
University of Pennsylvania
Institute for Environmental Studies



presents

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Pennsylvania Environmental Council
Market-Based Environmental Policies – PA's Experience

With the looming Chesapeake Bay, Everglades and other estuary cleanups expected to cost billions of dollars, some believe it may be time to go shopping at the farmers market. But the visitors won't be looking for lettuce or tomatoes. In the market some envision, the shoppers will be wastewater treatment plant operators, industries or even cities with lots of stormwater runoff. Faced with stiff and likely expensive nutrient reduction requirements, those dischargers may find it cheaper to meet their obligations by purchasing pollution credits from a farmer who has planted a grass buffer or restored a wetland. Welcome to the world of nutrient trading, where the market is a place to purchase environmental improvements.

Eying the success of air pollution trading programs, where acid rain goals were reached years ahead of schedule at a fraction of the estimated cost, trading proponents hope to do the same for water quality, where success in controlling nutrient-laden runoff has proved to be elusive. Trading, they say, may be just the tool to help clean the two-fifths of the nations waterways, including the Bay, that fail to meet water quality goals three decades after the Clean Water Act was passed.

The idea of a water pollution trading program has been around for more than a decade, but so far there is little evidence that trading will do for water quality what it did for air. More than three dozen water quality trading programs exist in the country, and the vast majority are still waiting to see their first trade. That may change soon. The EPA has released a new policy intended to promote trading among water polluters <<http://www.epa.gov/owow/watershed/trading/tradingpolicy.html>>. The policy broadly outlines the conditions under which trading must take place in order to secure EPA approval. For instance, all trades must take place within the same watershed, and no trade can result in a local violation of a water quality standard. Unlike the Clean Air Act, which specifically sanctions trades, the Clean Water Act says nothing about trading. By giving trading its seal of approval, agency officials hope to jump-start pilot programs that have the potential to become successful models for others to follow. In the past year, the EPA has funded 11 pilot programs, two of which are in the Bay watershed. So far, the Chesapeake Bay watershed like the rest of the country has been slow to realize any potential benefit from trading. In 2001, it produced a detailed set of principles to guide nutrient trading within the watershed, the product of nearly two years of work by government officials and stakeholder groups. The document was intended to guide the development of state and local trading programs. Two years later, no such programs are operating. That may also change soon. At the end of April, the Bay Program is expected to set new nutrient limits for all major Chesapeake tributaries. All are waiting for these new caps to come. When they appear in April, that will be the greatest framework around which to develop a trading program. Some estimates suggest the new nutrient reductions could cost \$1 billion or more a year, unless cheaper ways are found to do the job. Trading could be one of those cheaper ways. A recent Maryland study estimated that wastewater treatment plants in that state alone could save between \$9 million and \$12 million annually if allowed to trade.

Andrew McElwaine of the Pennsylvania Environmental Council will discuss nutrient trading in the Chesapeake Bay, focusing on Pennsylvania's new commitment to promote the concept, and possible applications throughout the Commonwealth.

Date: October 12, 2005

Time: NOON - 1:30 pm

Place: Carolyn Hoff Lynch Auditorium

On the Penn campus: Chemistry Building: 34 & Spruce Sts.

NO REGISTRATION REQUIRED

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