



Ohio River Basin Trading Project

Summer 2011

Manager Message

The Ohio River Basin Water Quality Trading Project has achieved many remarkable advances during the last six months. The positive relationships between project collaborators, strong, clear communication with EPA and USDA, and advances in state-level discussions are all contributing to the continued success of this effort. The impressive accomplishments summarized in this update reflect the dedicated and diligent work of project collaborators, EPRI staff, and key stakeholders. This project represents the quality, innovation, and complexity of work that is required to reach meaningful and cost-effective improvements in water quality in the Ohio River Basin.

We are thrilled to announce the launch of the next phase of this effort, which includes the execution of pilot trades. We are grateful for generous funding from USDA, American Electric Power, and Duke Energy supporting the pilot trades. Over the next 3 years, we plan to implement conservation on the ground that will result in verified water quality benefits, cost-effective regulatory compliance, and ancillary ecological benefits.

Sincerely,

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Jessica Fox is a Research Scientist in the Environmental Services area

of the Environment Sector. Her research activities focus on market-based approaches for natural resource protection, particularly water quality trading and endangered species conservation banking. Ms. Fox received a BS degree in biological sciences from the University of California, Davis and an MS degree in biological sciences from Stanford University. She is certified as an Associate Ecologist by the Ecological Society of America.





Project Overview

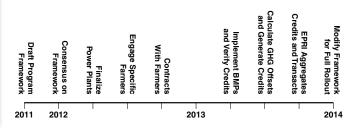
Water quality trading is a market-based approach to achieving water quality standards through programs that allow emitters to purchase pollution reductions from another source. EPRI's Ohio River Basin Trading Project will be a first-of-its-kind regional multi-credit trading program and includes portions of Illinois, Indiana, Kentucky, New York, Ohio, Pennsylvania, Virginia, and West Virginia. The successful implementation of this project will allow power companies, farmers, and other industrial dischargers to work together to improve water quality, minimizing costs to the public and stakeholders. The program will also benefit receiving water bodies that are now threatened by nitrogen and phosphorus pollution.

Project Update

Funding Update

EPRI Announces \$1.4M for Pilot Trade Execution

On Tuesday, August 23rd, EPRI announced \$1.4 Million in funding for the execution of pilot trades. Read the full press release <u>on the Media sec-</u> tion of the project website. \$1M of this comes from a very competitive 2011 USDA Conservation Innovation Grant and \$400K comes from the <u>EPRI Supplemental Project</u>. The project anticipates pilot trades with at least three power plants or other participants and up to 50 farms implementing agricultural conservation best management practices on up to 20,000 acres across Ohio, Indiana, Kentucky, West Virginia, Illinois or Tennessee. Nutrient reductions are expected to range up to 45,000 pounds of nitrogen 15,000 pounds of phosphorus annually. The pilot trades are anticipated to be executed over the next 3 years.



Project Activities

ORSANCO Adopts Resolution in Support of EPRI's WQT Project

On June 9, 2011, with the support of its member states, ORSANCO adopted a resolution confirming support for EPRI's Ohio River Basin WQT Project. The Ohio River Valley Water Sanitation Commission (ORSANCO) is an interstate commission representing eight states (IL, IN, KY, OH, NY, PA, VA, WV) with representation from the United States. They operate programs to improve water quality in the Ohio River and its tributaries, including: setting wastewater discharge standards; performing biological assessments; monitoring for the chemical and physical properties of the waterways; spill detection and response and conducting special surveys and studies. They have been an important project collaborator since 2009, helping to engage the states and agencies in the basin. The formal adoption of the WQT resolution demonstrates their continued commitment and growing leadership in the project. The signed resolution can be found <u>on the Project Agreements & Letters section of the</u> <u>project website</u>.

EPRI Published Report Assessing USDA's Nutrient Trading Tool and WARMF Watershed Model for Improving Crediting

In August, EPRI published a USDA-funded report that assesses the role of watershed models in a robust water quality crediting approach (Report 102361). A credit estimation method that ensures reliable and repeatable results is a critical element in a successful water quality trading program and something that is not always scientifically informed. This effort considers one approach for creating a scientifically informed approach that uses a combination of field-scale and watershed-scale models for crediting agricultural conservation practices. The Nutrient Trading Tool (NTT) and the Watershed Analysis Risk Management Framework (WARMF) were selected to evaluate the non-point source load reductions at the field scale and watershed scale, respectively. The publishing of this extensive report marks the successful completion of EPRI's 2009 USDA award.

EPRI, EPA, and USDA Execute Plan to Coordinate Research on Ecosystem Services in the Ohio River Basin

On June 23, 2011, EPRI executed a detailed work plan with USDA and EPA to coordinate research on ecosystem services in the Ohio River Basin. The Framework for Cooperation agreement marks the next step of our collaboration with these agencies, which formally began in February 2010 when the parties executed a general MOU to coordinate scientific research. Both the MOU and Framework for Cooperation were signed by Paul Anastas, the Assistant Administrator of the Office of Research and Development at EPA, Harris Sherman, the Under Secretary of Natural Resources and Environment at USDA, and Bryan Hannegan, the Vice President of Environment at EPRI. The purpose of the collaboration is to advance the understanding of ecosystem services in the Ohio and Upper Mississippi River Basins in order to quantify, possibly restore, and eventually sustain the condition of these services. This scientific research will be conducted in parallel with the WQT, pending appropriate government funding. The MOU and Framework for Cooperation can be found on the project website.

Project Team Meets with States to Discuss Pilot Trades

Beginning in March, 2011, the WQT project team began meetings with states to discuss the execution of pilot trades. EPRI and ORSANCO facilitated meetings with OH, IN, KY, and WV that included the permitting authority and the agriculture agencies; the primary state authorities governing the pilot trades. These meetings were followed by a full-day joint meeting with all the states in the basin on July 27th in Kentucky (hosted by ORSANCO) to discuss trading details, such as "baselines" for agriculture to generate credits. These meetings indicate interest from the states for reaching consensus on pilot trade rules and process. Several of the states have indicated that they are ready to move forward considering project agreements that will recognize the trades.

Project Briefing on Capitol Hill

On June 9, 2011, EPRI's Tina Taylor gave a briefing on Capitol Hill summarizing the objectives and progress of the Ohio River WQT Project. Other presenters included Ann Mills, Deputy Undersecretary of USDA, and Jimmy Daukas, EPRI's Collaboration at American Farmland Trust. Hosted by The Environmental and Energy Study Institute (EESI) and Water Environment Federation (WEF), EPRI's project was featured as an innovative, market-based approach to controlling nutrient pollution in the nation's waters from agriculture.

Recent and Upcoming Project Publications

- Stacking Environmental Opportunities and Risks in Environmental Credit Markets (PDF 916KB)
- <u>Ohio River Basin Trading Project Listening Workshops: Wabash</u> <u>River Watershed, Indiana March 8-9, 2010</u> (PDF 2.21 MB)
- <u>Barriers and Solutions for Farmer Participation in the Ohio River</u> <u>Basin Water Quality Trading Program</u>
- Use of Models to Reduce Uncertainty and Improve Ecological Effectiveness of Water Quality Trading Programs
- Pilot Trade Execution in the Ohio River Basin Water Quality Trading Project (*Anticipated: October 2011*)

Project Website

The Ohio River Basin Trading Project launched a new version of its website in August of 2011. The website has been designed to be a public resource for information and expertise on water quality trading in the Ohio River Basin.

EPRI's new Ohio River Basin Trading Project web site features:

- Latest on EPRI's water quality trading research
- Funding Opportunities
- Project Agreements and Letters
- Pilot Trades
- Credit Stacking
- Watershed Model
- Project Collaborators
- Project Stakeholders
- In the Media
- Project Schedule and Updates
- Reference Shelf

Supplemental Project Opportunity

EPRI's Supplement Project is a subset of the scope of work that will be needed to develop the Ohio River Trading Project. It creates a funding mechanism for interested organizations to directly engage in the development of the trading program. By funding the supplemental project, your organization will have access to all the reports and deliverables generated out of this project and will have a seat at the table during project discussions and program development.

The full description of the Supplemental project can be found on www.epri.com/ohiorivertrading





Project Contact

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EPRI intends to support a collaborative process for the development of this project. The project website was designed to facilitate communication of important project materials, and to solicit questions, comments, and feedback from the many interested stakeholders. Please visit the project website for more information and to download meeting materials, related EPRI reports, Frequently Asked Questions, and additional project resources.

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