TESTIMONY OF SHAWN M. GARVIN REGIONAL ADMINISTRATOR U.S. ENVIRONMENTAL PROTECTION AGENCY REGION III BEFORE THE SUBCOMMITTEE ON CONSERVATION, ENERGY AND FORESTRY COMMITTEE ON AGRICULTURE UNITED STATES HOUSE OF REPRESENTATIVES

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Good morning Chairman Thompson, Ranking Member Holden, and Members of the Subcommittee. Thank you for the opportunity to talk with you today about efforts to clean up the rivers and streams flowing to the Chesapeake Bay and the development of Phase II of the Chesapeake Bay Watershed Implementations Plans (WIPS) and their impacts on rural communities.

EPA has great respect for our rural communities and farmers in particular. Agriculture is a key part of the American economy and way of life, and has an important role in watershed restoration efforts. We value the critical work that farmers are doing to protect our soil, air, and water resources and believe that environmentally sound farming is essential to a thriving agricultural community and a sustainable Chesapeake watershed and ecosystem. Moreover, we believe environmentally sound farming is truly a preferred land use in the Region.

I am pleased to be here today to talk with you about the work we are doing—in collaboration with our state partners and other federal agencies—to restore local waterways and the Chesapeake Bay. I look forward to an open discussion with you about the Phase II WIP development and hope that I can answer any questions you may have about our work.

Chesapeake Bay TMDL

For nearly three decades, the Chesapeake Bay Program (CBP) partners have had a clear understanding of the efforts needed to restore water quality in the Bay. In 1983, the Governors of Virginia, Pennsylvania and Maryland , the Mayor of the District of Columbia, the Chair of the Chesapeake Bay Commission, and the Administrator of EPA signed the first Chesapeake Bay Program agreement to work together to restore the Chesapeake Bay. They have since renewed that commitment through annual meetings and periodic agreements and directives. In addition, the states of Delaware, New York and West Virginia signed a multi-jurisdictional Memorandum of Understanding committing to the restoration of the Chesapeake Bay.

The idea for a Bay TMDL is not a new or recent idea; it is merely the next step in this decades-long restoration partnership effort. In June 2000, when the CBP Partners signed the Chesapeake 2000 (C2K) agreement¹, they committed to meeting water quality standards in the tidal waters of the Bay by 2010. Since then, the Partnership continuously developed and refined models to allocate pollution reduction responsibility between the states and developed tributary strategies to implement the pollution reduction actions necessary to restore the tidal waters of the Chesapeake Bay. The targets established in 2000, and the level of effort to meet those targets, have changed very little when compared to the Bay TMDL.

When signing the C2K agreement, the partners recognized that a TMDL would need to be developed if the actions identified in the agreement were not successful in achieving water quality standards in the mainstem and tidal portions of the Bay.² Despite some significant progress in reducing pollution levels, the partners were not successful in meeting water quality standards by 2010. Our latest 2009 Bay Barometer report affirmed that despite the impressive restoration work done by the array of partners, the Bay continued to have poor water quality, degraded habitats, and low populations of some fish and shellfish species.

¹ http://archive.chesapeakebay.net/info/c2k.cfm

² Chesapeake 2000 agreement page 5: http://www.chesapeakebay.net/content/publications/cbp_12081.pdf

So, in October 2007, when it became apparent that water quality standards would not be met by 2010, the Chesapeake Bay Program's Principals' Staff Committee (PSC), a group of state secretary-level representatives, requested that EPA begin to work with them to establish a multi-state TMDL.³

After more than two years in development, EPA issued the final Chesapeake Bay Total Maximum Daily Load (TMDL), or pollution diet, on December 29, 2010 which established the maximum amount of pollution the estuary can receive and still meet water quality standards. The Bay TMDL is unique because of the measures EPA and the states adopted to ensure accountability for reducing pollution and meeting deadlines for progress. The final TMDL is based on the states' Phase I Water Implementation Plans (WIPs) and the input we received through our outreach effort across the watershed. That effort included hundreds of meetings with interested groups (including the agriculture community); two rounds of public meetings in all states, stakeholder sessions and media interviews; a series of monthly interactive webinars; notices published in the Federal Register; and a close working relationship with Chesapeake Bay Program committees representing citizens, local governments and the scientific community.

President Obama's Chesapeake Bay Executive Order

The TMDL is a part of a broader effort by the Obama Administration to restore the Chesapeake Bay. On May 12, 2009, President Obama issued Executive Order 13508 on Chesapeake Bay Protection and Restoration. In the Executive Order, President Obama declared the Chesapeake Bay a "national treasure" and ushered in a new era of federal leadership, action and accountability. The purpose of the Executive Order was "to protect and restore the health, heritage, natural resources, and social and economic value of the nation's largest estuarine ecosystem and the natural sustainability of its watershed." The Executive Order established the Federal Leadership Committee (FLC) for the Chesapeake Bay, which is chaired by the EPA Administrator and includes senior representatives from the departments of Agriculture, Commerce, Defense, Homeland Security, Interior

³ See PSC meeting minutes for October 1, 2007: http://archive.chesapeakebay.net/pubs/calendar/PSC_10-01-07 Minutes 1 9029.pdf

and Transportation. The Executive Order charged the FLC with developing and implementing a new Strategy for protection and restoration of the Chesapeake region.

The new federal Strategy for the Chesapeake region, released in May 2010, focuses on protecting and restoring the environment in communities throughout the 64,000-square-mile watershed and in its thousands of streams, creeks, and rivers. The Strategy includes implementing new conservation practices on 4 million acres of farms and conserving 2 million acres of undeveloped land. To increase accountability, federal agencies will establish milestones every two years for actions to make progress toward measurable environmental goals. These will support and complement the states' two-year milestones.

Watershed Implementation Plans (WIPs)

State WIPs are the road maps for how and when, in partnership with federal and local governments, states will reduce pollution in order to achieve and maintain pollutant allocations under the Bay TMDL. In developing the TMDL, our plan was always to have the pollution allocations based on state WIPs and to provide the states with flexibility to let them lead the way in determining how to reduce pollution and from what sectors.

TMDL implementation includes check-ins along the way to assure progress – a series of two-year milestones in which states, EPA, and other federal agencies are setting incremental commitments for specific practices and programs to be implemented.

Since the final TMDL was published in December 29, 2010, EPA and the states have turned our focus to TMDL implementation and developing Phase II WIPs. Phase II WIPs explain how states will work with their localities to get 60% of the needed restoration practices in place by 2017 and 100% of the practices in place by 2025.

Because implementation of the TMDL is designed to be as flexible as possible, EPA encouraged states to develop Phase II WIPs to meet the TMDL allocations in the best way for any given state. States are expected to develop draft Phase II WIPs by December 15, 2011 with final Phase II WIPs by March 30, 2012.

In recent weeks, we have had very productive conversations with the states that have allowed EPA to better understand how to adapt our collective approach toward cleaning up the region's waterways. A shift in EPA's focus for Phase II WIPs was announced in an October 5, 2011 letter to the state secretaries. Specifically, we have clarified that "local area targets" may be expressed in terms other than pounds of pollutant reductions by county. Instead, Phase II WIPs could identify "targets" or actions that local and federal partners would take to fulfill their contribution toward meeting the Chesapeake Bay TMDL allocations such as programmatic actions, pollutant reductions to be achieved by individual counties, or the number of BMPs that need to be implemented. These targets or actions should be based on what makes the most sense to the states and their key local partners. EPA agrees with the states that we need to place greater emphasis on increasing actions on the ground to restore the Bay.

States are now engaged in working with local governments, conservation districts, planning commissions, watershed groups, the public, and other key stakeholders to help refine strategies to clean up local waters and the Bay and to provide further assurance that the allocations will be met on schedule. In their Phase II WIPs the states will demonstrate that local partners are aware of the WIP strategies; understand their contribution to meeting the TMDL allocations; and have been provided the opportunity to suggest any refinements to the states WIP strategies.

Phase III WIPs, which states will develop by 2017, are expected to provide additional detail on restoration actions beyond 2017 and to ensure that the 2025 goals are met.

Engagement with the Agriculture Community

We recognize that the agricultural sector has done much to reduce nutrient and sediment loadings in the Bay watershed. Both nitrogen and phosphorus loadings from agriculture have declined since 1985. However, significant additional reductions from all sectors, including agriculture, are needed to meet water quality standards. The recent USDA Natural Resources Conservation Service assessment of the effects of conservation practices on cultivated cropland in the Chesapeake Bay region shows that conservation works. However, opportunities exist to make further progress in reducing nutrient and sediment loads from agricultural cropland.⁴

I have had a number of opportunities to talk directly with people in the agriculture community, including a visit to a Lancaster county, PA dairy farm this past summer when I accompanied Administrator Jackson. During our time on the farm, we got to see the use of field practices and manure handling practices that are benefiting the farm operation and improving impacts on water quality. In a roundtable discussion, hosted by Senator Brubaker, we had a chance to hear directly from farmers about the valuable work they are doing with their conservation district and to hear about their concerns about the process by which Bay protections are being implemented. These kinds of interactions are incredibly useful for us and we will continue to rely upon them as a key way of hearing from the agriculture community.

Agriculture Certainty

EPA has been involved in a number of discussions, along with USDA, state officials, and stakeholders to explore the option of state agricultural certainty programs. The idea of such state programs would be to increase producer interest and willingness to adopt systems of conservation practices based on farm-specific conservation planning, with incentives that provide assurances for farmers and increase the pace and extent to which resource conservation and verifiable water quality improvements are achieved. The Commonwealth of

⁴ http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1042076.pdf

Virginia is leading the way with its enabling statute for a certainty program and plans to promulgate a regulation to implement its program within the next year or so. On October 6, EPA and USDA officials met with the Chesapeake Bay states in Annapolis, Maryland to further discuss key elements and principles of an agriculture certainty program. More than 40 state representatives attended the very productive six-hour meeting. In addition, the states will hold another meeting this month to seek input from non-government stakeholders from both the agricultural and environmental communities as states move forward with developing these programs. We believe that certainty programs are best carried out by the states and we have offered our support to states in the Bay region and other parts of the country as they think through the development of these programs.

Financial and Technical Assistance

EPA provides funds to states to help with conservation implementation, technical assistance, tracking conservation, and compliance/enforcement activities. Our Chesapeake Bay Implementation Grants (CBIG) and Chesapeake Bay Regulatory and Accountability Program (CBRAP) provide \$20.3 million to the states for programs that improve water quality in the watershed. EPA funding helps with WIP development and implementation, including conservation implementation, technical assistance, tracking conservation, and compliance activities.

EPA's Innovative Nutrient and Sediment Reduction Grants Program, administered by the National Fish and Wildlife Foundation, provides grants for innovative, cost-effective projects that reduce agricultural and urban nutrient and sediment pollution in local and Bay waters. Since 2007, EPA has provided \$26.8 million to support 54 projects in the Bay watershed. This year alone, EPA awarded \$8.2 million to 19 projects in the Chesapeake Bay.

Two examples of projects we are funding through this grant program are:

- <u>Transitioning Small Dairies to Phosphorus Balance in the Shenandoah Valley, VA –</u> We are providing \$600,000 to Virginia Tech to work with small dairies in the Shenandoah Valley to help Virginia dairy farms achieve on-farm phosphorus balances over time. VA Tech will provide technical assistance to dairy farmers to help them develop a plan to achieve phosphorus balance over time, and financial incentives to install practices and technologies to address these imbalances. With matching funds, the total funding level for this project is \$1.4 million.
- <u>Testing Manure Injection Technologies to Reduce Nutrient Losses –</u> We are providing \$786,000 to evaluate manure injection technologies on no-till systems to reduce ammonia emissions and nutrient runoff from dry poultry and dairy manure, while improving nutrient up-take by crops in south central PA, the Shenandoah Valley VA, the Delmarva Peninsula, and NY.

We are pleased to see many states making a commitment to learn from these projects and advance technologies for finding alternative uses for excess manure nutrients. These innovations will keep farmers in business over the long-haul by moving them to a more sustainable way of managing manure. We are working with our state partners to credit the nutrient reduction benefits of these technologies.

EPA also recognizes that it is important for partners to have access to the tools and data we are using for the TMDL. In response to this need, EPA has provided workshops for each state on how the decision support tools work and how to submit data on nutrient and sediment controls to assess impacts of various management actions on Bay water quality. EPA also helped to create and provide training for tools that allow states to quickly and easily assess various pollution reduction strategies for their Bay cleanup plans.

Follow up from the March 16, 2011 Hearing

Data Coordination

At the March 2011 Subcommittee hearing, USDA and EPA pledged to continue their joint efforts to refine and increase the level of data available for understanding the implementation of conservation practices by farmers in the Chesapeake Bay region. Since the hearing, we have developed a joint workplan that outlines the actions we will be taking with USDA to continue our data collaboration. We provided this workplan to Chairman Thompson in June. Implementation of this workplan will further refine our accounting of agricultural conservation practices throughout the Bay watershed, bolster the scientific defensibility of the benefits of agricultural conservation practices, and improve consistency of data used in our agencies' respective decision support tools.

Agricultural Nutrient Policy Council (ANPC) Report Review

There was also discussion at the March 2011 hearing about the Agricultural Nutrient Policy Council (ANPC) report that claimed discrepancies between the CBP Watershed Model and USDA's Conservation Effects Assessment Project (CEAP) study. Earlier this year, the Chesapeake Bay Program's Scientific & Technical Advisory Committee (STAC), brought together a group of independent scientists to review the findings of the ANCP report. Reviewers included representatives from the US Geological Survey, Virginia Tech University, Penn State University, University of Maryland and the Maryland Agricultural Experiment Station.

The STAC found that the CEAP study and the Watershed Model developed by the Chesapeake Bay Partnership are in approximate agreement on both the nutrient and sediment loadings from agricultural lands in the Chesapeake Bay watershed at the large-basin scale and that there is more work to do in reducing nutrient and sediment loads on cropland. This affirms that conservation works and more conservation will help improve the health of local waters and the Bay.

Economic Analysis

Lastly, when EPA Deputy Administrator Bob Perciasepe testified before this committee in March 2011, there was discussion about both the costs and the benefits of implementing the Chesapeake Bay TMDL. Following the hearing, Mr. Perciasepe directed EPA's Chesapeake Bay Program Office to develop an estimate of the costs associated with the WIPs. In addition, he directed EPA's National Center for Environmental Economics to develop an analysis of the benefits associated with achieving water quality standards in the Chesapeake Bay. We are currently working closely with both federal and state partners to develop these analyses. For example, the costs of individual practices to be implemented in the watershed have been provided to all Bay watershed states for review. EPA also sponsored a two-day workshop on October 31 and November 1, 2011 to discuss approaches to the estimation of TMDL benefits with national and regional experts on these topics. EPA's Chesapeake Bay Program Office and National Center for Environmental Economics are scheduled to complete their initial analyses of costs and benefits by mid-late 2012, following completion of the Phase II WIPs. At that time, the costs analysis is expected to be complete, as will significant components of the benefit analysis. Some parts of the benefits analysis, however, require more laborious methodological approaches. Those parts of the analysis will be completed by the summer of 2013. Both studies will incorporate the final Phase II WIPs, due in March 2012.

Conclusion

Rural communities and farming are indeed a vital part of the Chesapeake Bay watershed's culture, economy and way of life. Maintaining a thriving agricultural community is essential to the long term sustainability of the Chesapeake Bay watershed and its ecosystems. I commend the farming community for the hard and innovative work that they have done in the past years.

The work we are undertaking is not new. Although the process and framework of the Chesapeake Bay TMDL may be new, the level of effort to meet the goals has been nearly the same for more than a decade. Implementing the Bay TMDL is simply the next step in this long term effort.

We look forward to continuing to work with this Subcommittee and the agricultural community to protect and restore local waterways that feed into the Chesapeake Bay.

Thank you for the opportunity to testify today, I am pleased to answer any questions.