

Water Policy Report

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Key Groups Poised To Launch Landmark Nutrient Trading Pilot In Ohio River

The Electric Power Research Institute (EPRI) and its partners have received a \$1 million federal grant to facilitate “pilot trades” of nutrients between point and nonpoint sources in the Ohio River, marking the first trades in what could provide a model for dischargers to comply with EPA requirements in many watersheds facing high nutrient levels.

When the program becomes fully operational in 2015 it will be a preferred method of attaining permit compliance and will serve as a model for other watersheds, Dr. Ann Sorensen, director of research for the American Farmland Trust, a farmland conservation organization that partners with EPRI in developing the Ohio River nutrient trading market, said in an Aug. 25 statement.

The launch of the program comes as many state and industry official are struggling to comply with growing EPA efforts to clamp down on nutrient pollution in a host of major watersheds, resulting in large hypoxic dead zones. But the trading program, if successful, could help provide a market-based cap-and-trade system to help dischargers comply with the regulatory requirements.

EPRI announced Aug. 25 that it had received a \$1 million Conservation Innovation Grant from the U.S. Department of Agriculture, which was matched by \$400,000 grant from Duke Energy and American Electric Power to facilitate a handful of pilot trades between at least three National Pollution Discharge Elimination System (NPDES) permit holders and “at least 50 farms implementing agricultural conservation best management practices on up to 20,000 acres across Ohio, Indiana, Kentucky, West Virginia, Illinois or Tennessee.”

The release also noted that the pilot trades are expected to result in reductions of “up to 45,000 pounds of nitrogen 15,000 pounds of phosphorus annually.”

“The conservation practices have the potential for ecological benefits, such as improved wetlands and restored habitats, with the credit trading program offering new revenues for farmers and a potentially cost-effective alternative for power companies and other industries to meet nutrient effluent permit obligations,” said Jessica Fox, senior scientist for EPRI’s Water and Ecosystems Program.

“Using scientific research, this project could result in a multi-industry market that may accelerate water quality improvements in the Ohio River Basin and establish a model for other domestic regional trading markets.”

EPRI began developing its Ohio River Basin nutrient trading program in 2009, with the intention of developing a large-scale, mutually accepted interstate trading market for nutrient reduction credits between point sources — which are subject to strict limits of nitrogen and phosphorus in its NPDES permits — and nonpoint sources such as farms, which contribute to nutrient loads but are not subject to NPDES permits.

Nutrient trading has long been viewed by agricultural, industry and environmental stakeholders as a possible solution to controlling nutrient pollution on a large scale. Since farmers and other nonpoint sources can implement best management practices (BMPs) — such as installing buffer zones, cover crops and other measures — to reduce nutrient pollution at a fraction of the cost and with greater impact than point sources can, allowing point sources to offset their nutrient loads by buying credits from farmers could hasten the reduction of nutrients in a watershed.

But the implementation of such a program raises serious logistical questions, such as how to measure the amount of nutrients being kept out of a waterway through the use of BMPs consistently and reliably, what impacts certain BMPs will have in different areas of a watershed and whether those reductions can reliably offset a point source’s nutrient load over the long term. The ability of a permit holder to buy credits from nonpoint sources in another state is also a perennial hazard of implementing large-scale nutrient trading programs.

Some states, such as Connecticut, have implemented limited trading programs between point sources, and during the Bush administration, EPA was pushing states in the Chesapeake Bay region to integrate their state-level nutrient trading programs into an interstate program. Those efforts were stalled, however, by uncertainty about the continued availability of trading credits in the future.

EPRI sources told *Inside EPA* when the program was launched that one of the differences between the EPRI program and other attempted interstate trading programs is the involvement of state officials through the Ohio River Valley Sanitation Commission (ORSANCO) and nonpoint stakeholders, including agriculture organizations. ORSANCO is a multi-state water quality management commission whose members are comprised of representatives from member states’ environmental agencies. Since the states in the Ohio River basin are already coordinating efforts to manage water quality through ORSANCO, the source said, the process of developing a trading program is made that much easier.