

**MINUTES**

**200<sup>th</sup> Meeting of the Technical Committee  
The Brown Hotel  
Louisville, Kentucky  
October 9-10, 2012**

**Chairman Toby Frevert, Presiding**

(Note: Power Point presentations from this meeting can be found on the ORSANCO website: [www.orsanco.org](http://www.orsanco.org))

**Call to Order**

The 200<sup>th</sup> meeting of the ORSANCO Technical Committee was called to order by Chairman Frevert at 1:00 pm EST on Tuesday, October 9, 2012. Seven states, two federal agencies and four Commission advisory committees were represented. (For Roster of Attendance, see page 15.)

**Minutes of 199<sup>th</sup> Committee Meeting**

**ACTION:** Motion passed to accept the minutes of the 199<sup>th</sup> Technical Committee meeting.

**Chief Engineer's Report**

Mr. Tennant reported on a number of items:

***Spill Reporting*** – Staff has been working with Senator Rockefeller's office to put language into the Coast Guard appropriation bill which will result in ORSANCO being able to receive all spill information from the National Response Center. Language has been inserted into the appropriations bill for the US Coast Guard that requires them to provide ORSANCO with complete information on spills.

***Commission Committee Structure*** – Mr. Tennant reported that the Commission has formed an ad hoc group to review the Commission's committees and that they are seeking input from TEC regarding its subcommittees.

***Workshop on the Value of Water*** – Mr. Tennant reported that he attended a workshop on the value of water that was also attended by former Commissioner Jeff Eger. The workshop seemed to focus on water withdrawal issues while not addressing issues such as recreation and transportation, so it may significantly undervalue water as a whole. A draft report is due out in December.

***Ohio River Basin Alliance*** – Several staff members attended the ORBA meeting just recently in Pittsburgh. Jerry Schulte is on the Steering Committee, Sam Dinkins provided a presentation, and Jeff Thomas was the lunchtime speaker on the Ohio River Basin Fish Habitat Partnership.

**Trading Program Signing Ceremony** – There was a signing ceremony held in August to kick off the pilot portion of the Ohio River Basin Trading Program. Commissioners Tom Easterly and Scott Nally, and proxy Bruce Scott, along with their counterparts from the conservation or agriculture agencies, signed an agreement to move forward with the pilot program on behalf of their states. This action received a lot of press attention.

**Staff** – Mr. Tennant congratulated Donna Beatsch on reaching her 40<sup>th</sup> year of employment with ORSANCO.

### **2012 Monitoring Activities and Water Quality Conditions**

Staff presented an overview of 2012 monitoring programs and summer water quality conditions. River flows were generally somewhat below long-term averages for the summer. From the contact recreation monitoring program, violations of the monthly bacteria standards ranged from one hundred percent of the summer months in Pittsburgh to twenty percent of the months in Huntington and Cincinnati, while the other major CSO cities fell somewhere in between. Very few short-term violations of the dissolved oxygen standard occurred, while violations of the temperature standard occurred during much of July and early August at Smithland. Louisville Water Company experienced taste & odor issues during the week of July 19 attributed to the presence of the taste and odor producing compound MIB (2-methylisoborneol). Two weeks later Evansville Water experienced a similar taste and odor incident, probably related to the Louisville incident. From the Wabash monitoring project, high algae counts and low dissolved oxygen levels were experienced during parts of the summer. A low flow survey was conducted at three Ohio River locations for one hundred twenty three pollutants for which ORSANCO has water quality criteria but does not monitor. Detections of several pollutants were measured but no violations of their water quality criteria.

### **Total Dissolved Solids Project**

Sam Dinkins provided an update on the Ohio River Users Program study to characterize dissolved solids concentrations in the Ohio River and select tributaries. Weekly samples have been collected at 11 mainstem locations and on five tributaries (Allegheny, Monongahela, Beaver, Muskingum, and Big Sandy Rivers) since December of 2011. The highest TDS concentrations observed to date have been from the Muskingum and Big Sandy Rivers with peak levels of 584 mg/L and 579 mg/L, respectively. TDS concentrations in the Ohio River have not approached the Commission's 500 mg/L standard, with the highest level observed to date at 368 mg/L. These moderate levels occurred even during lower flows in late summer and early fall when conditions might be expected to result in higher TDS concentrations. The sampling is scheduled to conclude in December 2012 and a full report will be completed in early 2013.

### **Ohio River Bacteria TMDL**

In 2012, over sixty percent of the Ohio River was designated as impaired due to bacteria concentrations, which is consistent with previous years. In 2006, US EPA Region 5 began working on a bacteria TMDL for the Ohio River, with public kickoff meetings in 2009. Data gaps were identified by modelers, and as a result, additional tributary bacteria data was collected by ORSANCO in 2011-2012 for support of the modeling effort necessary to complete the TMDL. Thirty-seven direct tributaries of the Ohio River were sampled for *E. coli*, total coliforms, and fecal coliforms to better estimate their bacteria loading to the Ohio River. Results of this study showed that higher medians tended to occur during November and March which are not in the recreation season when bacteria standards apply. Also, twelve

of the thirty-seven tributaries had medians above ORSANCO's maximum criterion of 240 cfu/100mL. Along with the sampling, the USEPA research facility in Cincinnati asked ORSANCO to collect samples for their qPCR study. The results of this study are still pending. In September 2012, the TMDL work group met to discuss the computer model for the TMDL. The HEC-RAS model was selected to replace the originally selected QUAL2 model due to its advancements in hydrologic simulations. According to USEPA, a review of the draft will be available for the states by the end of the first half of 2013.

### **EMAP/GRE Project**

A draft final report has been submitted to USEPA and accepted. A final report is being prepared by staff and is due to USEPA by December 31, 2012. The report will consist of an executive summary and a series of six manuscripts to be published in peer-reviewed journals. The manuscripts will be:

- Benthic trawling as a supplement to electrofishing for assessing Ohio River fish communities.
- Identification of instream abiotic gradients on the Ohio River.
- Creation of multi-metric macroinvertebrate indices to evaluate collection methods on the Ohio River.
- Development of an Ohio River periphytic diatom index.
- The relative effects of environmental variables at various spatial scales on the biotic condition of the Ohio River.
- Creation and implementation of the modified Ohio River Fish Index (mORFI<sub>n</sub>).

### **Ohio River Basin Fish Habitat Partnership (ORBFHP)**

ORSANCO biologists have been involved with the creation and development of the ORBFHP (a working unit of the USWFS initiative, the National Fish Habitat Partnership) since 2009. Jeff Thomas has served as co-chair of the Science Committee until recently agreeing to serve as Chair of the Steering Committee, with Ryan Argo succeeding him as Chair of the Science Committee.

The mission of the partnership includes protecting and restoring aquatic habitats (including water quality) in priority areas of the Ohio River basin, excluding the Tennessee and Cumberland river basins (due to overlap with the existing Southeast Aquatic Resources, or SARP). Recently, in coordination with several other fish habitat partnerships (FHPs) across the Midwest, a contracting firm (Downstream Strategies) was hired to streamline the efforts of the FHPs to determine priority areas within their geographic boundaries through statistically-driven aquatic habitat assessments. Each assessment consisted of pairing landscape-scale predictor variables with individual biological response variables, or modeling endpoints. The predictor variables consisted of any environmental factors that could affect the biological endpoint and could be assigned a value for every stream segment in the entire Ohio River Basin (including the Tennessee/Cumberland, due to participation by SARP). Predictor variables included both natural (elevation, air temperature, surficial/bedrock geology, etc) and anthropogenic (land use, presence of dams, presence of mines, etc). These data have been compiled for every stream in the basin and are available upon request.

Downstream Strategies ran seven models for the Ohio River basin using boosted regression trees to predict biological endpoints for every stream segment based on the relationships of each of seven response variables with the predictor variables. The modeling endpoints (response variables) included:

1. Intolerant Mussels Presence/Absence
2. Smallmouth Bass P/A
3. Great River Species P/A
4. Small Streams Signature Fish Index
5. River, Smallmouth, & Shorthead Redhorse P/A
6. Percent Intolerant Individuals (Fish)
7. Modified Index of Centers of Diversity (Fish)

Response variable data used to train the models came from fish and mussel community databases built by the partnership from state-collected datasets. These databases are also available upon request.

The final results of the seven models were aggregated to identify priority HUC 8 watersheds in which the ORBFHP can focus protection and restoration efforts. In addition, a GIS-based decision support tool is currently being developed for the partnerships. This tool, based on the results of the habitat assessment models, will allow watershed managers at any scale to review “what-if” scenarios. The tool should allow users to quantitatively estimate the downstream effects of individual management practices on aquatic resources of interest. The GIS tool, along with all raw data, model results, and summary reports is currently being made available online ([www.midwestfishhabitats.org](http://www.midwestfishhabitats.org)).

### **National Rivers and Streams Assessment**

The National Rivers and Streams Assessment Project (NRSA) is a USEPA initiative that began in 2008. Its purpose was to generate statistically-valid and environmentally relevant reports on the condition of the nation’s water resources. Throughout 2008 and 2009, ORSANCO biological staff participated in this project by lending expertise to national crew training, as well as completing 27 sites. Since the completion of the first NRSA project, several products have been developed by USEPA that demonstrate preliminary biological condition ratings determined by multi-metric indices (MMIs) for fish, periphyton and macroinvertebrates. Initial results indicate that 55.3% of the nation’s waters are in poor condition, 23.2% in fair condition and 20.7% in good condition. Preliminary results of the individual MMIs used in the overall condition rating demonstrate similar results.

ORSANCO has been solicited to participate in the second NRSA scheduled for 2013-2014. The project would entail completing at least 31 sites. The work would provide significant surplus funds for use in other ORSANCO projects as well as provide information necessary to determine the value/importance of the NRSA to the Commission.

The Technical Committee requested that staff present USEPA’s NRSA assessment methodologies and results at its February 2013 meeting.

### **USGS National Water Quality Assessment Program**

Mr. Peter Van Metre with the USGS presented on the Midwest Stream-Quality Assessment which is a collaboration between the USGS’s NAWQA and CERC programs, and the USEPA’s NRSA program. The regional stream quality assessments for the Midwest will involve one hundred sites monitored frequently over one season/year. Goals of the project include determining the status of stream quality for multiple indicators (including pesticides, nutrients, sediment, toxicity, biological responses, habitat and will also include modeling), identifying relationships between physical/chemical and ecological condition, identifying relationships between individual streams and watersheds, and modeling to predict ecological

responses to stressors. Of the 100 sites, 50 will be random/probabilistic sites while 50 will be targeted to cover the various stressor gradients such as reference, urban, agricultural, and local priorities. Monitoring will begin in 2013.

### **Status of Water Resources Studies**

An update on the Commission's water resources efforts was provided by Sam Dinkins. Staff is currently working on a series of studies to 1) evaluate current and future water management issues, 2) review the existing laws and regulations in-place which govern water resources in the Basin, and 3) to ultimately define the desired role for ORSANCO in addressing water quantity issues. The Water Resources Initiative is a three-year effort funded through private foundation grants.

Mr. Dinkins noted that with the field season slowing, progress has picked up on the water resource characterization studies as more staff time can be devoted to the effort. Staff is currently compiling information from the states and federal partners on various issues including the basic hydrology of the system, water use and a review of the various state laws pertaining to water management. The next areas to be addressed will focus on inter-basin transfers and potential impacts of climate change. The target completion for the characterization studies is June 2013.

The Governors' Water Resources MOU was also discussed. This document would serve as an endorsement by the states for a defined Commission role in water resources management. The Water Resources Committee has finalized the language of the MOU document and is ready to be advanced to the Governors for signatures. Support for the agreement has been expressed by members from four states: Indiana, Kentucky, Ohio, and West Virginia. Discussions are still ongoing to secure support from Pennsylvania. It is unlikely the remaining states will elect to join the agreement at this time. The next meeting of the Water Resources Committee is scheduled for late November.

TEC discussed, and there was general agreement on, the need for the development of information on temporal consumptive uses for surface water and ground water.

### **Interstate Source Water Protection**

ORSANCO, in conjunction with Ohio EPA and West Virginia Department of Health and Human Resources participated in the development of a multi-utility source water protection plan for drinking water utilities in the upper Ohio River. Source water protection brings together all aspects of the Commission's authorities and responsibilities, focusing them on the protection of the waters of the Ohio River to protect its use as a drinking water source. USEPA initially formalized the concept of source water protection through the groundwater/well head protection program, developing strategies to protect drinking water utilities using ground waters as their source. This concept grew to embrace development and implementation of similar strategies nationally, for utilities using surface water as their source.

Source water assessments have been completed for all Ohio River drinking water utilities. Source water assessments identify the risks upstream of an intake that could compromise drinking water quality. Source water protection plans identify strategies for managing those risks.

From the Ohio state line at Ohio River mile 40, to Ohio River mile 86, there are eight drinking water intakes, four on each side of the river. Three of the four on the Ohio side elected to work jointly with Ohio EPA in the development of a joint source water protection plan. In addition, ORSANCO contacted West Virginia drinking water intakes to gage their interest in participating. At this point, only one of the West Virginia based intakes has expressed an interest in participating in the source water protection plan.

Following the development of the plan, the third upper river source water protection meeting was held in Steubenville, Ohio to roll out the plan to all upper Ohio River interests, municipal and industrial alike. Participants at the meeting represented the towing, manufacturing and petroleum industries. Participants agreed that annual meetings should continue to advance the concept and promote responsible use of the river.

### **Pike Island Geographic Information System**

An effort to create a comprehensive geographic information system, GIS, for the Pike Island pool of the Ohio River has been discussed and supported by both the Upper Ohio River Focus Group, and the drinking water utilities participating in the development of the Upper Ohio River Source Water Protection Plan. Approval has been received from USEPA R-3 emergency response section to support the development of the technical layers, which would be provided by both Ohio and West Virginia GIS personnel. Support has been requested from USEPA R-5 FIELDS team to support the development of the front-end or search form for the project. No response has been received from the FIELDS group to date.

The GIS would allow for and provide searchable information such as the location of all discharge permits, their constituents and amounts/concentrations, so a user could query the data set and learn how much of any given constituent is being discharged into a user defined stretch of river, i.e., how much cadmium is being discharged into the Pike Island pool from all permitted outfalls. This could be structured to provide for a shore-specific query, i.e., how much is being discharged from the West Virginia side versus the Ohio side. Locations of as many attributes as possible would be included in the coverages.

### **ODS Renovation**

Federal funding has provided the opportunity to upgrade the entire Organics Detection System. Through September 30 of this year, 5 sites have been upgraded and are operating gas chromatographs with mass spectrometers, one former ODS site has been brought back online using an online (flow-through) gas chromatograph with an argon ionization detector, and one new ODS site has been established with the assistance of KY DOW also using the online GC.

Approximately half of the project funds have been expended to date. The incidence of false detections has dropped 90% at sites with the new equipment. The project will continue until all sites are upgraded. Funds to maintain the new equipment will need to be added to the Commission's FY15 budget, as all such funds were removed from the Commission's ODS budget in FY10.

### **Triennial Review of Pollution Control Standards**

The Pollution Control Standards Committee will be proposing the following revisions to the full Commission at their meeting on Thursday:

- 1) A reorganization of the standards document.
- 2) Revised non-summertime temperature criteria for the protection of aquatic life.

- 3) Addition of a temperature criterion for the protection of human health resulting from body contact with the river.
- 4) Removal of the acute aquatic life selenium criterion (but retaining a chronic criterion).
- 5) The following revisions to contact recreation criteria:
  - a. Removal of fecal coliform bacteria indicator criteria.
  - b. Addition of April to the recreation season during which our bacteria criteria apply.
  - c. Revision of the 30-day geometric mean E. coli criterion of 130 per 100mL to a 90-day geometric mean.
  - d. Revision of the single sample maximum E. coli criterion of 240 per 100mL to not to be exceeded in more than 25% of samples.
- 6) The following revisions to the section on variances:
  - a. Removed provision requiring concurrence from all affected states.
  - b. Added language that ORSANCO would confirm that the applicable states' regulations would allow the provisions of a requested variance being considered.
  - c. Added a provision that approved variances would become part of the Commission's standards.
  - d. Revised the effective dates of an approved variance from the life of the permit to a five-year maximum period.

**ACTION:** Motion passed recommending to the Commission that the proposed 2012 revisions to the Pollution Control Standards be adopted.

#### **Proposed Disposition of Variance Request**

The Standards committee is recommending that the Commission grant PPG a variance that would allow WVDEP to include a mixing zone in their NPDES permit. A number of stipulations that go along with the variance which generally requires the following:

- 1) The Commission's water quality criteria for mercury must be met at the edge of the mixing zone.
- 2) The variance is not to exceed a period of five years.
- 3) The monthly average limit for mercury shall not exceed 55 ng/L.
- 4) PPG has submitted a mercury reduction plan which shall be fully implemented which includes annual progress reports to the Commission.
- 5) PPG shall conduct monthly water monitoring and annual fish tissue monitoring to ensure that the Commission's water quality criteria are met outside the mixing zone. PPG will submit a work plan to the Commission for approval and these data will be reported to the Commission with the annual progress report.
- 6) The Commission may revoke the variance, at its discretion, at any time.
- 7) The variance will not interfere with WVDEP's regulatory authorities.

**ACTION:** Motion passed recommending to the Commission that the proposed 2012 revisions to the Pollution Control Standards be adopted.

#### **Process for Consideration of Variance Requests**

The Standards Committee continues to work on the development of a formal process for evaluating any future variance requests. This process will be generic in nature such that it would be applicable to any type of request for a variance. It will include an administrative process including a public participation process as well as acceptance criteria. The Standards

Committee will be working on this issue which is anticipated to be brought before the Commission for consideration in 2013.

There was discussion about the need to coordinate ORSANCO's process with states that already have a mercury variance approval process in place such that duplication of effort is minimized. There was general agreement by TEC that this should be considered while finalizing the variance review process.

#### **Gulf Hypoxia Task Force Update**

The long term chairman of the Ohio River Sub Basin Steering Committee is no longer able to attend the meetings, so a new Chairperson will be sought. The Gulf Hypoxia Task Force held a meeting September 11-13, 2012 in Des Moines, Iowa. This meeting was held in conjunction with the National Association of State Departments of Agriculture. The hypoxic zone in 2012 was less than 3000 square miles which makes it the third smallest on record. This was expected due to the low flows during the spring and summer from the Mississippi River.

There is a program among Federal and State partners to establish a long-term, integrated, multi-scale water quality monitoring collaborative based on existing sites. A website is being developed to display this data which includes nutrients monitoring sites.

There is a petition seeking EPA action to require all states on the Mississippi River to develop numeric criteria for nutrients. More than 30 parties have been granted intervenor status. A briefing schedule is now being negotiated. The next Task Force Meeting will be in Spring 2013.

#### **Interstate Water Quality Nutrient Trading Program Update**

The Ohio River Basin Pilot Nutrient Trading Plan was signed on August 9 by Indiana, Kentucky, and Ohio. EPRI was awarded a \$1M grant to develop a credit registry. EPRI is currently working on contracts with the states' Soil and Water Conservation Districts to install nutrients BMPs. Credits should be available early in 2013.

#### **Results of Research Needs Survey**

Staff presented the results of a survey developed by the Research Committee and distributed to various ORSANCO committees and technical staff requesting input to identify water quality and water quantity research needs in the Ohio River Basin. Responses were received from members of most committees polled and identified a wide range of issues. The Research Committee grouped the responses into seven pollutant or topical areas as a means to facilitate the process to develop a prioritized list of research needs. These categories included: 1) nutrients and non-point source pollutants, 2) water resources management issues, 3) mercury, 4) bromide and other drinking water issues, 5) resource extraction, 6) nuisance species, and 7) water quality standards. In evaluating the various needs identified, the Research Committee concluded that, in addition to supporting the continuance of the Commission's existing research efforts in other areas, nutrients and mercury were the most pressing research issues facing the Commission at this time. Water quantity and drinking water concerns related to bromide were also acknowledged as significant issues; however, research needs in these areas should be reassessed once current efforts underway are completed.

To further clarify the research needs associated with mercury and nutrients, the Committee formulated specific research questions for the Commission to consider in guiding future technical programmatic activities. These questions are as follows:

### Mercury

- 1) Are regulatory point source controls, which target total mercury discharges, an effective or adequate means to limit methylmercury bioaccumulation in fish?
- 2) Is the prohibition of mixing zones for bioaccumulative chemicals of concern (BCCs) necessary for the Ohio River to protect bioaccumulation in fish?
- 3) Where does the methyl mercury found in Ohio River fish originate? That is, where does mercury methylation occur?
- 4) Is implementation of Clean Air Act regulations, which require some coal-fired power plants to install flue gas desulfurization (FGD) scrubbers, impacting mercury levels in fish and the water column?
- 5) Which fish species (and/or other biota) should be evaluated to adequately determine mercury impairment and for developing bioaccumulation factors (BAFs)?

### Nutrients

- 1) How are nutrients processed and removed in large riverine systems such as the Ohio River, its tributaries, and headwaters?
- 2) How does bioavailability differ across the various forms of nitrogen found in the river system?
- 3) How can nutrient criteria be incorporated into a regulatory framework?
- 4) Is the Ohio River currently or in the past been impaired due to nutrients?
- 5) At what levels do nutrients cause impairments? (Develop a river model to assist in defining nutrients levels at which impairment occurs).

## **Member Reports**

### ***Kentucky***

Mr. Payne provided an update on Kentucky's Wild Rivers Program. The state currently has designated segments of nine rivers in the state and has purchased an additional 1300 acres in these corridors this year, bringing the total conservation lands purchased in the state to 26,000 acres. A 30-minute special on PBS regarding this program is scheduled to air on television next spring. There has been coordination between the 319 nonpoint source grant program and the clean water state revolving fund to address failing private septic systems by extending sewer collection systems to these areas. The 303d list of waters requiring TMDLs is still out for public comment. A 30-day extension was granted to October 15, 2012. There are two large enforcement cases in the Franklin Circuit Court regarding fraudulent DMRs submitted by two coal companies. An agreement has been reached with one company to pay \$575,000 in fines which will be used to address straight pipes from homes in the area and to assess surface water impacts from coal mining operations. The state has recently received notice from the US Fish and Wildlife Service that the Fluted Kidney Shell mussel has been moved to endangered species status. The Rabbits Foot and Sheep Nose mussel species on the endangered list have significantly expanded Ohio River reaches designated as Outstanding State Resource Waters creating new reaches above the Cincinnati area and in Owensboro. Fourteen written comments were received during the state's water quality standards triennial review which ended October 2, 2012. Significant proposed revisions include changes to the narrative nutrient criterion and definition of eutrophication.

### ***Illinois***

Ms. Willhite reported that Illinois has six priority watersheds for nutrient reduction efforts primarily involving agricultural sources, one of which is in the Wabash River Basin. A consortium of agricultural groups, the Council on Best Management Practices, is taking the lead on promotion of best management practices with a campaign called “Keep It For The Crop 2025.” They have developed maps for the fertilizer retailers to enable tracking of fertilizer application practices. Another priority watershed in the Ohio Basin is the Crooked Creek watershed located in the southeastern part of the state. This watershed was selected under the USDA/NRCS National Water Quality Initiative against the better judgment of the state. Illinois recently passed a fertilizer tonnage assessment, expected to generate \$2.5M per year that will go to a fund for nutrient reduction education and research. This summer’s drought conditions produced low flow, high temperature conditions that resulted in noncompliance with permit thermal limits primarily at power generation facilities. Illinois has statutory authority to provide provisional variances to allow short-term exceedances of permit limits which are caused by conditions which are out of the permittee’s control such as drought. The state views this practice as an approach to its enforcement discretion; however, USEPA has expressed concern about the practice with continuing discussions between the state and Region 5.

### ***United States Army Corps of Engineers***

Mr. Emery reported that the Corps is coordinating a workgroup for the Ohio River Community Model which utilizes HEC-RAS to simulate Ohio River flows for reservoir management purposes and will also be used by USEPA Region 5 for development of a bacteria TMDL. The Corps districts will be developing MOUs with the hydropower facilities requiring them to collect real-time temperature and dissolved oxygen data beginning next May. The Louisville District provided support to ORSANCO’s biological programs this year for work occurring in the Newburgh and Markland pools. Low flow conditions occurring this summer at Cairo, IL are augmented by Corps reservoir releases. The Corps is investigating the use of free satellite telemetry data to monitor algal conditions in its reservoirs. The Huntington District has purchased a monitoring instrument called FlowCam to enumerate algae cells in a very short period of time. Algae blooms above the WHO benchmark of 100,000 cells occurred in several reservoirs in the Ohio Basin this summer, some of which produced measurable toxins. The Corps will be developing plans to address harmful algal blooms. The Corps is currently undertaking a climate change study which has identified nine tasks and is coordinating this effort with a climate change workgroup of the Ohio River Basin Alliance. Mr. Emery reported that he is now chairing a water availability and management workgroup of the Ohio River Basin Alliance. He indicated that Brig. General Burcham has had a briefing on the Commission and would like to meet with ORSANCO in the near future. Lastly, the Corps is holding a water quality workshop including district updates, harmful algal blooms, and e-flows on December 4-5, 2012.

### ***Virginia***

Mr. Newman reported on the Clinch-Powell Clean Rivers Initiative which was established to address a significant decline in mussels. This watershed has been recognized as having a globally-significant mussel population that needs to be protected. The Nature Conservancy is chairing a steering committee and science committee and there is a diverse set of partners participating in the project. A science plan is to be implemented over a two-year period and includes habitat evaluations, analysis and assessment of pore water quality, in situ mussel studies, mussel toxicity testing, fish assessments and water quality sampling for clean metals, organics, TDS, and ions. The state is currently conducting a TMDL for PCBs impairments of

the New River Basin for approximately 100 stream miles and over 4000 reservoir acres. Monitoring is planned at 32 stream sites and VPDES permit holders are required to monitor as well as implement PCBs minimization plans. PCBs source assessments and loading estimates are just beginning at this time. Organizationally, the state is considering combining its DCR and DEQ water quality agencies which requires General Assembly action, possibly to become effective on July 1, 2013. The state is also considering assumption of the federal 404 certification program.

### ***West Virginia***

Mr. Mandirola reported that WVDEP has issued public notice that it is beginning its water quality standards triennial review to be considered by the legislature in 2014. Issues under consideration include revisions to their bacteria criteria similar to ORSANCO's proposal, numeric nutrients criteria for lakes, hardness-based aluminum criteria, revision of its beryllium criterion, and development of site-specific criteria for selenium and zinc. The agency has also been asked to consider development of a criterion for bromide and they are currently evaluating such possibilities. The public comment period on their proposed 2012 303d list has closed and they are currently developing responses to comments which should be completed shortly. The state has developed a general storm water permit specifically for oil and gas operations which covers pipelines, compressor stations and other activities associated with oil and gas that are not covered under the well permits.

### ***Power Industry Advisory Committee***

Mr. Reash reported that the USEPA was scheduled to issue a final 316b rule covering fish impingement and entrainment in July 2012; however, this has now been delayed until July 2013. Issuance of the proposed steam electric guidelines rule was scheduled to be issued in November but has now been extended to the end of December. The coal combustion byproducts rulemaking will probably not occur until after the November elections. A number of actions occurring under the Federal Clean Air Act will probably not result in any significant changes in the near term. AEP and EPRI are beginning a mercury modeling study of the Ohio River. A kickoff meeting was held at ORSANCO in late June attended by state and federal agencies. The objective is to model mercury sources and what happens to these mercury discharges after they are discharged to the river in the RC Bryd and Racine pools. They are currently in the process of collecting all existing mercury data that would be applicable to the project.

### ***Indiana***

Ms. Selvaratnam reported that IDEM has received final approval from USEPA on its antidegradation rule. USEPA is currently reviewing their revised chloride criteria rule. IDEM has developed numeric nutrients criteria for lakes for total phosphorus and chlorophyll. However, the challenge still remains in implementing such criteria for lakes in the absence of numeric criteria for rivers and streams. The current goal is to have a proposal developed by the end of this year. IDEM has been collaborating with the USGS to develop numeric nutrient criteria for rivers and streams primarily based on correlations with the aquatic community. They are currently working on a summary paper of all the work that has been published by Region 5 states regarding development of numeric nutrients criteria. IDEM is currently working on responses to public comments received on its 2012 303d list.

### ***Ohio***

Mr. Elmaraghy indicated that OEPA is celebrating its 40<sup>th</sup> anniversary and began by reporting that large rivers meeting or exceeding aquatic life water quality standards has increased from

20 percent in 1990 to 90 percent today, while smaller streams meeting or exceeding water quality standards have improved from 47 percent in 1990 to 58 percent today. The state has organized two groups to address statewide nutrient issues; one for point sources and one for nonpoint sources. These groups have developed a number of key recommendations for each category of sources to achieve nutrient reductions on a statewide basis. OEPA has been working with USEPA Region 5 to finalize numeric nutrients criteria. The primary issue to finalizing OEPA's proposal involves OEPA's proposal to use a weight of evidence approach versus USEPA's policy of independent application. OEPA will be taking over the lead from ODNR on the Gulf of Mexico Hypoxia Task Force Ohio River Subbasin Committee. OEPA testified in September in front of the House Transportation and Infrastructure Committee regarding delegation of the federal 404 certification program to the state, a position which Region 5 supports. The next step is to introduce legislation granting the director authority to pursue assumption of the program. An Oxford coal company applied for a 401 certification to mine 1100 acres. OEPA included special conditions to protect high quality streams in the area. The permit was appealed based on the stream not being listed by name in the water quality standards, therefore it did not need to be protected. The appeal commission agreed with the company and will deliver a formal decision with explanation in November; however, OEPA now feels there is some vulnerability in their water quality standards regarding this issue in general. An assessment of the lower Great Miami River Basin was recently completed which showed 81 percent in full attainment of uses, while the principle cause of impairment is nutrients. This represents a significant improvement since 1995 when only 59 percent was in full attainment.

OEPA is in the process of finalizing a permit renewal for DP&L's Stuart station and has requested either a cooling tower be constructed or the thermal discharge to be redirected to the Ohio River, which would require a 316a variance. OEPA is requesting assistance from ORSANCO to help DP&L with species selection for a 316a study of the Ohio River. Dewatering of a mine to the Ohio River immediately below the Cardinal plant in Jefferson County is expected to have high TDS concentrations. OEPA has issued findings and orders to satellite communities of the Eastern Ohio Regional WWTP asking them to operate their sewer systems appropriately and to report all overflows to OEPA. The Southern Ohio Coal Company in Meigs County intends to discharge treated acid mine drainage resulting from mine dewatering to the Ohio River which is expected to have high total dissolved solids concentrations. The Ironton POTW has received a general mercury variance from OEPA but will also need to receive a variance from ORSANCO which has been written into their NPDES renewal.

#### ***Water Users Advisory Committee***

Mr. Whitteberry reported that water quality conditions over the summer have been relatively good with the exception of the taste and odor issues experienced at Louisville and Evansville. Bromide is a continuing concern for water utilities and the committee is discussing research necessary to develop scientifically-based criteria. The committee is also investigating potential coordination with WVDEP and USEPA regarding their RARE Grant as relates to bromide issues. USEPA has given notice of intent to regulate perchlorate in drinking water; however, it is unclear whether this will be much of an issue for Ohio River utilities.

#### ***United States Geological Survey***

Mr. Guertal reported that budget issues for the USGS will remain on hold until after the elections. They are also in discussions with the Corps of Engineers regarding establishment

of flow measurement stations at two or three Ohio River locations in an effort to improve flow information for the river.

### ***Public Interest Advisory Committee***

Mr. Connor reported that PIACO has been working with ORSANCO to widen the email distribution for improved communications and public education of the Commission's activities. In addition, he welcomed all to visit Owensboro's new riverfront which includes a large new public area.

### ***New York***

Commissioner Wilson reported on behalf of Jeff Konsela who could not attend due to continuing out-of-state travel restrictions. Two major NYSDEC operated/maintained flood control projects on the Allegheny River were rated by the US Army Corps of Engineers (Corps) as unacceptable in early summer 2011. The result was the projects being removed from the Corps' Rehabilitation and Inspection Program. NY State developed and submitted "Letters of Intent" to the Corps in February 2012 under the Corps' new State Wide Improvement Framework (SWIF) policy. The state is still awaiting word on Corps acceptance of projects into the SWIF, which would allow projects to be reinstated into RIP while the state addresses the Corps noted deficiencies. NY State has over \$100M in funding through the NY Works Program to address flood control project deficiencies state wide. The deficiencies noted on the two projects on the Allegheny River will be addressed in 2013-2014 through the NY Works funds. Regarding Marcellus shale drilling and hydrofracturing, a public comment period on the Supplemental Generic Environmental Impact Statement (SGEIS) ended in January 2012. The NYSDEC is finalizing the SGEIS along with a stormwater general permit for such activities. NYSDEC is also finalizing revised regulations for water withdrawals after the public comment period ended. Regarding the Chautauqua Lake TMDL, the NYSDEC has received public comments on the draft TMDL and addressed them in a final plan for phosphorus allocations in the Chautauqua Lake watershed. The NYSDEC expects the TMDL plan to be sent to the USEPA for approval in mid-October. Chautauqua Lake was one of numerous lakes and ponds in Western New York to experience harmful algae blooms (Blue-Green algae) during this abnormally hot and dry summer.

### ***United States Coast Guard***

Commander Schade reported that there are five Coast Guard units that cover pollution prevention/pollution response for the Ohio River which are located in Pittsburgh, Huntington, Cincinnati, Louisville, and Paducah. These units combined cover a very large geographic area serving ten states within five USEPA regions. USEPA has the pre-designated role of "On Scene Coordinator" for inland waters while the Coast Guard serves that function for coastal waters. However, the Coast Guard works closely with USEPA and sometimes takes the lead role for inland water emergency response activities. Once the Coast Guard receives spill notification, vessel examiners or facility inspectors are dispatched and at the same time make further notifications following a lengthy list including states, counties, and ORSANCO.

### **Review of Commission Committee Structure**

Commissioner Phillips reported that an Ad Hoc committee has been formed to look at the Commission's committee structure. He asked for TEC's assistance with review of the subcommittees and workgroups that report to the Technical Committee, and specifically for input regarding the matrix that contains proposed actions for each of them.

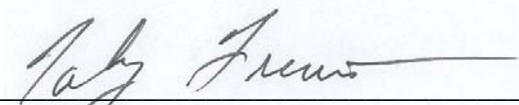
**Next Meeting**

The next meeting of the Technical Committee will be held on February 12-13, 2012 at the Embassy Suites River Center, Covington, Kentucky.

**Adjournment**

The 200<sup>th</sup> meeting of the ORSANCO Technical Committee was adjourned at 12:17 pm on Wednesday, October 10, 2012.

Approved:



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Toby Frevert, Chairman

Prepared by Jason Heath, P.E., BCEE

(Tape recording of proceedings available at Commission Headquarters)

PowerPoint presentations from this meeting are available on the Commission website at [www.orsanco.org](http://www.orsanco.org).

## Roster of Attendance

### Technical Committee

Chairman	Commissioner Toby Frevert
Illinois	Marcia Willhite
Indiana	Shivi Selvaratnam
Kentucky	Randy Payne
New York	Not present
Ohio	George Elmaraghy
Pennsylvania	Ron Schwartz
Virginia	Allen Newman
West Virginia	Scott Mandirola
Federal (US EPA)	Not present
US Coast Guard	Derek Schade
US Army Corps of Engineers	Erich Emery
US Geological Survey	Bill Guertal
ORSANCO Chief Engineer	Peter Tennant
Chemical Industry Committee	No representative
POTW Advisory Committee	MaryLynn Lodor
Power Industry Advisory Committee	Rob Reash
Public Interest Advisory Committee	Henry Connor
Water Users Advisory Committee	Bruce Whitteberry
Staff Liaison	Jason Heath

### Commissioners

Stuart Bruny, Doug Conroe, Chuck Duritsa, Tom Easterly, David Flannery, Sandy Gruzesky, Ken Komoroski, Ron Lovan, Phil Morgan, Greg Phillips, Paul Tomes, Mike Wilson, Ross Wales - Commission Legal Counsel

### Staff

Dave Bailey, Steve Braun, Sam Dinkins, Tracey Edmonds, Joe Gilligan, Eben Hobbins, Jeanne Ison, Travis Luncan, Jerry Schulte, John Spaeth (MBI), Rob Tewes, Jeff Thomas, Greg Youngstrom

### Guests

Terry Anderson	Former TEC member from Kentucky
Lee Bridges	Former Biological Subcommittee Chair from Indiana
Cheri Budzynski	Shumaker, Loop, and Kendrick
Dennis Clark	Former TEC member from Indiana
Scott Hall	Environ International Corp.
Tom Horan	PPG
Tim Joice	Kentucky Waterways Alliance
Lori Leffler	PPG
Jim Park	Former TEC member from Illinois
Aaron Pozar	Arcelor Mittal
Jim Rock	PPG
Tom VanArsdall	Former TEC member from Kentucky
Peter Van Metre	USGS