

## **Comments on Nutrient Trading Policies for the Chesapeake Bay Watershed**

Dear Ms. Gleason,

As a Riverkeeper on the Chester River in Maryland and a veteran of EPA's Office of Air Quality Planning and Standards and also the Regulatory Reform Staff that helped to develop the original Air Emission Trading Program, I want to thank all of those involved for their work in analyzing and developing the Nutrient Trading Policies for the Chesapeake Bay Watershed. Drawing 40 years domestic and international environmental experience I have had extensive opportunities to observe both the potential challenges and benefits of a variety of trading programs, whether applied to Hydrocarbons, Sulfur Dioxide, or Greenhouse Gasses in air or to Nitrogen, Phosphorus, or Sediment in water.

While there are many obvious differences between the Emission Trading programs under the Clean Air Act and Nutrient Trading programs under the Clean Water Act, I believe that there are also many lessons learned that are transferable. Both concepts, unfortunately, include the potential for abuse and the possibility that real reductions could be traded off for "smoke and mirrors". Experience has shown, however, that where adequate attention is paid to transparency and enforceability, including payment by the beneficiaries for certified third party auditors where necessary, tremendous environmental, financial and social benefits can be achieved.

Of course, if the initial allocation under the TMDLs and WIPs (or SIPs under the Clean Air Act) were near perfect, there would be little to be gained by offering a trading system of any kind. But, as we all know, these initial allocations are never perfect nor can they be. Despite over 40 years of trying, there is no known system to simultaneously optimize both economic efficiency (minimum \$/lb. of nutrient reduction) and social equity (equal burden) on the polluter. Either we place the entire burden on those "fortunate" enough to have the lowest cost per pound control options or we require approximately equal percentage reduction requirements on everyone. Sadly, the first option is manifestly inequitable and the second (which is largely the course we have followed) is grossly inefficient.

Even after farmers will have met their baselines, for example, many will still have potential additional control opportunities at less than 10\$/lb. of Nitrogen while many municipalities and owners of septic systems will be facing incremental costs of 75\$ to 500\$ or more for the same nutrient reduction. Here it is worth noting that these cost differentials are generally far larger than those that we faced under the Clean Air Act. This is partly due to the fact that we will be comparing costs between point and non-point sources but also due to the fact that nearly 40 years after the Clean Water Act was passed, we are just now getting serious about having some of the largest sources of pollutants (the ag sector) take on their full share of responsibility. Regardless of the precise origins of these differential costs, the fact remains that are and will continue to be tremendous differences in the cost effectiveness of various control options.

Not only does the failure to allocate TMDLs based on a least cost algorithm mean that stakeholders (including tax payers) will get far less environmental improvement than might otherwise be possible but there is a very real risk that we may encounter a taxpayer revolt when the cost of urban storm water controls becomes more apparent. I happened to be sitting next to former Republican Congressman, Wayne Gilchrist, when he first learned the cost of proposed storm water controls in neighboring Cecil County. Even this legislator with an outstanding environmental record was truly dismayed at the very

high cost and marginal benefit to be derived from those controls. If it later comes out that EPA, MDE or other state agencies ignored the opportunities for major cost savings this would be a major setback for all of us. What is curious is that relatively little has been said about those cost differentials thus far and some even suspect that government officials engaged in preparing the initial allocations have preferred that it remain that way.

One of the major lessons learned from the Emission Trading Program was it is not sufficient for a proposed trade to be Technically Feasible and Economically Efficient but that it must also be accomplished in a manner that maintains Trust among stakeholders. Maintaining this Trust will, of course, require major emphasis on transparency, and enforceability but it does not require us to only allow “Offsets” and prohibit “Trades.” Not only would such a distinction fail to protect the environmental integrity of a potential exchange but, ironically, it could cause us to forego some of the greatest potential savings. If, as WRI has concluded, retrofit storm water controls can cost five times as much as new storm water controls, then an “Offset for New Growth Only Policy” would have the perverse impact of allowing nutrient exchanges where the savings are comparatively low while prohibiting equivalent exchanges when the savings are highest.

Another serious challenge to maintaining Trust will have to do with the geographic trading area. Current Maryland Policy would prohibit trades, for example, that call for additional low cost enforceable riparian buffers in the upper Chester River in exchange for fewer expensive storm water and/or septic controls (more than a thousand feet from the nearest river). Under such a (now prohibited) scenario, the river would benefit; the upstream farmers would benefit and the downstream urban areas would benefit yet we would not be able to allow such a trade and probably could never satisfactorily defend such a prohibition to our constituency. Conversely, under current Maryland Policy one probably could allow an “Offset” for new growth on the Western Shore by imposing additional controls on agricultural interests on the Eastern Shore. It is difficult to understand just how we would maintain the public’s Trust while maintaining two such contradictory policies. Finally, yet another threat to Trust comes when one set of rules is applied to Pennsylvania and another completely different one is applied to Maryland with no solid environmental justification for the distinction.

Obviously, as a 19 year veteran of EPA, I recognize that your goal is to allow maximum flexibility to the states in this region consistent with achieving a common environmental objective. Unfortunately, I believe that if one state seeks to prohibit highly cost effective trades in the absence of strong technical and legal justifications that this will undermine public trust and ultimately undermine the success of your program.

Regards,

J. David Foster  
Chester Riverkeeper  
Chester River Association  
100 North Cross Street, Suite One  
Chestertown, Maryland 21620 USA  
<http://www.linkedin.com/in/jdavidfoster>  
410 708 8244