



**Testimony of  
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**Joint Hearing  
Agriculture & Rural Affairs Committee  
Environmental Resources & Energy Committee  
Senate of Pennsylvania  
October 18, 2016**

Good morning and thank you for the opportunity to testify on this important topic.

The Chesapeake Bay Commission is a tri-state legislative commission advising the general assemblies of Pennsylvania, Maryland and Virginia. The Commission was established by Maryland and Virginia in 1980, and it was quickly apparent that for any Bay restoration to be successful, Pennsylvania had to be involved. The Commonwealth joined in 1985.

Pennsylvania provides 50 percent of the freshwater to the Bay, and 90 percent of the freshwater to the upper Bay. Over one-third of the Bay's watershed lies within Pennsylvania. Not surprisingly, Pennsylvania has the largest share of the nitrogen, phosphorus and sediment loads that are the focus of the Chesapeake Bay Total Maximum Daily Load (TMDL).

Like all states in the watershed, Pennsylvania's nutrient loads come from a variety of sources – wastewater, stormwater, agriculture and air deposition. Relative to Pennsylvania, Maryland and Virginia have a higher proportion of their load coming from wastewater. The vast majority of Pennsylvania's load comes from agriculture.

In all three of our member states, much progress has been made to reduce wastewater loads. In many ways, wastewater reductions are “easy.” They come from a relatively small number of facilities with direct discharges that can be measured and permitted with standardized processes. However, they can be expensive.

Non-point sources, such as agriculture, are more difficult to address. By definition, non-point sources are diffuse across the landscape. There are many actors and the remedies can be site-specific. However, those remedies, especially for agriculture, can be relatively cheap to install.

In the thirty years since the restoration effort began, Pennsylvania has reduced 11 million pounds of its nitrogen load. To meet the TMDL, Pennsylvania will have to reduce another 34 million pounds in ten years. The TMDL requires that states will take sufficient incremental steps to reach a 2017 mid-point and 2025 final goal. Most states are “on track.” Pennsylvania is not.

By falling short, the state risks “backstop” actions by the U.S. Environmental Protection Agency (EPA). EPA has already taken one such action by withholding funding to the state last year. The Commonwealth's Chesapeake Bay “Reboot” is a direct response to that backstop action.

Other potential backstop actions include increased oversight of federal permit programs administered by the state, and on-the-ground facility inspections by EPA staff<sup>1</sup>.

To get back on track, Pennsylvania will have to significantly accelerate its pace of reductions. Based on the state's current Watershed Implementation Plan (WIP) for the TMDL, most of these reductions will need to come from agriculture, with a smaller but still significant portion from stormwater. In fact, of all the agricultural reductions to be achieved Bay-wide, 80 percent will need to come from Pennsylvania. Fifty-five percent of the nitrogen reductions from all sources Bay-wide will need to come from Pennsylvania farms.

We are at an important moment in this process. Over the next two years, the Commonwealth will write the "Phase 3" or final phase WIP that will get us to 100 percent implementation by 2025. In addition to a roadmap for state action, the purpose of the WIP is to demonstrate "reasonable assurance" to EPA that the necessary reductions will, in fact, occur.

Decisions are pending, but it is possible that the Phase 3 WIP will include local area goals, providing new information and guidance to decision-makers at the county or municipal level.

There are many options that Pennsylvania can consider as it prepares the Phase 3 WIP. One that is already part of the reboot is to count existing BMPs that have not previously been recorded. This data can be very helpful in our efforts to understand the work that has already been done, and why some practices may be more popular or successful than others. It will also show some additional progress. However, based on reviews of surveys that have already been conducted in Lancaster and elsewhere in Pennsylvania, these un-counted practices are estimated to only result in an additional two to four million pounds of nitrogen progress. This is notable and important, but it still leaves a deficit of 30 million pounds.

Another option is to have EPA require further reductions of wastewater treatment plants. They have the authority under the Federal Clean Water Act to require permitted facilities to install the best available technology, which is further than many Pennsylvania plants have gone, even in the latest round of upgrades. Unfortunately, that option is likely to cost over a billion dollars and achieve only a few million pounds of reduction.

That same money could instead be spent to achieve non-point source reductions, especially in agriculture, and get most of the 34 million pounds needed. A recent study by Penn State<sup>2</sup> estimates that \$378 million is needed annually over the next ten years for Pennsylvania agriculture to achieve its Bay TMDL goals. Currently, there is approximately \$127 million available statewide for all water quality efforts.

Other metrics show a similar need. Approximately \$100 million worth of applications for conservation assistance came to USDA from farmers in Pennsylvania's portion of the Bay watershed last year. Only \$20 million was available. Some of the funding package announced

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<sup>1</sup> U.S. EPA, letter from Region 3 Regional Administrator Shawn M. Garvin to Secretary Preston Bryant, Virginia Department of Natural Resources, December 29, 2009.

<sup>2</sup> Shortle, et al., *Building Capacity to Analyze the Economic Impacts of Nutrient Trading and Other Policy Approaches for Reducing Agriculture's Nutrient Discharge into the Chesapeake Bay Watershed*, August 2013

by USDA on October 4 will help to address that backlog, but 70 percent of the need will still go unmet.

And that is only for those farmers who choose to participate in the federal programs. We know that many farmers choose not to participate for a variety of reasons, and the structure of federal programs offers little flexibility to address their concerns.

USDA conservation programs will always be an important part of the agricultural solution, but Maryland and Virginia have taken extraordinary steps to offer a variety of state-level cost-share and other incentives to reduce loads from all sectors. By establishing robust dedicated funds for water quality, they have been able to support their communities and farmers as they implement the necessary upgrades and practices. As a result, both states are on-track with their Chesapeake Bay goals. A summary of both states' programs is included with this testimony.

In Pennsylvania, this success could be replicated. A suggested revenue source for a dedicated water quality fund is a small fee on large water users. HB 2114 suggests one hundredth of a cent per gallon on withdrawals greater than 10,000 gallons a day, and one tenth of a cent per gallon on consumptive uses greater than 10,000 gallons a day. Revenue estimates are projected to be \$245 million a year.

Even when shared with the other major watersheds in the Commonwealth, this would generate a meaningful source of support for Pennsylvania's farmers who shoulder much of the expectation for water quality improvement. As a new program, it could be crafted to make use of the new sophisticated tools that are becoming available to identify the most cost-effective practices and the geographic areas where the biggest progress can be achieved. As a state program, it can leverage efforts to improve local water quality and address the 19,000 miles of Pennsylvania rivers and streams that are listed as "impaired."<sup>3</sup>

Our Commission members and partners in Maryland and Virginia appreciate that Pennsylvania has zero miles of Bay shoreline. We know that your efforts "for the Bay" must also demonstrate benefits to Pennsylvania. The Commission is proud to be a part of an exciting new project led by the PA Department of Agriculture along with 13 other partners including state agencies, the conservation district, several non-profits and ag industry organizations in Lancaster County.

This project was recently awarded a large grant from the National Fish & Wildlife Foundation through its Innovative Nutrient and Sediment Reduction program. This project is "innovative" because it identified one particular small watershed that not only had influence to the Bay, but also included locally-impaired waters and significant potential for trout habitat. By saturating conservation efforts, particularly livestock stream exclusion, in that watershed, it is expected that improvement will be made not just for the Bay, but for the local area as well. The local government is particularly excited about the potential recreational benefits to the community and commitment to farm viability. This project could be a model for how a new water fund could be administered.

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<sup>3</sup> Federal Clean Water Act Section 303(d).

Besides cost-share for the practices themselves, a new fund should also support technical assistance. Because non-point sources are dispersed across the landscape and require site-specific solutions, technical assistance providers, like conservation district staff or private providers, are extremely important to provide the plan-writing, engineering and project support that farmers need. Investment in this human infrastructure can pay dividends in the successful implementation and long-term viability of conservation practices.

Finally, cost-share is one, albeit important, tool to achieve water quality. Successful programs in the watershed are those that have combined cost-share with regulation and voluntary incentives. Examples of some legislative initiatives that would complement a new cost-share program are:

- Establish an “Agricultural Certainty” (regulatory safe harbor) program.<sup>4</sup>
- Amend Clean & Green to require compliance with manure management plan/nutrient management plan and ag E&S plan as a condition of eligibility. (HB 1447)
- Create a certification program for commercial fertilizer applicators and limit the nitrogen and phosphorus in fertilizer applied to turf. (SB 563)
- Repeal or significantly modify the Clean Streams Law prohibition of stream fencing requirements (1937, June 22, P.L. 1987, § 702, added 1980, Oct. 16, P.L. 985, No. 169, § 1).

Thank you for your time and interest in the Chesapeake Bay. We are happy to answer any questions you have at this time, and are also available to you and your staff as you consider bills throughout the legislative session.

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<sup>4</sup> Maryland Ag Certainty program:

[http://mda.maryland.gov/resource\\_conservation/Pages/agricultural\\_certainty\\_program.aspx](http://mda.maryland.gov/resource_conservation/Pages/agricultural_certainty_program.aspx)

Virginia Ag Certainty program: <http://www.dcr.virginia.gov/soil-and-water/rmp>