MINUTES
237th Meeting of the Technical Committee
Embassy Suites Riverfront
Covington, KY
February 11-12, 2025
Chair Scott Mandirola, Presiding

Call to Order

The 237th meeting of the ORSANCO Technical Committee was called to order by Chair Scott Mandirola, at 1:00 p.m. on Tuesday, February 11, 2025. Eight states, three federal agencies, and all six advisory committees were represented (Roster of Attendance see page 14). Chair Mandirola welcomed all to ORSANCO's dual in-person and virtual meeting of the Technical Committee.

Minutes of 236th Committee Meeting

ACTION: Motion passed to accept the minutes of the 236th Technical Committee meeting.

Executive Director's Report

Director Dinkins reported on ORSANCO's reorganization resulting from Richard Harrison's departure and Sam Dinkins' promotion to director. The technical staff is now distributed among three groups: biological programs under Ryan Argo, ODS and emergency response programs under Lila Ziolkowski, and water quality under Greg Youngstrom. Jenny Coldiron, Director of Finance and Administration, left and is being replaced by Bob Wehmeier. Biologisits Ryan Hudson and Bridget Borrowdale have left and are replaced by Erin Linko, formerly a Biological Program Intern.

Ohio River Water Quality Update: 2024 Water Quality Conditions

ORSANCO staff discussed 2024 monitoring activities and observations on water quality of the Ohio River and major tributaries. Flows were generally below long term average flows. In general, it was a typical year for Ohio River water quality. Criteria exceedances varied for parameters including E. coli and fecal coliform, temperature, dissolved oxygen, iron, and mercury. There was a localized, Microcystis HAB event, on the Ohio River in Louisville, which generated a Recreational Public Health Advisory.

Update on Proteus Real-Time Bacteria Monitoring

Stacey Cochran presented an update on the status of the real-time Bacteria Monitoring Pilot Project which was funded by a WV 604b grant. This project is evaluating whether a real-time monitor for E. coli bacteria is viable for the Ohio River. Work was completed over the 2024 Contact Recreation Season to collect real-time readings with the Proteus instrument, along with water samples being analyzed for E. coli in the lab. The Proteus company is currently working on an algorithm for the data collected during the 2024 season, which is necessary to translate tryptophan readings to E. coli concentrations. ORSANCO was awarded a continuation of our WV604b grant for FY2025 and will add the Fluidion ALERT One instrument to this Pilot Project. This instrument collects in situ water samples and analyzes for E. coli. A summary report of the comparison of all three methods (Colilert, Proteus, and Fluidion ALERT One) will be generated after the 2025 season data has been collected and evaluated.

Update on Ohio River HABs Research and Monitoring through the ORSANCO, EPA-ORD, and Neptune and Company Partnership

Chris Nietch, USEPA-ORD, provided an update on partnership facilitated research activities since the Ohio River HABs risk characterization tool was brought online during the 2022 bloom season. R&D completed since then has included the implementation of a 14-day ahead HABs occurrence forecast, an update of the original scripts used to produce the web application, an exploratory analysis to bring remotely sensed data related to HABs into the risk characterization, and sampling campaigns designed to help evaluate the underpinning hypothesis to the original HABs risk model, assess newer analytical methods, and to survey the extent to which benthic

cyanobacteria may pose risk to river water quality and safety. This work is providing valuable research on Ohio River HABs processes and application to Ohio River risk characterization and predictive modeling.

Analysis of Long-term Temporal Trends of the Ohio River and Major Tributaries

ORSANCO Environmental Scientist, Riley Lanfear, detailed plans to complete a temporal trends analysis of Ohio River water quality parameters. She highlighted methods and findings from similar analyses completed in prior decades using ORSANCO data. The new analysis will incorporate these prior methods, like the Seasonal Kendall test, in addition to more modern regression techniques. The results of these trends analysis will be shared with TEC at future meetings.

Biological Programs Update

Biological staff (Rob Tewes, Erin Linko, and Ryan Argo for Ryan Hudson) provided a summary of the content reviewed by the Biological Water Quality Subcommittee during their January meeting, including preliminary fish index scores, staff participation in National Rivers and Streams Assessment surveys, and plans for the 2025 field season. Aquatic Biologist, Ryan Hudson also reviewed an investigation into functional diversity measures and their potential for use in assessing Ohio River fish populations. ORSANCO staff presented results from the 2024 field season including probabilistic surveys of Montgomery and Newburgh pools, the conclusion of the 2023-2024 cycle of National Rivers and Streams Assessment surveys, and preliminary results from those assessments and special studies.

Source Water Protection and Emergency Response Programs Update

Lila Ziolkowski, ORSANCO staff, reported that ORSANCO was awarded congressionally directed spending funding through Senator Sherrod Brown in the amount of $688,000 to procure two new GCMS systems for Ohio based Organics Detection Systems (ODS) sites and procure a portable GCMS unit for use in rapid response surveillance instances to support Emergency Response and other source water response initiatives. Remaining funds will be used for integration into existing ODS network data management platform and to support creating a new spills notification database and platform to streamline communications and disseminate spills related information. There were no emergency response actions from ORSANCO, other than routine notification protocols, since the last Technical Committee meeting.

Monitoring Strategy

Jason Heath, ORSANCO staff, presented results of work by the Monitoring Strategy Committee to develop priorities for future monitoring initiatives, as well as a revised monitoring strategy document. This committee has been very active over the last two years, is well attended, and provides valuable input on ORSANCO's monitoring programs. Higher priority monitoring initiatives include PFAS, HEX Chromium, river-wide bacteria monitoring, plastics monitoring, mussel surveys, metals on tributaries, and addition of fish contaminants parameters following EPA's new guidance. A draft Monitoring Strategy was reviewed by the committee and has been submitted to EPA Region 5. The Monitoring Strategy Committee will continue to meet on a regular basis to continue discussions on priorities and monitoring programs.

New Draft National Recommended Criteria for PFAS

The USEPA recently issued draft National Recommended Human Health Criteria for three PFAS constituents, including PFOS, PFOA, and PFBS. Jason Heath, ORSANCO staff, provided an overview of the draft criteria, and how they compare to ORSANCO's 2021 Ohio River PFAS survey. Ohio River concentrations of PFOS and PFOA from the 2021 survey were generally above the draft National Recommended Criteria, while all PFBS concentrations were well below the criteria. The draft National Recommended Criteria are currently out for public comment.

Ohio River Basin Restoration Initiative

Jordan Lubetkin, with National Wildlife Federation, discussed the status of the Ohio River Basin Restoration Initiative and Restoration Plan, emphasizing the need for a federal program to support the region's restoration efforts. He outlined the plan's goals, including demonstrating the need for restoration, securing investment, and starting to see results. Jordan also mentioned the plan's focus on community-driven priorities and the involvement of tribal conservation and clean water priorities. The plan is currently in its finalization stage, with the aim of presenting it to Congress for potential investment.

He also discussed the limitations and challenges of the current plan, including data accessibility and the vastness of the region. He highlighted the difficulty in quantifying costs for certain aspects, such as habitat restoration and flood prevention. He also emphasized the importance of coordination across the 14 states, and the need for adaptive management programs. He outlined the overall report recommendations, including establishing a national higher river program, supporting tribal conservation and clean water priorities, engaging communities, and preventing additional harm. He also discussed the recommendations for each of the nine issue areas, such as water infrastructure, non-point source pollution, hydrologic modification, and habitat and species conservation. He concluded by emphasizing the need for increased investment, monitoring, and research to effectively implement the plan.

The plan is upcoming for public comment, which will be released by June. The plan aims to foster collaboration and partnerships among stakeholders to achieve shared goals. The plan is not a binding document and is intended to be a case statement for federal funding for the Ohio River Basin. Jordan also addressed concerns about the length of the original report, stating that they have edited it to be more concise and focused on the facts.

Member Updates and Interstate Water Quality Issues

Illinois

Scott Twait reported the following:

Triennial Review

An InterGovernmental Agreement (IGA) for the evaluating the Recreational Use in several waterbodies in the Chicagoland area has been executed. The University of Illinois will be doing surveys to determine the recreational use that is happening in the Chicago Sanitary and Ship Canal, Bubbly Creek, and the Brandon Pool section of the Des Plaines River this summer at access points to these waterbodies. The recreational survey is being completed to determine the recreational use as part of the triennial review.

Nutrient Loss Reduction Strategy

The Agency is working with National Great Rivers Research and Education Center (NGRREC) to develop a NLRS website that will include dashboards and interactive maps. The Agency hopes to have that completed by the end of 2025. The dashboards will be updated annually and will replace our traditional Biennial Reports.

PFAS Permit Progress

As of 2/30/25 the NPDES permit program is issuing permits that have PFAS monitoring requirements (quarterly) and requirements for BMPs/PMPs. The count includes the major municipal, major industrial, as well as the minor industrial facilities within the targeted industrial SIC codes.

- NPDES permit issued with PFAS requirements:
  - 15 Municipal
  - 18 Industrial
- NPDES permits on public notice:
  - 15 Municipal
  - 13 Industrial

Plan is still to add both monitoring and BMP requirements to the permits as they come in for renewal.

TOC vs. DOC

USEPA is moving toward using DOC in the equations to determine the toxicity of metals in some of the newer criteria. Our monitoring group has collected decades worth of TOC data, but to prepare for this, we had asked our monitoring group to also collect DOC over a year ago. We recently analyzed the data we have on lakes and streams. A separate analysis of the lake data did not show a strong relationship between TOC and DOC. However, the analysis of our stream data shows a very strong correlation between both parameters. We are now trying to decide if we can discontinue sampling for DOC, since our analysis shows that they are equivalent in our streams.

Critical Mussel Habitat

The Fish and Wildlife Service (FWS) is proposing to list large portions of several rivers as critical habitat for three mussel species in Illinois. The FWS are proposing to list critical habitat to protect the Sheepnose mussel (portion of the Kankakee River), Snuffbox mussel (portion of the Embarras River), and Spectaclecase (portion of the Mississippi River). This notice was published in the Federal Register on December 13, 2024. The document citation is: 89 FR 101100. It is a FWS listing under the Endangered Species Act. The FWS is asking for comments including any probable economic impacts and whether any specific areas should be considered for exclusion. The comment period ends February 11, 2025.

Indiana

Gabrielle Ghreichi reported the following:

Water Quality Standards

- We are working on our 2024 WQS review priorities list. We are considering adopting EPA's 2018 aluminum criteria, adopting aquatic life criteria for a few pesticides and biocides, updating Indiana's human health criteria derivation methodology in both the Downstate and Great Lakes part of our WQS rules, and are also re-evaluating our limited use designated use streams. Our public hearing to solicit feedback on list of priorities will be on December 11, 2024. The public hearing will be part of the Environmental Rules Board meeting that takes place on December 11, 2024.
- Aquatic Life methodology rulemaking update: IDEM is getting close to finalizing proposed rulemaking language for this rulemaking. IDEM is working to adopt the Great Lakes aquatic life methodology state-wide.
- U.S. EPA reviewed the Indiana 2024 303(d) List of Impaired Waters and issued a partial approval on May 17, 2024. In its partial approval, U.S. EPA concluded that IDEM's 303(d) list is not fully consistent with the requirements of Section 303(d) of the Clean Water Act and EPA's implementing regulations based on IDEM's decision to not list several waterbodies for certain metal pollutants. U.S EPA initiated a 30-day public comment period for their changes, which ended on July 16, 2024. No comments were received, and U.S. EPA issued a final action on the Indiana 2024 303(d) list on September 11, 2024. That information is available on our website: IDEM 2024 303(d) List
- N-STEPS nutrients project with EPA and TetraTech is moving along. We are working on evaluating all our nutrients-related water chemistry data, fish, macroinvertebrates and diatom datasets to evaluate potential relationships between nutrient levels and aquatic life impacts. IDEM will use this study to potentially re-examine how it assesses the impact of elevated nutrients on Indiana's warm water aquatic life use.

PFAS in Drinking Water

- Update on PFAS DW Sampling Project Phase 4 (Surface water sampling of water bodies containing drinking water intakes):
    - IDEM received an Emerging Contaminants Grant extension to study PFAS in Indiana surface water bodies that are used for drinking water
    - Initial samples were collected near the surface water intakes
    - 32 Surface Water Systems and a total of 44 intakes
    - 3 systems had PFOS or PFOA detects above Drinking Water MCLs for finished drinking water
    - Resamples have been collected and we are waiting for results.
    - Coordinating with OLQ to locate potential causes of detections above Drinking Water MCLs
    - All PFAS sample results will be posted on our IDEM website at https://www.in.gov/idem/resources/nonrule-policies/per-and-polyfluoroalkyl-substances-pfas/

Watershed Assessment and Planning

- In October, IDEM will finish sampling for the special project titled "Farmers Helping Hellbenders Initiative" in the Blue River and Indian Creek watersheds in the Ohio River basin. Water chemistry was collected monthly for 1 year, pesticides (including neonicotinoids) sampled monthly through October, and macroinvertebrates sampled once July - August. The sampling was conducted in collaboration with Purdue University and the Natural Resources Conservation Service's (NRCS) Regional Conservation Partnership Program (RCPP),

- IDEM's Fish Tissue program is wrapping up sampling in the Lower Wabash River Basin (from Lafayette to the confluence with the Ohio River). In 2025, the Ohio River Basin tributaries will be sampled. For more information or specific requests please reach out to Tim Fields (TFields@idem.in.gov).
- NPS Management Plan: Submitted a final draft to EPA. Updates to through 2029. No major changes to monitoring components; NPS Plan impacts our 319 funding, not our 205j funding, which is being used to fund ORSANCO monitoring from IDEM's end.
- IDEM and ORSANCO had an overlapping site on the Tippecanoe River upstream of SR 18 that was sampled this summer for the National Rivers and Streams Assessment (ORSANCO) and the Stream Regional Monitoring Network (IDEM). Dylan Brown (IDEM) worked with Ryan Hudson (ORSANCO) to coordinate sampling, so the events took place at least two weeks apart. IDEM conducted fall sampling for macroinvertebrates and fish community on September 3rd.
- IDEM finished probabilistic monitoring in the Upper Wabash River Basin for 2024 and will be sampling in the Lower Wabash River Basin for 2025. Probabilistic monitoring includes sampling at 38 sites for water quality (3 events spring, summer, and fall), *E. coli* (once a week for 5 consecutive weeks), diatoms, macroinvertebrate, and fish communities. IDEM is currently in the 5th cycle of probabilistic monitoring in the State of Indiana.

Kentucky
Katie McKone reported the following:

General
Public notices are now available in a viewer. Currently, the Division has 35 activities at public notice, ranging in activity type from 401 certifications, KPDES sanitary and industrial renewals, and a general permit renewal.

Kentucky's Water Health Portal, which displays 305(b) assessment results, waters designated as outstanding state resource waters, and EPA-approved TMDLs, has been enhanced to display HUC12s with 319 funded implementation, load reduction estimates for nitrogen, phosphorus, sediment, and E. coli, and watershed plans. We are in the process of finalizing updates to Chapter 4, which includes water withdrawal permits, design criteria for dams, and water supply plan requirements.

The Division has developed the Monthly Kentucky Water Resource Report, which is updated each month on the 15th. Our goal is to create a repository of data that looks and tracks rainfall, groundwater levels, lake levels, and other climate related events during each month.

In celebration of the 50th Anniversary of the Safe Drinking Water Act, the Division created a Regionalization of Public Water Systems in Kentucky viewer. We hope it will show our communities how hard we have worked to make our drinking water systems more reliable, sustainable and safe. More information is available at the provided link.

Nutrient Related
DOW continues to advance its work outlined in the Kentucky Nutrient Reduction Strategy. DOW issued its first KPDES discharge permit to a POTW with requirements for a nutrient reduction optimization study in October 2024. The nutrient optimization study will allow the POTW to identify the best combination of nutrient reduction strategies for its specific treatment system. DOW has identified over 90 POTWs on which to require nutrient optimization studies and will continue to evaluate and implement these requirements upon renewal of the facilities KPDES permits.

A HAB Recreational Advisory remains in effect for Carpenters Lake in Owensboro, which was initially reported on September 25th, 2024. Total microcystins was below detection limit in samples collected on 2/4.
The Division has a 604(b)-funded project involving Beargrass Creek that will be coordinated by MSD with USGS to look at point source and NPS nutrient inputs that contribute to seasonal HABs that appear around the mouth of Beargrass Creek and adjacent of Towhead Island. This project is part of our overall nutrient reduction strategy, and Josiah Frey is coordinating the project for the division.

We expect to publish a 2024 Nutrient Reduction Strategy Biennial Report before our next TEC meeting. The best way to stay informed is to join the distribution list for the Division's nutrient newsletter.

PFAS Related

Last year, the Division designated additional staff to increase our outreach on PFAS in wastewater. We wanted to assist permitted entities to prepare and plan for potential future regulations relating to PFAS discharges and meet the requirements of the Senate Joint Resolution 149 that called us to provide consultation and guidance on best management practices relating to PFAS discharges. We've sampled 7-8 WWTPs so far for PFAS in wastewater and/or biosolids and have several more that are interested. We are looking at some additional SOP updates relating to this type of sampling.

At Cynthiana Municipal Water Works, the Cabinet is installing an intake pump and making improvements (under a declared emergency) in order to provide an alternate water source for the water system due to PFAS concentrations in their primary source that seem to be flow dependent (low flow). Another project of interest is connecting the City of South Shore to Portsmouth, Ohio, which is in progress. The boring that extends under the Ohio River is partially complete. The $16M project depends on awarded BIL funding that is currently under review at the federal level.

Ohio

Melinda Harris reported on the following items:

Water Quality Monitoring and Assessment

Planning for 2025 field season in underway. We plan to conduct a biological and water quality survey in the Licking River Watershed.

Large River PFAS Sampling

PFAS sampling of 29 large rivers at 149 sites across the state occurred in 2023&2024 for comparison to USEPA's aquatic life criteria. Ohio EPA is currently working on a summary of the data and interactive map.

- Of the 40 compounds included in Method 1633, 9 were detected in the water column at 80% of the sampling locations
- Water column concentrations are similar to those reported by ORSANCO and neighboring states.

Water Quality Standards

Working on variance rule, stream nutrient assessment procedure, antidegradation and aquatic life criteria updates

Pennsylvania

Kevin Halloran reported on the following:

1. Triennial Review of Water Quality Standards proposed rulemaking published in the PA Bulletin in October 2023.

   PADEP presented the draft final-form rulemaking to the Agricultural Advisory Board (AAB) in April and the Water Resources Advisory Committee (WRAC) in May. WRAC voted to support the final-form rulemaking to the Environmental Quality Board (EQB).

   PADEP is scheduled to present the final-form rulemaking to the EQB at its March 11, 2025 meeting. Rulemaking documents and related materials will be made available to the public on the EQB's website approximately 2 weeks prior to the March 11th meeting. If approved by the EQB, the regulation will be submitted to the Independent Regulatory Review Commission (IRRC) for final review and action.

   17 new or updated WQ Criteria

   - 14 Human Health (HH) 1,4 – Dioxane, 2,4-D, Chloroform, Barium, Boron, Methyl ethyl ketone, 1,2,3-trichloropropane, 1,2,4-trimethylbenzene, 1,3,5- trimethylbenzene, Xylene, Acetone, Formaldehyde, Metolachlor, Resorcinol
   - 3 Aquatic Life (AL) Cadmium (updated), Carbaryl (new), Tributyltin (TBT) (new) Minor definition revisions.

2. DEP presented a proposed rulemaking for stream re-designations to the EQB in September. The EQB adopted the proposed regulations relating to Class A Stream Redesignations. These amendments were published in the Pennsylvania Bulletin on February 1, 2025, to solicit public comment. A virtual public hearing will be held at 2 p.m. on March 13, 2025. The official public comment period will conclude on March 18, 2025. Additional information regarding this proposed rulemaking, the stream redesignation process and the stream evaluation reports are available on the PADEP web site.

3. PADEP presented the draft final-form rulemaking for some updates to our site-specific water quality criteria regulations (Chapter 93, section 93.8d) to the Water Resources Advisory Committee (WRAC) in May and to the Agricultural Advisory Board (AAB) in June. WRAC voted to support presentation of the final-form rulemaking to the EQB, and PADEP expects to present this rulemaking to the EQB in 2022.

4. PFAS update: all community public water suppliers are sampling, started putting sampling requirements in NPDES permits.

5. ALCOSAN update. Completed most of the new headworks. Submitted permits applications for Ohio River tunnel, plan to start this spring.

Virginia
Jeffrey Hurst reported the following:

Quick update on Hurricane recovery efforts. We are currently in the waterway debris management phase to restore hydraulic capacity in some of our hardest hit areas of SW Virginia. These efforts are being led by our Dept. of Emergency Management and FEMA, in coordination with Virginia DEQ and our other natural resource agency partners within the Commonwealth. All wastewater treatment plants have been back online for several months now, but some are still operating at reduced capacity.

Selenium Update - DEQ held a public comment period between October 7 and December 6, 2024, for the recommended selenium criteria for protection of aquatic life for four specific streams, and their tributaries, in Buchanan County, within the Big Sandy watershed. A public hearing was held in the on November 14, 2024, in Buchanan County. At the upcoming March 2025 State Water Control Board (Board) meeting, DEQ intends to ask the Board to adopt final amendments to the Virginia Water Quality Standards (WQS) regulation (9 VAC 25-260) to include a site-specific freshwater aquatic life selenium criterion for several tributaries to Knox Creek in Buchanan County. More information is available on the Virginia Regulatory Town Hall website. https://townhall.virginia.gov/l/ViewAction.cfm?actionid=6387

Virginia is currently within our regular Legislative Session, which is scheduled to conclude on February 22, 2025. We are currently tracking a number of proposed environmental regulations at this time, and I'll plan to have a more complete update for the Summer 2025 ORSANCO meeting.

The Virginia Dept. of Environmental Quality (DEQ) approved a Notice of Intended Award (NOIA) on December 6, 2024 and posted to the DEQ Nonpoint Source Funding website. The public comment period ended January 17, 2025. DEQ intends to award approximately $1.5 million of Federal Section 319 (h) funding for Seven Watershed Improvement Projects. The grant awards are to support projects that will advance goals and milestones within implantation and watershed-based plans. Three of the seven projects are in Southwest Virginia and within the Ohio River basin. They include the Knox and Pawpaw Creek watersheds ($244,392), South Fork Holston River (almost $300,000), and the Guest River ($94,709). DEQ expects to issue contracts stemming from this Notice of Intended Award (NOIA) around October 2025, subject to the availability of Federal 319(h) funds. The next opportunity to apply for CWA 319(h) funding will be coming up again in late May/early June 2025.

And finally, I would just like to mention that Virginia DEQ's 2025 Ambient Water Quality monitoring plan will be released later this month. We have almost 100 monitoring stations planned this season, specifically within Virginia's section of the Ohio River basin for this upcoming monitoring season.

West Virginia
Scott Mandirola reported the following:

Upcoming Legislative Session starts tomorrow, February 12.

Rules for 2025 session
WQS triennial review proposal for the 2025 47CSR2
- E Coli is being proposed for change from fecal
- Addition of an alternative aquatic life use based on the completion of a UAA
- Addition of 7 HH criteria currently not in the rule. 54 of the 96 2015 EPA updates were included in the last TR, these 7 new parameters are currently in permits because there is RP based on the NPDES permitting guidelines for the particular Industrial Codes.

NPDES Fee rule is being updated 47CSR26
- 75% increase, hasn't been increased for Industrial permits since 1999, municipalities since 1992.
- If no fee increase the program will runout of money by August 2025.

Air rules
- 5 rules are being updated to incorporate new federal requirements (IBR)

Haz waste Rule
- One rule being updated to incorporate new federal requirements (IBR)

DEP has 3 legislative changes for session being proposed.
1 - NPDES fee cap removal
2 - Haz waste fee sunsets and needs to be extended
3 - Remove sunset on the design build pilot program

Permit action
- Chemours reissuance for Washington works facility is in, the company is modifying the application currently
- Chemours has been issued a second permit for a second PFA production line which has been in production since September 1. Three carbon bed treatment is required on this line to achieve 99.999 percent removal for GenX and PFOA .

PFAS Protection Act status
- USGS contract testing 106 additional finished water sources, results should be back shortly.
- WV has received a 1 million dollar grant from EPA to do public outreach for emerging pollutants in disadvantaged communities (PFAS). It has been awarded 3 virtual and one in person meeting have been held for planning with the participating NGO'S. The first outreach meeting in the communities should be held shortly
- Reporting of PFAS use by industries completed on 12/31/23. The 6 industries that have reported the use or manufacture of PFAS compounds have had their permits modified to include quarterly monitoring for PFAS, as per the Act.

DEP has received UIC Class VI primacy from EPA.

New York
Damianos Skaros reported the following:

I'd like to thank the ORSANCO board for the many accomplishment and ongoing efforts the organization continues to perform. As we look towards the year ahead, New York State continues to actively pursue and invest in a variety of environmental initiatives which promote and protect our many resources. While based within the headwaters of the ORSANCO watershed, we are a proud member of this organization. A few of the many efforts which New York State has promoted are highlighted in this report:

Water Quality Improvement Project (WQIP) Program - NYSDEC

The New York Water Quality Improvement Project (WQIP) program is a competitive reimbursement grant initiative which funds projects that address documented water quality impairments or protect a drinking water source. This highly successful program has been instrumental in funding the design and implementation of a variety of water quality projects throughout NYS. The program has worked to fund projects ranging from improvements to wastewater infrastructure to salt storage structures, to streambank stabilization projects.

In 2024, this highly competitive program and others similar ones, have resulted in over $13.5 million being granted by New York State to projects within the Allegany Watershed. The WQIP program within New York will continue again in 2025, helping to fund water quality improvement projects throughout New York State.

Nutrient Guidance Values - NYSDEC

In December of 2024, NYSDEC released new water quality guidance values (GVs) that will advance the State's regulation of the nutrient phosphorus in ambient
freshwaters. The intent of these new GVs is to protect human health and aquatic life in waterbodies throughout New York and the Allegany Watershed. The public comment period on the new values extends through February 24, 2025.

Septic System Replacement Fund | Environmental Facilities Corporation

New York State's Septic System Replacement Fund Program, which focuses on improving water quality by providing funds to counties to help homeowners replace cesspools and septic systems that are adversely impacting designated waterbodies will continue into 2025; with both Chautauqua and Allegany Counties participating in the program. This effort will continue to improve water quality in key waterbodies throughout the watershed.

Chautauqua Lake Internal Loading Studies

New York State Department of Environmental Conservation (NYSDEC) has initiated an internal loading study of Chautauqua Lake, which is designed to better understand the phosphorus sources and loadings within the system. By fully understanding Chautauqua's nutrient system, efforts to improve water quality, reduce harmful algal blooms, and promote ecosystem health can be better strategized.

US Geological Survey

Jeff Frey reported the following:

Stream gages

- No changes additions or losses of stream gages for Ohio-Kentucky-Indiana (OKI), West Virginia-Virginia (WV-VA), Pennsylvania (PA), and New York (NY) Water Science Centers

There are new cameras associated at several Ohio River Basin stream gages:

- McAlpine L&D site in Louisville https://waterdata.usgs.gov/monitoring-location/03293551/#dataTypeId=continuous-00065-0&period=P7D&showMedian=false
- Jenkins, KY which is also a LoCAS emergency alert system mentioned at the last meeting https://waterdata.usgs.gov/monitoring-location/371016082381001/#dataTypeId=continuous-00065-0&period=P7D&showMedian=false
- Soon at Cincinnati on the Ohio River (link not available yet).
- https://apps.usgs.gov/hivis/ is the site you can see cameras at gages across the nation.

Key meetings

- ***Jun 23-26: Barge safety meeting in DC*** with key cooperators to potentially identify ways USGS streamgages could be leveraged to improve barge safety on the Ohio River (Pete Cinotto will attend)

Reports

Harmful Algal Blooms (HABs)

- Zhang, C., McIntosh, K.D., Sienkiewicz, N., **Stelzer, E.A.**, Graham, J.L., Lu, J., 2024, **qPCR-based phytoplankton abundance and chlorophyll a: A multi-year study in twelve large freshwater rivers across the United States**: Science of The Total Environment, v. 954, 19 p., https://doi.org/10.1016/j.scitotenv.2024.175067 (September 19, 2024)

- Gorney, R.M., Nystrom, E.A., Stouder, M.D., St. Amand, A.E., Sauve, C., Clark, D., **Stelzer, E.A.**, Givens, C.E., Graham, J.L., 2024, **An evaluation of cyanobacterial occurrence and bloom development in Adirondack lakes**: Lake and Reservoir Management, published online 5 Nov 2024, 17 p., https://doi.org/10.1080/10402381.2024.2406283 (November 5, 2024)

Water Hazards

- **Ostheimer, C.J., and Whitehead, M.T.**, 2024, **Flood-inundation maps for the Cuyahoga River in and near Independence, Ohio, 2024:** U.S. Geological Survey Scientific Investigations Report 2024–5122, 16 p., https://doi.org/10.3133/sir20245122
- **Whitehead, M.T., and Ostheimer, C.J., 2024, Flood-inundation maps for the Cuyahoga River at Jaite, Ohio, 2024:** U.S. Geological Survey Scientific Investigations Report 2024–5115, 12 p., https://doi.org/10.3133/sir20245115.
- **VonIns, B.L., and Koltun, G.F.**, 2024, **Low-flow statistics computed for streamflow gages and methods for estimating selected low-flow statistics for ungaged stream locations in Ohio, water years 1975–2020 (ver. 1.1, October 2024)**: U.S. Geological Survey Scientific Investigations Report 2024–5075, 37 p., https://doi.org/10.3133/sir20245075.

PFAS

- **McAdoo, M.A., Connock, G.T., and Messinger, T., 2022, Occurrence of per- and polyfluoroalkyl substances and inorganic analytes in groundwater and surface water used as sources for public water supply in West Virginia: U.S. Geological Survey Scientific Investigations Report 2022–5067, 37 p.,** *https://doi.org/10.3133/sir20225067.*
- And here is a link to the ***WV/VA WSC*** PFAS website that shows all sample locations and describes both completed and ongoing studies: PFAS Sampling Locations

Water Quality

- Conaway, C.H., **Baker, N.T.**, Brown, C.J., Green, C.T., and Kent, D.B., 2025, **Prioritizing US Geological Survey science on salinization and salinity in candidate and selected priority river basins**: Environmental Monitoring and Assessment, v. 197, article 59, 31 p., https://doi.org/10.1007/s10661-024-13264-z
- Hubbard, L.E., **Stelzer, E.A.,** Poulson, R.L., Kolpin, D.W., Szablewski, C.M., and Givens, C.E., 2024, **Development of a large-volume concentration method to recover infectious avian influenza virus from the aquatic environment: Viruses, v. 16, no. 12, published 10 Dec 2024, 14 p., https://doi.org/10.3390/v16121898.**
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  This professional paper is a multichapter report that assesses water availability in the United States for water years 2010–20.
- Integrated Water Availability Assessments | U.S. Geological Survey

GIS

- Annual NLCD (National Land Cover Database)—The next generation of land cover mapping | U.S. Geological Survey

Industry Advisory Committee
Kathy Beckett reported the following:

The committee has been communicating regularly via emails, but elected not to meet in advance of this meeting. There has been a fair amount of transition issues that are impacting the regulated community, as you might guess through the change of various administrations. We will be deciding to meet later before the next meeting in June. We will have an additional report to you at that time. The committee applauds the monitoring strategy work that is ongoing and finds extraordinarily valuable the PFAS characterization of the Ohio River. This is a significant policy issue and regulatory dilemma that industry is trying to prepare for as to how best to manage the industry.

The Committee recommends dropping the chemical adjective because this industry group is more than chemical. It has been discussed that the name doesn't match the context of this committee so we recommend it be updated.

Finally, the committee applauds the heavy lifting of the Strategic Communications Plan and looks with interest at the 501 of the organization. Often times the industry has a number of grant funding opportunities that are limited to 501c3 and we see an opportunity for synergy there. So we be looking into the future to see if we can find ways to collaborate.

Power Industry Advisory Committee
Cheri Budzynski reported the following:

Petition for Review – In light of the new administration, the DOJ has requested an abeyance to these challenges subject to review.

ELG – Fifth Circuit
Legacy CCR Rule – DC Circuit

Public Information Advisory Committee
Betsy Mallison Bialosky reported the following:

PIACO met in late January and again this week to review the new strategic communications plan that Annette Shumard debuted yesterday at the Roundtable. PIACO has spent considerable time over the last year in discussing this communication plan and providing input into various outreach strategies. We acknowledge and salute Annette's efforts to get the plan done. It was no small feat and we are behind it 100 percent.

We believe that the communications plan will bring consistency and improvement to ORSANCO's reputation. The plan includes the formation of a new Task Force that will combine the efforts and knowledge of our partners, stakeholders and river communities to help spread the word about ORSANCO's activities and expertise. We also believe there is a wealth of information to be mined from the technical committee and its efforts should be actively interwined with the efforts of the Task Force and communications efforts.

PIACO will continue to work with the communications staff to review and refine this communications strategies as time goes along and look forward to its implementation.

Watershed Organization Advisory Committee
Heather Hulton VanTassel reported the following:

Thank you for the time and consideration when it comes to hearing from the Watershed Organizations across the Ohio River Basin.

We would like to thank ORSANCO for expanding their focus on plastics and PFAS as emerging contaminants and increasing efforts around those contaminants. The Watershed Organizations across the basin would like ORSANCO to consider reaching out to those organizations conducting plastics, PFAS, or other novel contaminant work to amplify and utilize the work and data of those organizations when monitoring funds are limited. Our data could also be used to help support ORSANCO's efforts to seek additional funds to expand their monitoring.

As a collective, we will continue to advocate for the Ohio River Basin Restoration Plan and federal designation. We would like to emphasize the importance of recognizing the threats and challenges of our basin, including legacy and current industrial pollution in our watersheds. While it can be politically challenging to bring light to these ongoing pollution sources, we cannot come together as a watershed to resolve these issues without first addressing the problem. The Ohio River Basin is worth restoring and protecting, and addressing industrial pollution is a necessary step towards progress.

We also recognize the uncertainty when it comes to federal funding at this time. We encourage ORSANCO to continue to put efforts towards environmental justice in their monitoring and educational efforts across the basin. Additionally, there are organizations still working on environmental justice issues, and we encourage ORSANCO to utilize those organizations as resources during this time.
Thank you for your time and consideration of these comments from the Watershed Organizations Advisory Committee.

Water Users Advisory Committee
Chris Bobay reported the following:

The Water Users committee last met on January 28 and 29, 2025, in Wilder, KY.

Source Water Protection/Spill Response
Water Users remain focused on source water protection and emergency response efforts. Consider this: during our time together this week, we had two reported incidents, a diesel tanker spill near Pittsburg and styrene barge collision near Paducah. This underscores the importance of the ODS network and the critical role ORSANCO plays in supporting the drinking water community in spill notification and response.

ODS Network
ORSANCO staff and ODS sites reported no river VOC detections in the past quarter. A few of the ODS sites reported operational issues due to cold weather and freezing sample lines. ORSANCO staff updated the Committee on the status of the CDS grant to fund improvements of the ODS network which include two new GCMS installations and 1 portable GCMS to support field activities, as well as enhancements to data management and notifications within the network. We commend ORSANCO staff for their work to secure this funding and look forward to supporting them on implementation in 2025.

Emerging Contaminants
Water Users also remain focused on emerging contaminants, in particular those that have potential to threaten the quality of drinking water supplies, or those that are otherwise challenging to treat and remove effectively through conventional means. During our last committee meeting, we devoted a good portion of our agenda to the topic of micro- and nanoplastics. We invited national experts to present on the state of science with respect to analytical methods and instrumentation and emerging standards for classification and numeration of different plastics. Additionally, many of our members are actively involved in national research on method development and are working to understand challenges associated with the separation and quantification of plastics in water samples. Note: a 2024 NAS study on nanoplastics found that bottled water contained 20,000 particles per liter, orders of magnitude more than tap water.

PFAS Update
We also remain laser focused on PFAS. Committee members discussed recent PFAS trends from routine samples collected at drinking water intakes. Recent Ohio River GenX trends are very concerning and, if unmitigated, could threaten water system compliance with the new PFAS MCLs. I shared these results with the Technical Committee yesterday and would invite all of you to view that presentation. I've had some very constructive and encouraging discussions with many of you about this over the past few days and look forward to working with you to explore opportunities for additional protections for drinking water systems, including notification of permit exceedances and additional sampling. Water Users expect there to be further updates on this important issue which we will be monitoring closely over the coming months.

The Committee will meet again on May 20 and 21, 2025. This will be a joint meeting with the POTW committee.

POTW Advisory Committee
Reese Johnson reported the following:

The most recent POTW Advisory Committee Meeting was held on Thursday, January 23, 2025. ORSANCO hosted a virtual meeting and representatives from SD1 of Northern Kentucky, Cincinnati MSD, and Louisville MSD participated virtually.

The committee's main agenda item was to hear the details of a demonstration project for low-cost water quality sensors with internet access points that ORSANCO is working on with the Cleveland Water Alliance and Limno-Tech. Ed Verhamme from Limnotech and Ebie Holst from Cleveland Water Alliance presented an overview of their work. They have built a network of sensors and gateways to collect data on water quality parameters such as chlorophyll, dissolved oxygen, and temperature. The data is used by utilities, research institutions, and recreational users. The team also discussed their work on oil and chemical spill detection and response, with a focus on identifying high-risk areas and deploying sensors to monitor for hydrocarbons. The Cleveland Water Alliance has an open innovation challenge to promote the development of new sensor technologies with the goal of creating a smart, connected sandbox for IoT technologies to improve water quality monitoring and disaster response. The presentation led to a discussion about the deployment of water quality monitoring devices on the Ohio River, particularly in the Cincinnati/Northern KY region. The initial timeline for the project has a deadline of June 30th for the deployment of devices. We discussed the potential for raising funds to continue the project beyond this deadline, as well as the potential for expanding the project to include more stakeholders. Cincinnati MSD has followed-up already to explore joining the collaboration with the addition of a water quality sensor near the mouth of the Mill Creek into the Ohio River and ORSANCO staff asked about current monitoring technology for E. coli. The presenters responded that they are still searching for a hardy device for natural environments and all agreed on the challenge of finding a real-time E. coli sensor.

Our second agenda item was an update on ORSANCO's Water Quality Monitoring Program. ORSANCO staff member Stacey Cochran gave a quick update on the Proteus water quality monitoring sonde pilot study. She shared that they had completed all 35 rounds of sampling for the pilot study and were waiting for an update of the algorithm from the manufacturer, as the initial attempts to correlate the data were weak. A full report-out was provided separately at the TEC meeting. ORSANCO also purchased a Fluidion, a new technology for water sampling, and planned to run it side by side with the Proteus. It has its pros and cons, but the search for an effective E.coli sensor continues in earnest.

Finally, in preparation for our next POTW Advisory Committee meeting, which we are planning to hold jointly with the Water Users Advisory Committee in May 2025, we members discussed our experience with PFAS sampling to date. Both Cincinnati MSD and Louisville MSD have done some proactive testing to explore the presence of PFAS in their wastewater, and SD1 of NKY will be collecting samples from their collection system soon. So, we are beginning to get a picture of what PFAS regulation could impact at our plants, and look forward to discussing this in more depth with our colleagues at our upcoming joint meeting.

Next Technical Committee Meetings
The next Technical Committee meeting will be June 10-11, 2025, in Morgantown, West Virginia.

Comments by Guests
There were no comments by guests.

Adjournment
The 237th meeting of the ORSANCO Technical Committee was adjourned by Proxy Commissioner Mandirola at 11:47 a.m. on Wednesday, February 11, 2025.

Approved:

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Proxy Commissioner Scott Mandirola

Roster of Attendance

Technical Committee

Chairman	Commissioner Scott Mandirola
Illinois	Scott Twait
Indiana	Gabrielle Ghreichi
Kentucky	Katie McKone
New York	Damianos Skaros (virtual)
Ohio	Melinda Harris (virtual)
Pennsylvania	Kevin Halloran (virtual)
Virginia	Jeffrey Hurst
West Virginia	Scott Mandirola
US Army Corps of Engineers	Erich Emery (virtual)
US Coast Guard	TEC representative not present
US Environmental Protection Agency	David Pfeifer (virtual)
US Geological Survey	Jeff Frey (virtual)
Chemical Industry Advisory Committee	Kathy Beckett
Power Industry Advisory Committee	Cheri Budzynski
Public Interest Advisory Committee	Betsy Mallison Bialosky (virtual)
POTW Advisory Committee	Reese Johnson
Water Users Advisory Committee	Chris Bobay
Watershed Organizations Advisory Committee	Heather Hulton VanTassel (virtual)
ORSANCO Chief Engineer	Samuel Dinkins
Staff Liaison	Jason Heath

Commissioners/Proxies

Douglas Conroe, George Elmaraghy, David Flannery, Toby Frevert, Sarah Jon Gaddis (virtual), Bruce Herschlag (virtual), John Hoopingarner, James Jennings, John Kupke, John Lyons (virtual), Ron Potesta (virtual), Lou Wallace (virtual), Mike Wilson (virtual)

Staff

Ryan Argo, Bridget Borrowdale, Alexis Brandenburg, Elizabeth Burton, Nick Callahan, Daniel Cleves, Stacey Cochran, Sam Dinkins, Tracey Edmonds (virtual), Nick Guthier (virtual), Emilee Harmeling (virtual), Jason Heath, Riley Lanfear, Erin Linko, Annette Shumard, Adam Scott, Rob Tewes, Rachel Toney, Jamie Tsiominas, Greg Youngstrom, Lila Ziolkowski

Guests

Duke Adams (virtual)	PA DEP
Yetunde Agbesola	Illinois EPA
Scott Bessler	Metropolitan Sewer District of Greater Cincinnati
Frank Borsuk (virtual)	US EPA
Karina Bynum (virtual)	Tennessee Department of Environment and Conservation
MSTC Michael Callinan	US Coast Guard MSD Cincinnati
Pete Cinotto (virtual)	USGS
Melissa Conner (virtual)	
Jim Gibson	SD1
Peter Goodmann	Louisville Water Company
Jim Goodrich (virtual)	US EPA
Ed Hammer (virtual)	US EPA
Richard Harrison	Northern Kentucky Water District
John Hirschfield (virtual)	Westlake Corporation
MST1 Jean Jimenez-Sosa	US Coast Guard MSD Cincinnati
Rayna Laiosa (virtual)	The Chemours Company
James Lazorchak (virtual)	USEPA
Jordan Lubetkin	National Wildlife Federation
John Lyons	Strand Associates
Christopher Nietch	US EPA
MST2 Will Quinby	US Coast Guard MSD Cincinnati
Nick Reif	KY Division of Water
Charlise Robinson (virtual)	WV Rivers

Guests (continued)

Suresh Sharma (virtual)	
Ryan Sherman (virtual)	Illinois EPA
Diane Tancl (virtual)	US EPA
Daymond Talley (virtual)	Louisville MSD
Jeff Thomas	EPRI
Matt Thompson (virtual)	
Nicole Tremblay (virtual)	Louisville Water Company
Jit Weir (virtual)	IDEM
Bruce Whitteberry (virtual)	Greater Cincinnati Water Works
MST2 Tabitha Woolery	US Coast Guard MSD Cincinnati