Frevert, Carey Johnson, Summer Kunkel, John Kupke, John Hoopingarner, John Lyons, Ron Potesta, Mike Wilson, Davitt Woodwell

Staff

Ryan Argo, Dave Bailey, Danny Cleves, Lisa Cochran, Stacey Cochran, Sam Dinkins, Tracey Edmonds, Joe Gilligan, Nick Guthier, Emilee Harmeling, Richard Harrison, Jason Heath, Melissa Mann, Adam Scott, Bridget Taylor, Greg Youngstrom, Lila Ziolkowski

Guests

Jody Arthur	IDEM
Chris Bobay	Louisville Water Company
Brad Gavin	IDEM
Madeline Genco	
Peter Goodmann	Louisville Water Company
John Hirschfield	Westlake Chemical
Jim Lazorchak	US EPA
Ron Lovan	Northern Kentucky Water District
Jordan Lubetkin	National Wildlife Federation
Sherri Mason	Penn State Behrend
Cary McElhinney	
Marc Mills	US EPA
Stacey Sobat	IDEM
John Wathen	