

Flawed bay cleanup plan

Idea of regulated polluters buying credits from farmers is unfair, impractical

By Kurt Stephenson and Leonard Shabman

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Bills in Congress, some state agencies and some environmental advocates are promoting a program of buying and selling pollution credits as a way to have regulated polluters pay unregulated farmers hundreds of millions of dollars every year to install practices that reduce nutrient runoff from their farms – the main source of pollution to the Chesapeake Bay.

Advocates for this idea believe it would cost regulated polluters (such as wastewater treatment plants and urban developments) less to meet their pollution-reduction obligations if they pay farmers to install pollution controls, rather than install controls themselves. This practice is called “water-quality trading,” in which some polluters meet their requirements by purchasing “credits” created by pollution reductions that result from the actions of others, in this case farmers.

Unfortunately, the logic behind the idea is factually flawed and conceptually misleading. First the facts.

There will be relatively few buyers for farm credits. Permits typically limit permit holders’ opportunity to shift their control obligations to others, regardless of the cost advantages. Wastewater treatment plants are required to clean their outflows to the limits of technology. Emerging storm water programs require developers to exhaust all feasible on-site controls first.

Even if allowed to buy credits from farmers, regulated sources may find few financial benefits in this approach. In Virginia, recent research suggests buyers may need to pay more than \$100 for every credit they buy from a farm.

Costs of credits are high in part because trading programs usually require at least two pounds of credits from a farmer to offset one pound of nitrogen. Also, farmers usually must employ at least the lowest-cost pollution control practices on their fields before they are eligible to sell credits, so credits for sale are generally created with higher-cost practices. Further, farmers will seek a premium for giving up income from crops and for linking their farm operations to a regulatory program.

Not surprisingly, wastewater treatment plants are investigating gray water reuse, constructed wetlands and biomass harvest as compliance strategies – strategies that keep control of compliance in their own hands.

Finally, the claim that this kind of program can generate hundreds of millions of dollars to fund agricultural nutrient reductions in the Chesapeake Bay region is wildly optimistic. The U.S. Environmental Protection Agency and some states have promoted nutrient trading since 1996. All the cash transfers ever made from regulated sources to agriculture in all those existing

trading programs do not add up to one year's worth of payments being promised for bay region farms. There is no reason why a Chesapeake Bay program would diverge radically from past national experience.

Conceptually, buying and selling credits – trading – is a way for a group of pollution sources to meet their regulatory obligation, not a way to transfer revenue to unregulated polluters. If trading is envisioned, and then designed as a mechanism to generate revenue for agricultural sources, it becomes a *de facto* tax on the regulated parties. If additional revenue to pay for nutrient reductions on farms is desired, one can imagine a variety of tax systems that can generate more revenue, be easier to administer, and provide far greater transparency than that provided by a water quality trading program.

The fairness of this kind of tax will be questioned. Already, sewage treatment plants in the bay region have been required to reduce nutrient discharges by a greater proportion than other nutrient sources, and their control requirements approach the limits of technology. Now these regulated sources and their customers would be asked to pay for reduction efforts by sources that state governments have decided not to regulate directly.

Demanding funds from a compliant source to pay for reductions at a noncompliant one is hardly fair. Nonetheless, EPA has recently threatened to require further reductions from regulated sources if bay region states fail to reduce pollution from unregulated sources, mainly agriculture.

We believe it is possible to design programs that use market-like principles to secure meaningful and certifiable reduction in all sources of pollution. Properly designed trading programs can ensure more water quality benefits at lower cost. A variety of explicitly created taxes can create nutrient reducing incentives, raise funds and effectively deploy those new funds for real results.

Thinking that trading is a way to generate millions for farmers, however, is an unfortunate diversion from the real opportunities to employ market-like programs for water quality management.

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