

Water Quality Trading and Nutrient Management, May 22, 2013

The following article provides a recap of the Senate EPW Hearing on May 22, 2013, on Water Quality Trading and Nutrient Management, including testimony by EPA Deputy Assistant Admin. for Water, Bob Perciasepe. The panelists' written testimony can be accessed here:

[http://www.epw.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing\\_id=ad7b2064-9a2f-0f47-5e2d-581f6fc46468&CFID=53886125&CFTOKEN=58279592](http://www.epw.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing_id=ad7b2064-9a2f-0f47-5e2d-581f6fc46468&CFID=53886125&CFTOKEN=58279592).

*Water Pollution*

## **EPA Says Water Quality Trading Consistent With Clean Water Act**

*By Amena H. Saiyid*

An Environmental Protection Agency official defended water quality trading as being “absolutely consistent” with the Clean Water Act at a May 22 hearing of a Senate Environment and Public Works subcommittee.

Michael Shapiro, deputy assistant administrator for water, told the Water and Wildlife Subcommittee that EPA's water quality trading policy has focused on nutrients, which he termed “a major threat to clean water.”

“States have identified more than 15,000 waters nationwide that have been degraded by excess levels of nutrients to the point that they do not meet state water quality standards,” Shapiro said.

When asked by Sen. Benjamin Cardin (D-Md.) whether the authority under the Clean Water Act to carry out water quality trading is clear, Shapiro responded, “We believe it is consistent with the Clean Water Act authority ... It is absolutely consistent with the Clean Water Act.”

Cardin, who chairs the subcommittee, convened the hearing on nutrient trading and water quality.

Susan Bodine, partner at Barnes & Thornburg, agreed with Shapiro and cited three different authorities in the Clean Water Act to back water quality trading.

Nitrogen and phosphorus discharges, collectively known as nutrient discharges, cause algal blooms in water that in turn lead to low oxygen levels and fish kills.

The hearing comes as EPA and other groups await a federal court's decision on a 2012 lawsuit by Friends of the Earth and Food and Water Watch, who asked the U.S. District Court for the District of Columbia to force EPA to strip water pollution trading out of the Chesapeake Bay restoration program (*Food and Water Watch v. EPA*, D.D.C., No. 1:12-cv-1639, 10/3/12).

While that lawsuit focuses on the program for the Chesapeake Bay, it could have implications nationwide.

### **Three Authorities in Water Act Cited**

EPA in 2003 issued a water quality trading policy that operates on a cap-and-trade basis. The policy allows for either a total maximum daily load or a watershed plan, and the pollution limits in either plan serve as the cap on pollutant levels for trading purposes.

The EPA voluntary water quality trading program involves exchanges of pollutant reduction credits. A facility or source with a higher pollutant control cost may buy a pollutant reduction credit from a facility source with a lower control cost, thus reducing the cost of compliance. The source may be a point source, such as a wastewater treatment plant, or nonpoint sources, such as farms.

Shapiro cited three sections of the Clean Water Act to support his assertion. First, Section 103(a) of the act that directs EPA to “encourage cooperative activities by states for the prevention, reduction, and elimination of pollution, [and] encourage the enactment of improved, and, so far as practicable, uniform state laws relating to the prevention, reduction, and elimination of pollution.”

In addition, Section 103(b) allows states to form an interstate compact, such as the one formed by the Ohio River Valley Water Sanitation Commission, to reduce pollution in shared waterways, Bodine said. Also, Section 117(g) of the law that created the Chesapeake Bay Program authorizes trading.

### **State Authority Under Act**

Cardin also asked Shapiro whether states have the authority under the Clean Water Act to set up interstate trading programs, and whether additional guidance is needed from EPA.

Shapiro responded that EPA would have to make sure that the state trading programs meet the requirements of the Clean Water Act. Moreover, he said, “We believe they have the authority to do that ... proceed in that direction.”

However, Shapiro cautioned that interstate programs would require states to develop uniform standards so that buyers and sellers in different states can proceed with water quality trading.

States do not require additional guidance on pollutant credit trading because they already have developed TMDLs for reducing pollutants to meet state water quality standards, he said.

For instance, Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia, and the District of Columbia are obligated to reduce releases of nitrogen, phosphorus, and sediment into the Chesapeake Bay and its tributaries under an EPA-ordered total maximum daily load plan.

### **Technical Memoranda Helpful**

Also testifying at the hearing was Beth McGee, senior water quality scientist for the nonprofit Chesapeake Bay Foundation. She told the subcommittee, which mostly consisted of Cardin and the subcommittee's ranking member Sen. John Boozman (R-Ark.), that the Chesapeake Bay states had all independently developed their trading programs, “so they are all different.”

McGee said the technical memoranda that EPA is developing for nutrient trading in the bay would be most helpful in resolving questions about baselines and monitoring.

Bodine said legislation is not needed because states should be allowed to develop trading plans to suit their own water quality conditions.

During the hearing, Boozman asked Shapiro whether on-site water quality monitoring at farms would not discourage participation by farmers who are reluctant to engage in pollutant credit trading.

### **On-Site Versus Watershed Monitoring**

Shapiro said “on-site monitoring is the most effective in terms of demonstrating ongoing effectiveness of a type of technology” to generate credits. Moreover, on-site monitoring provides a way to measure and quantify whether the credits generated as a result of planting trees or buffer strips are being maintained.

Bodine disagreed that on-site monitoring is necessary to demonstrate effectiveness. She said monitoring at the watershed level would yield the same results without having to go to someone's farm.

Marty Matlock, an ecology engineering professor at the University of Arkansas, told the subcommittee that monitoring has to be focused on a watershed level, not a farm level.

“You cannot manage practices. You have to manage outcomes, you have to manage water quality. If the water quality is not getting better, then something has to change,” Matlock said.

*By Amena H. Saiyid*