January 2009 Kickoff Meeting
Ohio River TMDL
Most Frequently Asked Questions and Answers

1. **What will the TMDL provide to the stakeholders in the watersheds?** The final TMDL document will provide allocations to pollutant sources located on the Ohio River mainstem and to numerous Ohio River tributaries. Mainstem point sources such as sewage treatment plant effluents, CSOs and MS4s will receive wasteload allocations that will be implemented in NPDES permits. Mainstem nonpoint sources will receive load allocations. Gross allocations to tributaries will form the basis for subsequent TMDL development by the States.
2. **How does the TMDL affect Long Term Control Plans (LTCPs), Consent Decrees, and cities, and can the TMDL require the cities to abide by its results/allocations?** EPA's Combined Sewer Overflow Control Policy requires communities to develop LTCPs. The ultimate goal of LTCPs, like TMDLs, is to achieve water quality standards. EPA recognizes that a great deal of time and effort has gone into development of LTCPs and does not intend the TMDL to supersede or necessarily alter the prioritization and scheduling of CSO controls contained in existing LTCPs. The TMDL will, however, prescribe the necessary pollutant reductions from CSOs and all other sources that are needed to achieve currently effective water quality standards throughout the river. As such, the wasteload allocations for CSOs may define alternative water quality-based endpoints that, in turn, may necessitate LTCP revisions and/or the pursuit of water quality standard revisions as envisioned in the national Combined Sewer Overflow Control Policy. To the extent that wasteload allocations are consistent with the Consent Decree endpoints, the TMDL will not affect the established schedule for corrective actions.
3. **Will the TMDL require CSO communities to meet a specific design standard, such as a 20-year storm event?** There is not a design standard per se, but the TMDL must meet critical conditions for the river, which are usually wet weather events. A record of flow will be considered for the determination, perhaps 10 – 15 years duration, which captures a variety of flow events, including some extreme weather (precipitation) events. Rainfall duration and intensity will not be incorporated from a specific event but will be included in the overall dataset used that spans many years.
4. **Do cities have permits for storm sewers?** An MS4 (Municipal Storm Sewer System) is a conveyance or system of conveyances that is: owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.; designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.); not a combined sewer; and not part of a Publicly Owned Treatment Works (sewage treatment plant). Phase I, issued in 1990, requires *medium* and *large* cities or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their stormwater discharges. Phase II, issued in 1999, requires regulated small MS4s in urban areas, as well as small MS4s outside the urbanized areas that are designated by the permitting authority, to obtain NPDES permit

coverage for their stormwater discharges. Generally, Phase I MS4s are covered by individual permits and Phase II MS4s are covered by a general permit.

5. **Will the model consider incorporating a "typical year"?** The model will be driven by a continuous period of precipitation spanning many years. The design precipitation period will include wet years, dry years and average years and the TMDL will include allocations that ensure attainment of criteria for all precipitation and flow conditions.
6. **How frequent was the sampling of the Ohio River?** The sampling was performed annually on each of the upper, middle, and lower segments of the Ohio River, so one third of the river each year, rotated on the three year basis. By request of the modelers for this project, an attempt was made in 2008 to sample the entire length of the river in one sampling season. Sampling occurs from May 1 – October 31, which is the primary contact recreational season. The river is measured in three locations per site, from near each bank and in the middle of the river. Most locations have 5 samples in a 30 day interval to comply with standard requirements, at approximately 10 mile increments. There are some samples taken at depth. There is ongoing sampling by request of the modelers for "off season" in March and April of 2009 to get a measure of the bacteria in colder spring runoff conditions, which are usually not collected, since the model is being run year round to comply with secondary contact recreational season standards of Kentucky (November 1 – April 30).
7. **How will loads from nonpoint agricultural sources be developed?** Land use mapping data will be used to develop allocations for agricultural lands along the Ohio River mainstem. Calibration conditions will be based upon the best available information regarding the source types and extent of management practices in place and allocations will reflect the pollutant reductions expected from reasonable Best Management Practices from a "no BMP" baseline condition.
8. **How does the TMDL affect permits, MS4s, etc?** NPDES permitting regulations require that the effluent limitations in an NPDES permit must be consistent with the wasteload allocations of any applicable TMDL. The TMDL allocations will be incorporated into the permits in the next permitting cycle. It is expected that the existing permit limitations for the disinfected effluents of the majority of sewage treatment facilities will be consistent with expected wasteload allocations. CSO Long Term Control Plans will have endpoints established by the wasteload allocations of the TMDL. MS4 permittees will be expected to propose and implement management practices specifically aimed at the established wasteload allocations. .
9. **How will the locks and dams be considered in the TMDL?** We understand that locks and dams add to the complexity of the project, both in changing the hydrology and other characteristics (temperature, turbidity) that affect bacteria. The model chosen for the project has the capacity to consider locks and dams, and the modelers will focus on some of these areas in the modeling effort to ensure that the model reflects what is occurring at these sites.
10. **How will existing TMDLs be considered (in tributaries that flow into the Ohio River)?** The existing TMDLs will be reviewed and compared with the Ohio River TMDL for consistency. If problems arise during the comparison, both

TMDLs will receive a more detailed review and the workgroup will consider next steps. To the extent practical, the loading conditions of consistent tributary TMDLs will be represented in the Ohio River TMDL.

11. **Are the allocations mass-based?** We can display TMDLs as counts/time but the most effective allocations for traditional point sources and CSOs and SSOs will be concentration-based. The format may be varied depending on sources and locations, and what is most applicable for the states and implementation needs.
12. **There are fewer samples taken at high flows, how will this be accounted for in the model?** Adequate data is available for calibration at high flow conditions
13. **How will the tributary allocations get distributed?** Distribution will occur when the states develop tributary TMDLs in the future.
14. **Why aren't the tributaries getting addressed upstream of the confluence with the Ohio River?** This modeling project includes 130 tributaries that will receive gross allocations at their mouth. While the tributary contributions are important in regard to both hydrology and water quality of the Ohio River, the monitoring, source tracking and modeling activities necessary for development of tributary TMDLs would not be able to be effectively accomplished with the budget for this project.. The planned establishment of gross allocations for the tributaries will form the basis for future, detailed TMDL development by the states,
15. **When will the state tributary TMDLs be developed?** Tributary TMDL development will be in accordance with each State's TMDL development program plan and EPA PACE guidance.
16. **If the TMDL does not appear to support the current designated use, will the TMDL supersede the Use Attainability Analysis (UAA)?** The TMDL will be established as necessary to attain currently effective water quality standards. The TMDL will not prevent pursuit of any available water quality standard variance.
17. **Will Bacteria Source Tracking (BST) be used to determine the origin of the bacteria, that is, whether it is from human or animal waste?** BST is not sufficiently developed to be practical in TMDL development and is not anticipated to be used in this project.
18. **Will the draft TMDL be available for a 30-day review period?** A minimum 30-day period will be provided for review of the draft TMDL. Because of the large scale of this project, expanded public outreach activities and an extended comment period are anticipated.
19. **Will the strictest state standard be applicable to the whole mainstem of the Ohio River?** No, each state's standards will apply. However, the modeling will use the strictest standard to ensure that the outputs from one segment of the river will not cause another segment of the river to be impaired
20. **How much will the project cost?** EPA currently estimates that the project will cost $500,000-$700,000, not including staff costs and monitoring.
21. **How will we involve special interest groups, CSOs, and nonpoint sources?** ORSANCO has a POTW Advisory Committee, an Industry Advisory Committee, a Public Interest Advisory Committee, a Power Advisory Committee, and a Drinking Water Advisory Committee. We will include them in first draft reviews rather than in later stages. Then ORSANCO will update the website to keep

various groups updated especially as various technical documents (memos) are completed.

22. **How will the TMDL schedule adjust for data to be made available in 2011?** Currently the TMDL scheduled completion is for 2010. Currently, USEPA has some flexibility in the schedule, and as more review and stakeholder involvement evolves, the schedule may be altered and completed in 2011. We may be able to incorporate more information into the TMDL, especially as related to Consent Decrees and Long Term Control Plans.
23. **Will the model incorporate climate change projections**? The design precipitation period upon which the TMDL will be based is sufficiently recent and robust to represent expected conditions.
24. **Will the presentation be on the website?** Yes, updates may be found at http://www.orsanco.org/watqual/tmdl/docs/