

**HEARING TO REVIEW THE IMPLEMENTATION
OF PHASE II OF THE CHESAPEAKE BAY
TMDL WATERSHED IMPLEMENTATION PLANS
AND THEIR IMPACTS ON RURAL
COMMUNITIES**

HEARING
BEFORE THE
SUBCOMMITTEE ON CONSERVATION, ENERGY,
AND FORESTRY
OF THE
COMMITTEE ON AGRICULTURE
HOUSE OF REPRESENTATIVES
ONE HUNDRED TWELFTH CONGRESS
FIRST SESSION
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**HEARING TO REVIEW THE IMPLEMENTATION
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THURSDAY, NOVEMBER 3, 2011

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CONSERVATION, ENERGY, AND FORESTRY,
COMMITTEE ON AGRICULTURE,
Washington, D.C.

The Subcommittee met, pursuant to call, at 10:04 a.m., in Room 1300 of the Longworth House Office Building, Hon. Glenn Thompson [Chairman of the Subcommittee] presiding.

Members present: Representatives Goodlatte, Gibbs, Huelskamp, Hultgren, Thompson, Holden, Owens, and McIntyre.

Staff present: Brent Blevins, Debbie Smith, Lauren Sturgeon, Heather Vaughn, Suzanne Watson, Nona McCoy, Liz Friedlander, Anne Simmons, John Konya, and Caleb Crosswhite.

**OPENING STATEMENT OF HON. GLENN THOMPSON, A
REPRESENTATIVE IN CONGRESS FROM PENNSYLVANIA**

The CHAIRMAN. Good morning, everyone. I want to welcome everyone to this morning's hearing to review implementation of Phase II of the Chesapeake Bay TMDL Watershed Implementation Plans and their impacts on rural communities. This hearing is the second hearing this Subcommittee has held to provide oversight of the Chesapeake Bay TMDL process.

In March, we reviewed the productive conservation work that our farmers are engaging in throughout the watershed, and at that hearing, I stated that I believe this topic is one of the most important matters this Subcommittee will examine, and nothing has changed my mind on that.

Today's hearing will examine the TMDL with a different focus. We are going to examine the impacts the TMDL will have on states and localities within the Chesapeake Bay watershed. More specifically, we will be considering Phase II and the practical effects this period of the TMDL will have on states, regulatory bodies, our farmers, and communities.

By way of review, the TMDL was published in the *Federal Register* last December. The states had to submit their plans for Phase I Watershed Implementation Plans, or WIPs, to EPA prior to that date. These WIPs outline the targets for each state in reducing nitrogen, phosphorous, and sediment. The states are now required to

submit their Phase II WIPs to EPA next month. That is why the time of this hearing is so important. Because the TMDL for the Chesapeake Bay is such a broad effort, and because of the cost imposed on local governments within the watershed, it is imperative for Members of this Subcommittee to understand what is being asked of the counties, cities, and towns that are covered by the TMDL.

For the second phase, these plans must go into greater detail than the initial WIPs and outline each state's efforts to engage localities and all government organizations in the nutrient reduction process. States are being asked to formulate these draft plans while they are in the process of implementing the first phase of these plans approved by EPA last year.

Agriculture plays a large role in that process. Our March hearing showcased the good work producers are doing on the ground every day, but it is no secret that I have serious concerns about the TMDL both in terms of process and the likely impacts on our farms and communities. As laid out by EPA, this plan may result in a cleaner Bay. However, it will certainly come at an incredibly high price to the 17 million residents in the watershed. What is most problematic is that no one can say with certainty whether the cost is worth the effort, as we still do not have a cost-benefit analysis. For this process, I do understand from the Administrator's report that the one in May may be in process, I look forward to hearing more about that.

We addressed this in our March hearing, and I am aware that EPA has taken steps to address these concerns. I am pleased to hear that and I look forward to seeing the final analysis. But the longer we wait for the final analysis, the more difficult it will be to change directions if necessary. We are in the midst of a process that could cost individual states like Virginia, Maryland, and Pennsylvania more than \$10 billion per state. Even in the best of economic times, that figure would be a crushing burden on the states. My home State of Pennsylvania had considerable budget struggles in recent years. That is why it is so important to be sure of the costs and the benefits ahead of us.

Frankly, I am alarmed at the potential economic impact that this will have on states and municipalities in the watershed. I am worried that our rural communities will be faced with the difficult choice of either raising taxes or slashing other spending in order to comply with these requirements. I also have reservations about the Bay model that the EPA is using in making allocations. Several states, as well as outside groups, have raised issues about the accuracy of the watershed model used for nutrient allocation purposes. These concerns are addressed in a letter from Virginia Secretary of Natural Resources to Administrator Garvin that I am submitting for the record.

[The document referred to is located on p. 63.]

The CHAIRMAN. There is too much at stake for the use of an inaccurate model, and I hope to hear from EPA about steps it is taking to address these questions and concerns. I think I speak for Members of the Subcommittee when I say that we must be certain that this entire process is carried out in an open and transparent manner. We must also be certain that our Federal Government is not

carrying out the requirements of this plan in a heavy-handed manner and placing an undue burden on states and localities at a time when we need fewer regulations, not more.

I want to welcome our panel of witnesses. I thank them for agreeing to testify today. I want to welcome Region 3 Administrator Shawn Garvin. I want to thank you for coming down from Philadelphia for this hearing, Mr. Garvin. I look forward to hearing your testimony on how EPA is assisting states in complying with the TMDL. I also want to thank our second panel of witnesses for agreeing to be here today. The Subcommittee will benefit from hearing the regional, state, and local perspectives that each of you offer.

[The prepared statement of Mr. Thompson follows:]

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The second phase of these plans must go into greater detail than the initial WIPs and outline each state's efforts to engage localities and non-governmental organizations in the nutrient reduction process.

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But it is no secret I have serious concerns about the TMDL—both in terms of process and the likely impacts on our farms and communities.

As laid out by EPA, this plan may well result in a cleaner Bay.

However, it will certainly come at an incredibly high price to the 17 million residents in the watershed.

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But the longer we wait for the final analysis, the more difficult it will be to change directions if necessary.

We are in the midst of a process that could cost individual states like Virginia, Maryland, and Pennsylvania more than \$10 billion per state.

Even in the best of economic times, that figure would be a crushing burden on states.

My home state of Pennsylvania has had considerable budget struggles in recent years.

That's why it's so important to be sure of the costs and benefits ahead of us.

Frankly, I am alarmed at the potential economic impact this will have on states and municipalities in the watershed.

I am worried that our rural communities will be faced with the difficult choice of either raising taxes or slashing other spending in order to comply with these requirements.

I also have reservations about the Bay model that EPA is using in making allocations.

Several states—as well as outside groups—have raised issues about the accuracy of the Watershed Model used for nutrient allocation purposes.

These concerns are addressed in a letter from Virginia's Secretary of Natural Resources to Administrator Garvin that I am submitting for the record.

There is too much at stake for the use of an inaccurate model.

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I look forward to hearing your testimony on how EPA is assisting states in complying with the TMDL.

I also want to thank our second panel of witnesses for agreeing to be here today.

The Subcommittee will benefit from hearing the regional, state and local perspectives each of you offer.

I now recognize Mr. Holden for his opening statement.

The CHAIRMAN. And I now recognize Mr. Holden for his opening statement.

**OPENING STATEMENT OF HON. TIM HOLDEN, A
REPRESENTATIVE IN CONGRESS FROM PENNSYLVANIA**

Mr. HOLDEN. Thank you, Mr. Chairman. Thank you for having this hearing today.

The health of the Chesapeake Bay and those bodies of water contained in the Bay watershed, including the Susquehanna River that runs through my Congressional district, deserves our full attention. I want to thank our witnesses and guests for coming today to speak on a very important topic for farmers and ranchers not only in the Chesapeake Bay watershed, but also those across the country concerned with increased regulation.

Farming has always been an important part of the Chesapeake Bay's landscape. Comprising almost ¼ of the watershed, it is often noted that agriculture can play a significant role in the protection of this ecosystem. Efforts to improve Bay water quality, however, should not impede on the livelihood of our family farmers.

This Subcommittee has worked for a long time to make sure Chesapeake Bay farmers, who already face some of the most stringent environmental regulations in the United States, are put on the same level playing field as those in other regions of the country. Yet it feels like every time we take a step forward, we are pushed two steps backwards. EPA has singled out producers in the

Chesapeake Bay states for new regulations and increased penalties through the Chesapeake Bay TMDL; once again placing Bay farmers at a financial and competitive disadvantage. Despite lack of information about the data sets used to develop the TMDL reduction allocations and despite glaring discrepancies between data collected by various government agencies, EPA has pushed forward with Phase II Watershed Implementation Plans which set nutrient and sediment goals to more local levels.

In the 2008 Farm Bill, Congress—at the recommendation of this Subcommittee—established a new Chesapeake Bay Watershed Program to give farmers from the Chesapeake Bay states a guaranteed source of funding for the tools they need to implement land management practices that help reduce nutrients and sediment that can flow into the Bay. The increase in regulatory action by EPA makes targeted conservation funding even more essential. It is important we keep the Chesapeake Bay Watershed Program and what it does for producers in mind as we work to reauthorize farm bill conservation programs, especially when discussing potential program reductions and consolidation.

We must continue to do everything we can to protect our agriculture producers and preserve the integrity of this essential program. Agriculture practices can be some of the most cost-effective at improving water quality in the region. It is important that we encourage our farmers, who have always been the best advocates for resource conservation, to continue their efforts to further elevate their environmental stewardship across the Chesapeake Bay watershed without threatening harmful penalties.

I look forward to learning more about the development of the draft WIPs produced and the impact on agriculture from our witnesses today. Thank you, Mr. Chairman.

The CHAIRMAN. All right. I thank the Ranking Member. The chair would request that other Members submit their opening statements for the record so the witnesses may begin their testimony to ensure that there is ample time for questions.

[The prepared statement of Mr. Peterson follows:]

PREPARED STATEMENT OF HON. COLLIN C. PETERSON, A REPRESENTATIVE IN
CONGRESS FROM MINNESOTA

Good morning. Thank you Chairman Thompson and Ranking Member Holden for holding today's hearing. I am pleased that we are closely tracking the TMDL process for the Chesapeake Bay watershed and monitoring EPA's actions as the Watershed Implementation Plans move forward.

The impact the Chesapeake Bay TMDL could have on producers is of particular concern to this Committee and something we have been closely following. This oversight is important not only because of the effects it could have on those near the Chesapeake Bay but the potential ramifications it could have on producers nationwide.

I've made no secret about my concerns with some of these regulations. Chesapeake Bay producers already face some of the most stringent environmental regulations in the country. The additional costs that producers will incur to meet these requirements could potentially put these producers at a competitive and financial disadvantage, potentially forcing some out of business.

I think we need to continue looking very closely at these issues to ensure that EPA's policy and procedure is being developed in an open and transparent manner by taking into account input from all interested organizations and not basing important decisions based on some ideological viewpoints.

Again, I thank the chair for holding today's hearing and look forward to hearing from our witnesses.

The CHAIRMAN. And I would like to welcome our first panel to the table. And as I mentioned before, it is the Honorable Shawn M. Garvin, Region 3 Administrator, the Environmental Protection Agency Region 3, Philadelphia, Pennsylvania.

Administrator Garvin, please begin when you are ready.

STATEMENT OF HON. SHAWN M. GARVIN, REGIONAL ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY, REGION 3, PHILADELPHIA, PA

Mr. GARVIN. Good morning, Chairman Thompson, Ranking Member Holden, Members of the Subcommittee. Thank you for the opportunity to talk with you today about efforts to clean up local rivers and streams and the Chesapeake Bay, and specifically to discuss the developments of the Phase II Watershed Implementation Plans and their impacts on rural communities.

Agriculture is a key part of the American economy and way of life and plays an important role in watershed restoration. We believe environmentally sound farming is truly a preferred land use in the region. State WIPs are the roadmaps for how and when states will reduce pollution in order to achieve the local and regional water quality goals set by the Bay Total Maximum Daily Load, or TMDL.

In developing their WIPs, states have the flexibility to decide how to reduce pollution and from what sectors. The TMDL establishes the targets and the states through their WIPs describe how they will meet those targets. Since the final TMDL was signed in December 2010, EPA and the states have turned our focus to TMDL implementation and development of those WIPs. Phase I WIPs describe the restoration action at the state level, whereas the Phase II WIPs zoom in a little more and explain how states will work with their localities to get on-the-ground restoration practices in place.

In recent weeks, we have had very productive conversations with the states resulting in a shift in our Phase II approach. Our revised thinking is described in an October 5 letter I sent to the states. In this letter, we clarified that local targets do not have to be expressed in pounds of pollution but instead can be expressed as programmatic actions or the number of practices needed for restoration. These local targets should be based on what makes the most sense to the states and their local partners.

Right now, states are engaged and are working with the localities on these Phase II plans. We recognize that the agricultural sector has done much to reduce nutrient and sediment loadings in the Bay watershed, and we participated in discussions with states about certainty programs that recognize those contributions. The bottom line is that conservation practices work and additional opportunities exist to make further progress.

I was able to view these practices firsthand when I visited a dairy farm in Lancaster County this past summer with Administrator Jackson. State officials including Senator Brubaker and Secretary Krancer joined us on that visit. During our time on the farm, we got to see the use of field practices and manure handling that are benefitting the farm operations and improving water quality. In a roundtable discussion hosted by Senator Brubaker, we had

a chance to hear directly from the farmers about the valuable work they are doing and to hear about their concerns. These kinds of interactions are incredibly useful and we will continue to rely upon them as key ways of hearing from the agricultural community.

Last, I want to point out the work EPA has done following the March hearing where Deputy Administrator Bob Perciasepe testified. At the hearing, there were discussions about both costs and the benefits of implementing the Chesapeake Bay TMDL. Following the hearing, Mr. Perciasepe directed EPA staff to develop an estimate of the costs associated with the WIPs and the analysis of the benefits associated with achieving water quality standards. This work is well underway and EPA has been consulting with USDA and the states on this analysis.

You also asked us at the hearing about what is commonly known as the LimnoTech Report. As we stated at the hearing, we asked that an independent panel of scientists be convened to review the report. The panel recently published their review and found that the CEAP study and the Chesapeake Bay watershed partnership model are in approximate agreement on both the nutrient and sediment loadings from agricultural lands at the large basin scale. Again, this confirms that conservation works and more conservation will help us restore local waters in the Bay.

Last, at the hearing USDA and EPA pledged to work together on conservation practices data. Since the hearing, we have developed a joint work plan which we provided to the Subcommittee in June that further refines our counting of conservation practices, bolsters the scientific defensibility of these practices, and improves data consistency between the two agencies.

To conclude, farming is indeed a vital part of the Chesapeake Bay watershed. Thriving agriculture is essential to the long-term sustainability of the Chesapeake Bay and I commend the farming community for the hard work they have done. The work we are all undertaking now is not new. Although the TMDL may be new, the level of efforts to meet the goals have been nearly the same for more than a decade. Implementing the TMDL is simply the next step.

We look forward to continuing to work with this Subcommittee and the agricultural community to protect and restore local waterways and the Chesapeake Bay. Thank you for the opportunity to testify, and I am pleased to answer any questions.

[The prepared statement of Mr. Garvin follows:]

PREPARED STATEMENT OF HON. SHAWN M. GARVIN, REGIONAL ADMINISTRATOR,
ENVIRONMENTAL PROTECTION AGENCY, REGION 3, PHILADELPHIA, PA

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 3 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) agreement,¹ 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.

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 2 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 Ag-

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

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

³See PSC meeting minutes for October 1, 2007: http://archive.chesapeakebay.net/pubs/calendar/PSC-10-01-07_Minutes_1_9029.pdf.

riculture, Commerce, Defense, Homeland Security, Interior 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 2 years for actions to make progress toward measurable environmental goals. These will support and complement the states' 2 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 2 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

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

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 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 6 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:

- *Transitioning Small Dairies to Phosphorus Balance in the Shenandoah Valley, VA*—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.
- *Testing Manure Injection Technologies to Reduce Nutrient Losses*—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 ANPC report. Reviewers included representatives from the U.S. 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

Last, 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 2 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.

The CHAIRMAN. Well, thank you, Administrator Garvin, for your testimony.

The chair would like to remind Members that they will be recognized for questioning in order of seniority for Members who were here at the start of the hearing. After that, Members will be recognized in order of arrival. I appreciate Members' understanding.

And with that, I will recognize myself for the first 5 minutes.

Mr. Garvin, you mentioned in your testimony that the EPA's Chesapeake Bay Program Office is developing a cost associated with the WIPs, cost-benefit analysis. I read that within your testimony. This is more logistics. When can we expect to see the results of that analysis and are you working with the states to come up with those figures?

Mr. GARVIN. I will answer in reverse order. We are working with the states. A number of states have already put together some information on cost and benefits as they were going through Phase I, so we are certainly looking to utilize that information, but we are consulting with them and with USDA on that information. The timing of it is probably we are looking at the middle part of next year on the cost.

One of the things that we are taking into account is as the Phase I strategies were put together by the states and as they are more refined in Phase II, we want to make sure that we have a good understanding of what those balances are to help inform the costs. One of the things that we recognize is the fact that there are different mechanisms, different approaches, different cost effectiveness that you can get at when looking at all the sectors in the TMDL and subsequently looking at what decisions were made in those areas that will help inform that discussion.

The CHAIRMAN. Obviously, the model has been a significant point of controversy, and I appreciate the response in June where it appears that it is a work in progress. I am concerned, though, that the mandates as a result of the model results are not as flexible. I think everyone knows that there is considerable controversy over the modeling on which the TMDLs are based *versus* the model USDA has put forward. And even taking USDA out of the picture, the differences between communities that sit in proximity to each other, some that are in surplus on sediments and some that have to remove sediments.

And so at the last hearing on TMDL, this issue was discussed at great length. What has EPA done to reexamine the basic Chesapeake model this TMDL utilizes? And how much confidence do we have in the outcomes of this, the data that really is driving a very expensive response by farmers and communities and all those who live within the watershed?

Mr. GARVIN. Congressman, we have a great deal of confidence in the tool that is the model, and the model is really—it summarizes a model but there are several different models that go into that model and the number of things that make up the suite of tools that we use to help inform decisions. The model is a tool that we use. We have worked closely with USDA. We have looked at consistency of information. Many of the issues that we are dealing

with now are not related to the mechanism. It is related more to the input to the mechanism.

We recognize that there is information we do not have. Clearly, we can't input information into the mechanism that doesn't exist, and so we are working very closely, particularly if you are talking about agricultural processes on the ground. And so we are looking at working and we have been working very closely with USDA and the states and other areas to make sure that information is both being tracked, being verified, and then being provided to us so that we can account for that.

The CHAIRMAN. My concern obviously is kind of a cart-before-the-horse type thing. You know, we need good data so that we know that the taxpayers, whether it is a local level or out of their pockets, the agriculture community or the Federal taxpayers make investments, that they are going in for the right reasons in targeted areas.

When Administrator Jackson testified before the full Committee earlier this year, she stated that this process was largely driven by a settlement agreement between the Chesapeake Bay Foundation and the EPA. Would you agree that that is kind of what pulled the most recent—

Mr. GARVIN. I don't know exactly what the Administrator was referring to that you are citing. The actual TMDL is actually required and has been required for the last 15 years or so. And actually, back in 2000 when the partners agreed to the *Chesapeake 2000* agreement that said we would work and put on track by 2010—meaning water quality standards for the Chesapeake Bay—there was a recognition back then that if we did not make that goal that we would start beginning the process of creating a TMDL.

And subsequently, this has been a long-standing requirement that has been hanging out there. It has been actually a result of a number of court settlements from back in the early 1990s across the country in which—not to get into too much detail—the waters that are on the impaired list, the 303(d) list, needed to have TMDLs established. So this has been something all the partners have been aware of was coming if the efforts that we were undertaking were not going to get us to meeting water quality standards or at least on a significant path to meeting water quality standards.

The CHAIRMAN. Well, I just want to revisit: Administrator Jackson went on record to the Committee stating that this process was largely driven by a settlement agreement between the Chesapeake Bay Foundation and the EPA. In terms of accountability and transparency, do you think it is a conflict of interest that there are two EPA employees, Jeff Corbin and Chuck Fox, who both have been effective and instrumental in the development of the Bay TMDL, were both formerly employed by the Chesapeake Bay Foundation?

Mr. GARVIN. No, I don't believe there is a conflict of interest.

The CHAIRMAN. Okay. I now recognize the Ranking Member for 5 minutes.

Mr. HOLDEN. Well, thank you, Mr. Chairman.

Administrator Garvin, getting back to the model, you say you believe it has credibility but I am looking at an article from *Agri-Pulse* citing that a county in Virginia would have to reduce nitro-

gen by eight percent, phosphorous by 11 percent, and sediment by 20 percent but another run from the EPA model for the same county would have to make no reductions in nitrogen and has a 20 percent surplus in phosphorous and room for 350 percent more sediment. Now, how can we have faith that you are moving forward with credibility when two variations in the models by EPA directly contradict each other?

Mr. GARVIN. I don't know what the two different models you are referring to. I think what you are referring to is the same model at two different scales, and one of the reasons for the October 5 letter to the states suggesting that they do not have to, though it is still up to them to make the decision—have to articulate those more local Phase II plans in pounds at the local level as opposed to a narrative on practices that would be calculated at the larger river basin level.

There is a recognition amongst all of us that the model is much more effective at the larger basin level, that there are some irregularities at the finer scale. I liken it to my wife the other day asking me to hang a picture and it was between a doorjamb and the fireplace and there was a sconce in the way and I only had a yardstick. So I wasn't able to get the yardstick all the way up to the point where I had to measure, so what I did was I had to use a little bit of common sense and eye up a little bit on where the point is that I was going to put the drill and hang the picture. What the model does at the larger basin scale is give you the big picture, allows the jurisdiction to figure out what are those practices to get up to that point, how do they work when you start giving them up at the local level, and then make the calculations. Though some states may want to use it and then kind of use some discretion on how—

Mr. HOLDEN. All right. Thank you, sir. And is EPA doing onsite farm visits?

Mr. GARVIN. Yes. We are doing compliance visits and a couple—

Mr. HOLDEN. Under what authority is EPA doing onsite farm visits?

Mr. GARVIN. It would fall under section 308 of the Clean Water Act is the authority but the goal of it is we look at them more as educational visits that we are working with the conservation districts and others to help educate us and inform both us, the states, as well as the farmers on expectations. It also helps us to have a better sense as we look at review assurance on planning.

Mr. HOLDEN. Do you intend to visit every farm in the Bay region, the watershed?

Mr. GARVIN. We do not. We have been focusing on generally areas that are high concentration and have a heavy impact on the Bay in helping to work with those communities. You know, one of the areas we went in was southeast Pennsylvania where there was a high level of Plain Sect farmers who were not necessarily engaged in the discussion and it was an opportunity working with the conservation districts to meet with them and talk to them about what the expectations are and for us to be educated and informed on what they actually have going on, on the ground.

Mr. HOLDEN. Are farmers given notice that you are going to make the visit?

Mr. GARVIN. Yes.

Mr. HOLDEN. Okay. And Administrator, from your testimony I hear that you testify that you are working with the states, but I have to tell you Secretary Krancer who is in the next panel—in his written testimony he describes EPA as telling DEP to get over it or get on with it, and a similar statement was made by an official from Virginia. So that doesn't seem to reflect the good working relationship. So I wonder if you can elaborate on the comments that are in the Secretary's testimony.

Mr. GARVIN. Yes, absolutely. I can't refer to the specific comments. Obviously he will be testifying to those. I can comment on kind of the notion of what we have been working with all the Bay partners, with all the states in looking to address the issue of restoring the Chesapeake Bay. We can't just keep standing at the starting line and saying, this 10K is an awful long run to take. We need to start making progress towards implementing the TMDL.

The wisdom of the partnership back in 2008 led by the governors and the Administrator and the mayor of D.C. was breaking this up into 2 year increments, breaking these up into small pieces so that we can continue to adapt, we can continue to learn, we can continue to make changes over the course of the 15 years to address issues learned from what we are doing on the ground, share effectiveness with other jurisdictions on those type of things. And if we continue just to sit back and say this is a daunting effort and not move forward, we are never going to get there.

And so what we recognize and what we are committed to is a process of adaptive management, a process of continuing the dialogues. I have assigned senior managers at EPA to work with senior managers in all the states on a consistent basis to continue to hear concerns and figure out how we can evolve and adapt based on what those issues are.

Mr. HOLDEN. Well, thank you. Just keep in mind it is a partnership.

Mr. GARVIN. Absolutely.

The CHAIRMAN. I thank the gentleman and recognize Mr. Goodlatte from Virginia for 5 minutes.

Mr. GOODLATTE. Thank you, Mr. Chairman, and thank you for holding this hearing.

Administrator Garvin, welcome.

Mr. GARVIN. Thank you.

Mr. GOODLATTE. Standing at the starting line? Are you serious? I mean for 25 years farmers, localities, and others across the Chesapeake Bay region have substantially reduced the amount of nitrogen, phosphorous, and sediment going into the streams that go into the Chesapeake Bay and now you are claiming that we are standing at the starting line? There has been tremendous cooperation between local governments, state governments, and private entities, homebuilders, farmers, and others to achieve substantial reduction in these nutrients going into the Chesapeake Bay, and yet you claim that we are standing at the starting line.

Now, you mention in your testimony that after I and many others have complained bitterly for years that all of this is being done

without having done a cost-benefit analysis that now finally you are doing a cost-benefit analysis. Good for you. I am glad. But how can you make effective decisions about what should go into a TMDL and how can you expect the states to comply when you haven't even given them the evidence of what needs to be done and how it will benefit the Chesapeake Bay? We don't even know the extent to which the billions and billions of dollars that are going to be spent here will benefit the Bay, do we? Because you haven't done a cost-benefit analysis yet and yet you are expecting us to be "moving ahead instead of" as you say "standing at the starting line."

Mr. GARVIN. Congressman, my reference to standing at the starting line was the implementation of the TMDL. I absolutely agree with you and concur with you there has been a lot of great things that have occurred on the ground in the ag sector, urban and suburban storm water, and with wastewater treatment plants. My reference is the fact that if we wait for implementation of the TMDL until we have what is considered to be all the information, all the data—

Mr. GOODLATTE. Like an effective model and a cost-benefit analysis? Don't you think we should have a model that is effective that would indicate what kind of things will work and what won't work and a cost-benefit analysis to tell us whether this is even worth doing the way the EPA says to do it instead of the way the states had been doing it until you leaned on all of them?

Mr. GARVIN. We believe we have an effective model. With regard to the cost-effective analysis, there have been a number of cost-benefit analyses done by a number of folks over the course of the years, so it is not like the information doesn't exist. What we are looking to do is do it based on the Phase I TMDLs, based on what comes out of the Phase II TMDLs when we actually have those strategies and plans laid out on what the potential cost and benefits are for those activities. There have been blue ribbon panels in 2004, NOAA, University of Virginia, University of Delaware, many other academia—

Mr. GOODLATTE. But not a cost-benefit analysis. They looked at and offered their opinions about various things but they did not compare the costs with the benefits to be derived by the Bay and weighed those two together.

Now, let me ask you this. On August 30, President Obama sent a letter to Speaker Boehner outlining regulations that will cost \$1 billion or more. Virginia estimates that the Bay TMDL will cost the Commonwealth \$7 billion alone. You have a witness on the next panel sitting behind you who is a member of the city council of a small city in my district, Lynchburg, Virginia, that has already spent hundreds of millions of dollars in compliance and estimates that these new requirements will cost them well over \$100 million or more to comply.

I believe that other states have similar estimates and this does not account for the cost incurred by localities, businesses, farms, and families. However, the Chesapeake Bay TMDL and the WIPs are not included in the list of costly regulations that the President outlined. Can you explain this omission? I am talking about \$20 billion or more, not \$1 billion.

Mr. GARVIN. The simple answer, Congressman, is the TMDL is not a regulation.

Mr. GOODLATTE. It is not a regulation?

Mr. GARVIN. No.

Mr. GOODLATTE. So what is it?

Mr. GARVIN. TMDL is a strategy, a plan to meet the 303(d) requirements of the Clean Water Act.

Mr. GOODLATTE. And what will that result in localities and farmers and state governments and homebuilders and others having to do?

Mr. GARVIN. Put on-the-ground activities to improve water quality.

Mr. GOODLATTE. And will they be able to do those voluntarily or are they going to have to be required to do those?

Mr. GARVIN. Both.

Mr. GOODLATTE. But that is not a regulation?

Mr. GARVIN. The TMDL is not a regulation.

Mr. GOODLATTE. Well, that is a pretty amazing claim. You think people should feel good about the fact that the President left off a list something that is being pushed down from the Federal Government onto the states and then onto farmers and others and told, well, it is not on the list of things we should be concerned about, the impacts on jobs and economic growth because it is not a regulation? I find that unbelievable.

Mr. Garvin, you participated in a meeting with the Chesapeake Bay jurisdictions on September 16 in which most of the jurisdictions expressed concerns about how the model assessed the use of nutrient management plans. In that meeting, the jurisdictions produced a chart that showed that in many counties, the use of nutrient management plans actually increased nutrient application rates in the upgraded 5.3.2 model. Do you agree that nutrient management land plans as identified in the model result in higher rates of nutrient application?

Mr. GARVIN. No. What I agree with is the fact that that is an indicator that there is too much manure in that area in which that data came from. Ultimately, the way the model works and the way the law in Virginia works is the fact that you can't apply manure to lands unless you have a nutrient management plan. Subsequently, the amount of manure that exists is credited to nutrient management plan lands, which is an indicator that what needs to happen is more nutrient needs to be dealt with so it is not being land applied.

Mr. GOODLATTE. Is it true that one of the items you committed to fix in the previous model was related to how it evaluated nutrient management plans?

Mr. GARVIN. Yes, the two areas in which we had agreed to make modification were urban/suburban land cover, as well as nutrient management plans.

Mr. GOODLATTE. Can you give me a timeline for these fixes?

Mr. GARVIN. That was done back in June.

Mr. GOODLATTE. I might ask one more question, Mr. Chairman, with your leave?

The CHAIRMAN. Yes.

Mr. GOODLATTE. One of the major complaints about the model is that it does not account for non-cost-shared nutrient management plans. Has this been fully corrected in the model? Additionally, is the model giving credit for other things farmers are doing? For example, some farmers may not agree to fence off streams on their land by 35 feet. Picture this: if you have a stream meandering through your farm for a mile and you fence it off on both sides, in addition to the cost of doing that, you are fencing off 70 feet times 5,000. That is 350,000 square feet of usable pasture land, more than 8 acres. But instead they do it to 5 feet, which keeps the cattle out of the streams and has a substantial benefit. Does the model account for those practices?

Mr. GARVIN. With regard to non-cost-share conservation practices being credited in the mechanism, it is not a model correction; it is an input issue. I absolutely agree with you. There are things going on, on the ground, that we need to know and we are working closely with those folks who track and monitor that to provide that information to us so that it can be credited. We also recognize that there are additional areas where nobody has the information and we are working to figure out what is the best way to get that information. For example, as I referred to earlier, the Plain Sect community and their way of life, government interaction is done in a different way, and so our ability to work and find out what are those practices going on, on the ground, so that they can be credited in those areas is an important activity and we are working very closely with USDA and states on making sure that information is inputted.

Mr. GOODLATTE. Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman and recognize Mr. Owens, from New York.

Mr. OWENS. Thank you.

Mr. Garvin, thank you for testifying today. I want to ask you a couple of questions about the TMDL model that is specifically focused on New York State. We have heard from our constituents that there is a difference between the model estimates and the actual recording that takes place on the ground, the actual test results. How is that factored in or is it factored in?

Mr. GARVIN. One of the bases of the model is the input of the data on actual water quality that we know. We recognize that there are some special issues in New York based on their location, based on the fact that they have been actually reducing and not growing and we have been working very closely with the State of New York to address those issues. And I believe that in the very near future, next month or so, we will have a path forward that addresses those concerns.

Mr. OWENS. So we will be able, then, to actually have the real testing data included as opposed to model data.

Mr. GARVIN. The real testing data is already included. What it is going to do is reflect some special circumstances in New York that address some of the concerns they have about growth and location and contributions to the Bay.

Mr. OWENS. Another question that has been raised by my constituents is the need or the difference between the delivered load and the edge-of-stream load, and, fundamentally, the question is

that you do have some dilution that occurs as the water moves downstream, and therefore, the load is in fact different than the measurement that is currently being proposed. How do you deal with that?

Mr. GARVIN. That is actually one of the things that we are addressing in New York as well as in West Virginia, and we have folks who are working with them to account for their concerns in that area.

Mr. OWENS. And finally, when you do your cost-benefit analysis, are you taking into account the increase in cost to the consumer for production of food in the ag community that arises out of increased regulation?

Mr. GARVIN. I will have to get back to you on that, Congressman. I am not sure all the factors that are going into the analysis, but we can make that available to you and to the chair and the Subcommittee.

Mr. OWENS. If it is not included, would the EPA consider including that as a factor?

Mr. GARVIN. Well, I will go back and have a conversation and figure out what is being included and what is not and we will get back to you.

[The information referred to is located on p. 83.]

Mr. OWENS. Thank you very much.

I yield back.

The CHAIRMAN. The gentleman yields back. I now recognize Mr. Gibbs, from Ohio.

Mr. GIBBS. Thank you, Mr. Chairman.

Obviously, I am the only one on the Committee right here that is not in the Chesapeake watershed, so I don't know all the specific data that you guys have, but I do have a couple of questions.

I am just curious because my experience in my area talking about the modeling and stuff, on stream monitoring programs, who is doing that? Is that in partnership with the local county's soil and water districts, state EPA? I am curious how rigorous your monitoring process is.

Mr. GARVIN. I appreciate that and that is kind of the lifeblood of what we are doing. We have somewhere upwards of 250 monitoring points throughout the Chesapeake Bay watershed. We are actually undertaking an effort to increase that so that we have the most amount of data and information that we can to help inform on the discussions. We are also working with states and local communities to get information and data on what they have on the impacts.

You know, clearly, when we are moving forward in this approach and we are looking to restore the Bay—and quite honestly to restore any water body—the more information we have, the better information we have to inform our decisions and be able to measure. One thing that we tend not to touch on is the fact that we deal with the Chesapeake Bay watershed in its entirety. It is 64,000 square feet and it is 17 million people, but there are going to be different parts of the Bay watershed that are going to respond faster than other parts of the watershed. We want to make sure that we understand where those are and what the impacts are.

Mr. GIBBS. I guess I would be an advocate that you have to break this down in subsets—

Mr. GARVIN. Yes.

Mr. GIBBS.—and determine what is happening, especially point source areas and non-point source areas—

Mr. GARVIN. Yes.

Mr. GIBBS.—especially making a determination of non-point is a lot more challenging as you know. And my experience in the past, you have in different streams different flow rates, weather conditions, rainfall that can impact it. And I know in my area in the past years we had an issue with the EPA at one time. They were doing what I call drive-by evaluations, windshield drive-bys and weren't getting the right data. And so I guess being an outsider of the Chesapeake, that is when I would question and make sure that the monitoring process to develop the model makes sense.

And the second part of that, in my one watershed we had been involved for about 10 years of a nutrient trading program—

Mr. GARVIN. Yes.

Mr. GIBBS.—and how that has been so successful, they have lowered the load into that watershed working with a cheese manufacturer and working with those local farmers around there, and it has been real successful and kept the jobs and the economic growth. Are there any type programs like that going on in this watershed?

Mr. GARVIN. Yes, Congressman. The TMDL actually had a section, an appendix that dealt with a placeholder for trading. A number of the states came in with their state strategies that relied—in varying degrees on trading. What we have been doing with the states currently is we have been meeting with them, discussing what trading programs they do or they don't have, getting a better sense of what they are. One of the issues is making sure that when we are doing trading we are not double counting, when we are doing trading that there is a common exchange rate so that we are talking apples and apples when we are looking at numbers. And so we have been working close with the states on that, and I am hoping in the next couple of weeks—and we will share this with the Subcommittee—that we will be providing some feedback to the states on that review.

[The information referred to is located on p. 84.]

Mr. GIBBS. Of course, to me that would go back to having a very rigorous monitoring program.

Mr. GARVIN. Yes.

Mr. GIBBS. And are there soil and water county districts near that area?

Mr. GARVIN. Yes.

Mr. GIBBS. So you have a close working relationship with the NRCS and the soil and conservation services in each county?

Mr. GARVIN. Absolutely.

Mr. GIBBS. Okay. Because, I just can't emphasize enough—the monitoring—to develop a model that is accurate has to be based on sound data from the monitoring.

So thank you, Mr. Chairman. I yield back.

The CHAIRMAN. Thanks, Mr. Gibbs.

We are going to have a few additional questions. I now recognize Mr. Goodlatte.

Mr. GOODLATTE. Thank you, Mr. Chairman.

Mr. Garvin, in February of 2008, the Chesapeake Bay Program's Scientific and Technical Advisory Committee, or STAC, told the EPA that its Chesapeake Bay models, "are not appropriate for development and implementation of TMDLs at the local watershed scale." In your letter to Bay Jurisdictions on October 5, you admit that there are areas in the watershed, "where there are limitations to the application of the Chesapeake Bay Program watershed model at a finer scale, finer scale than the major basin." However, the final TMDL based off the model contains thousands of allocations. Do you understand the concerns that this raises about the accuracy of the model and the TMDL which has developed by this model?

And throughout this process, the EPA has asked the states to provide reasonable assurance of plan implementation, but what reasonable assurance has the EPA provided that the model that is driving this whole process is accurate or that the loading reduction numbers the EPA has distributed to the states are accurate?

Mr. GARVIN. The TMDL was developed and the tool or the model that was used was at the larger major basin scale, not at the finer scale, which is actually the subject of the October 5 letter, which is a recognition that there are some limitations at the finer scale, not that it can't be used as a planning tool that the states can use. But when we are actually doing calculations on effectiveness, we are going to do it at the larger scale.

Mr. GOODLATTE. But the TMDL itself includes thousands of allocations based upon a tool that you admit is not ready for those finer allocations.

Mr. GARVIN. We believe that at the scales that were done for the TMDL the model is effective.

Mr. GOODLATTE. What is driving the timeline to have the Phase II WIP completed by March 2012? Is there a legal requirement or a statutory requirement to meet this deadline?

Mr. GARVIN. What ultimately is driving it is the schedule that was laid out with the end point being 100 percent of the practices on the ground by 2025, 60 percent of the practices on the ground by 2017.

Mr. GOODLATTE. There is no legal requirement that you take a model that is flawed, that isn't ready for primetime or for as you say "finer scale," but you have nonetheless imposed thousands of allocations at that finer scale. There is no statutory requirement, no legal requirement to meet that deadline, is there?

Mr. GARVIN. There is a settlement—well, let me back up. We set the schedule which was actually 5 months earlier than what the schedule is that we are on now. We expanded that schedule at the request of the states for some additional time. We also again in the October 5 letter changed our approach to the Phase II allowing the states the option of going to a narrative—

Mr. GOODLATTE. Is it more important to develop implementation plans with the correct science or to meet an artificial deadline?

Mr. GARVIN. I believe that we have the correct science and I believe that we need to keep on a schedule—

Mr. GOODLATTE. But you have admitted that you don't have the correct science. You said it is not ready. You said you don't have a model that works at the finer scale, and yet you are asking individuals in communities and property owners of various kinds and so on to begin implementing something that is not ready. And Mr. Garvin, you have not committed to updating the Bay model until the Phase III WIPs are implemented in 2017. Why the delay when there are multiple 2 year milestones in the interim?

Mr. GARVIN. What we have committed to is a reevaluation of the process in 2017. We will—

Mr. GOODLATTE. What are we supposed to do in the meantime?

Mr. GARVIN.—continue to evolve the model, evolve the inputs that go into the model between now and 2017. What we are looking to do in 2017 is a wholesale evaluation based on what we learned from 2 year milestones, based on what we learned from the activities on the ground to make determinations, working very closely with the states and other Federal partners, in figuring out what is the best process to get us from 2018 to 2025. It is basically a mid-course check on where we are, our effectiveness on what we are doing and how we get to the end goal of 2025.

Mr. GOODLATTE. Even though, as you say, standing at the starting line of the TMDL, you guys weren't ready to go. You don't have a model that works. You have a model that you acknowledge does not work at the "finer scale," and yet you expect everybody to live by it, but maybe by 2017, 6 years from now, you will get around to telling us whether or not it was right.

Mr. GARVIN. I believe we are ready to go and that is the process that all of the partners are undertaking at this time.

Mr. GOODLATTE. Because you have threatened them if they don't undertake it with actions that most of us here on this panel who are in the United States Congress and involved in writing laws don't think the laws of the land allow you to do.

Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman.

Mr. Garvin, just a couple final questions from me. You know, this is mainly farmers and communities, specifically in Lycoming County and then outside the district points east, as you are aware, we experienced some pretty tremendous flooding—it has been about a month ago—and I saw things going down the streams that were just—well, let us put it this way, there are a few cabins that are now in the Chesapeake Bay that originally were in Pennsylvania. Or maybe they haven't made it there yet but they are coming. I don't know how long it takes for that water to flow, a very long time.

And we all saw on the news a significant amount of runoff, sediment, a lot more than just sediment that went directly into the Susquehanna River. And I read through the testimony today and it talks a lot about—I didn't see the word turbidity but I saw, in terms of some of the measurements in the Bay cloudiness, dead zones, those types of things. And I have to wonder, when we are having these 100 year floods a whole lot more than 100 years it seems like and there is not much we can do to control those, certainly can't prevent them. They are going to occur. But my question is with these hundreds of millions of dollars of some of these com-

munities and the costs of which we are spending on an annual basis, is there consideration of what went directly into the Chesapeake River and ultimately into the Chesapeake Bay? Is that factored into the modeling or is that impacted in—I have to wonder how much sediment as a result of 48 hours of flooding compared to 20 years of agriculture wind up in the Bay?

Mr. GARVIN. That is a very good question, Congressman, and clearly that was one of the issues when initially everybody was concerned about Irene and it was actually tropical storm Lee that really hit your portion of the district and had a larger impact on the Susquehanna. You know, we recognize in all these conversations that we have is that there are going to be ebbs and flows as it relates to the impacts of Mother Nature, be it droughts in some times and excessive rain and potential flooding at other times. So we try to factor that in both in our ability to measure success of the practices that are going on the ground, as well as being able to take a snapshot of where we are and where we need to get to.

With regards to the storm a couple months ago or I guess a month and a half ago or so, USGS, Army Corps, others had already had folks out there looking at, as I said, the concerns with Irene that did not necessarily develop, and so they were actually in place already doing additional monitoring before and after tropical storm Lee to help characterize what the potential impacts might be.

The CHAIRMAN. And so will you be able to provide this Subcommittee measurements in terms of—you have given us some testimony and through the testimony of the other witnesses we know approximately how many pounds of sediments are targeted for each state and we have estimates of the tremendous reductions since about 1985, if I recall correctly, from the testimony. It would be really interesting to see the estimates of the amount of sediments that go into the Bay that are going to be largely unpreventable and are going to occur on a reoccurring basis. I would love to see that number compared to the TMDL plan that is out there as well.

Mr. GARVIN. We will get you whatever information we have or that we have collected from other Federal agencies and states. The State of Maryland and the Commonwealth of Virginia were also out doing some monitoring after Irene.

The one thing I do want to note and this was at least initial feedback was that the timing of the storm—let me put it this way—the impacts could have been greater if it had happened earlier in the summer. So that may turn out to be something that diminishes at least the overall impact.

The CHAIRMAN. My last question is actually kind of a clarification. In your testimony and what you have testified on, you seem to infer that the TMDL model is effective but the effectiveness at this point is limited at—I don't recall the—it was a large Bay scale or there was a particular term you used.

Mr. GARVIN. The major river basin scale.

The CHAIRMAN. Major—

Mr. GARVIN. And it is effective at lower levels than that but we recognize that it becomes less effective the finer the scale becomes. It doesn't limit it from being a valuable tool to be used to help inform decision and I can't stress enough that the policy decisions are made by the policy-makers. The model helps to inform it, as well

as data that we get from all corners of the watershed. The same thing with states in understanding what is happening, the dynamics that are happening on the ground, where they feel that what sectors they can make decisions based on. And so the model is one tool, a big tool that is used to help inform those decisions.

The CHAIRMAN. All right. Well, I know Mr. Goodlatte would agree with me. We are concerned with the TMDL model in that it is being driven to make decisions on a local level and it has not only been proven to be inaccurate, it has been shown to be inconsistent with just some of the testimony that we have heard, that has been reported, the discrepancies in terms of numbers that have been set.

And that really concerns me because in your testimony you describe on the bottom of page 4, Phase II WIPs explain how states will work with their localities—now, it is taking it down to the local level—to get 60 percent of the needed restoration practice in place by 2017, 100 percent of the practices in place by 2025. Bottom line is we need a TMDL model if we are going to use one that we are confident that doesn't have the discrepancies that are showing up in this one. And so I have grave concerns about moving forward when the science isn't settled.

And that is not to say it is not possible to do that and it is not possible to come up with a model that actually is accurate for the full river basin, for states as a whole, and for localities, especially localities, because that is where a lot of these remedies are placed and that is where the financial burden is placed, on localities. I think the responsible thing is to make sure we tighten up that model. I appreciate the target improvements that were identified by the EPA in the letter that was sent in June. I just think that there is more work to do.

So I want to thank you for taking the time to come down from the Keystone State and being here and testifying today.

Mr. GARVIN. Thank you, Congressman.

The CHAIRMAN. Thank you.

Now, the folks that are on the second panel, I want to welcome our second panel witnesses to the table as we get set up.

Well, now I would like to welcome our second panel of witnesses to the table. We have the Honorable Michael Krancer, Secretary, Pennsylvania Department of Environmental Protection down from Harrisburg, Pennsylvania; we have the Honorable Michael Brubaker, Chairman of the Chesapeake Bay Commission—the Commission is based out of Annapolis, Maryland; Mr. Carl Shaffer, President of the Pennsylvania Farm Bureau Federation, Camp Hill, Pennsylvania; Hon. Turner Perrow, Lynchburg City Council, Lynchburg, Virginia.

Secretary Krancer, please begin when you are ready.

**STATEMENT OF HON. MICHAEL L. KRANCER, SECRETARY,
PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL
PROTECTION, HARRISBURG, PA**

Mr. KRANCER. Sure. I appreciate it. First, it is an honor for me to be here in front of a couple of my home Congressmen. If you don't mind, I am going to adopt Representative Goodlatte as my honorary home Congressman because I went to UVA and then I

went to Washington and Lee. Judge Sweeney taught me trial practice and my classmate, Morgan Griffith, is now a colleague of one of yours. So we were really proud to send him to the United States Congress.

Mr. GOODLATTE. We have a lot of ties that bind.

Mr. KRANCER. Yes, we do. Anyway, again, thanks for having me. And I want to just hit on a couple of notes. You have seen my written testimony and I certainly can talk about that and I appreciate the opportunity for you to ask me questions. Congressman Goodlatte hit the nail on the head about the deadlines and about what is really driving this. And I know the regional Administrator had a little trouble grasping the concept. Apparently, his boss did not when she was in front of the whole Committee. This is a settlement agreement that is driving these immediate deadlines. These are self-imposed deadlines with friendly litigation partners. I think that was also pointed out by the Congressman. And I have pointed that out before and I talked about it in an article that appeared in the *Altoona Mirror* that I think you all have seen. But that is clearly the case. So let us make no bones about that. That is exactly what is happening. That is what is causing the rush to judgment; that is what is causing the cart before the horse that the Congressman has noted already.

There was some discussion about farm inspections in Pennsylvania specifically. It is in my backyard so I am interested in that. And heavy-handedness, well, I think the heavy-handedness can go together, and I will give you a little snippet of what I am talking about. July 19 we had a press release from the EPA touting one of the farm inspections, and they said we have done these farm inspections, particularly dairy farms, and we found that there was widespread noncompliance with state regulations and extensive nutrient pathogenic contaminations of drinking water sources. Well, I considered that inflammatory. I considered that an attack on Pennsylvania farmers in a broad brush, and I also considered it insensitive and certainly overstated—certainly a lot of rhetoric there. But in any event I thought it was inappropriate.

Congressman Goodlatte hit the nail on the head again with the regulation. Not a regulation? My foot it is not a regulation. It sure is a regulation and it should be on that list of regs that are costing billions of dollars. But the bottom line is if the states don't dance to the tune, the nonscientific tune that is being set, there are backstops that will be imposed, penalties imposed from the Federal Government. So again the Congressman was exactly correct about that.

I have talked about this in my written testimony and I was at the all-secretaries meeting; I was at the summit, whatever you want to call it, about the modeling; and until very recently, the October 5 letter in particular, we were not being responded to in any meaningful sense. We were given some—I would say lip service—about the model but we were not being paid attention to and what I would call a bunker mentality was adopted by the EPA on this. The *Virginia Pilot* reported that where one of the highest EPA officials basically said get over it. Get on with it. Well, that was when we kept bringing these issues to the attention of the EPA, the scientific model issues which these are not political issues by the way.

These span different Administrations. I inherited these technical questions and disputes with the EPA. So this is not a political issue in any way, shape, or form. It is a down and simple scientific issue.

So I was encouraged by the October 5 letter for sure, but like I said in my testimony, we are going to have to wait and see. In my written testimony, we are going to have to wait and see whether that is additional placating or whether that is really serious effort at EPA to start paying attention. We are just going to have to see.

At the end of the day, Congressmen, you all hit it on the head as well about the cost. I said in my written testimony we have to make sure that this is worth the price. We all want to clean up the Bay and we want to get it better. There is no question about that. My farmers, Virginia's farmers, New York's, everybody is committed to doing that, but we need to make sure that the bang we are getting for the buck is worth it and that we are not paying too much buck for too little bang as I say in the testimony.

So with that, I am going to close and allow either questions or I don't know what the agenda is to move on to the other witnesses first, whatever it is.

[The prepared statement of Mr. Krancer follows:]

PREPARED STATEMENT OF HON. MICHAEL L. KRANCER, SECRETARY, PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, HARRISBURG, PA

Introduction

Chairpersons Thompson and Holden and Members of the Subcommittee, thank you for the opportunity to appear before you to discuss Pennsylvania's efforts to comply with the U.S. Environmental Protection Agency's (EPA's) expectations for the Chesapeake Bay Total Maximum Daily Load (TMDL), the Pennsylvania Phase II Chesapeake Watershed Implementation Plan (WIP) and their impacts on rural communities.

Pennsylvania is committed to protecting and enhancing our streams and watersheds. The efforts here at home will in turn help in further restoring the Chesapeake Bay by 2025. Over the years significant progress has been made to reduce nitrogen and phosphorous pollution of local waters in Pennsylvania's watersheds. According to EPA's current watershed model, when compared to 1985, Pennsylvania has achieved 27% of the nitrogen reductions, 31% of the phosphorous reductions, and 50% of the sediment reductions needed to reach the 2025 restoration targets. This is real progress but more needs to be done. When compared to current 2010 progress reported by the watershed model, Pennsylvania needs to achieve an additional 33.23 million pound reduction in nitrogen, 1.26 million pound reduction in phosphorous, and 524.4 million pound reduction in sediment by 2025. It should be noted that EPA's watershed model can be a useful tool to help guide management actions and project their results. It is not, however, sufficiently precise to measure actual progress or lack thereof. It should not be used in a regulatory context to determine whether an enforcement action or other penalty is appropriate.

Basic Statutory Background

The Federal Clean Water Act requires states to assess their waterbodies to identify those not meeting water quality standards. If a waterbody is not meeting standards, it is listed as impaired and reported to the EPA. Chesapeake Bay tidal waters in Virginia, Maryland and the District of Columbia were listed as impaired by the states and EPA in 1998. The Act then requires development of a Total Maximum Daily Load (TMDL) for the pollutants that caused the water quality violations. A TMDL calculates the maximum amount of a specific pollutant that a waterbody can receive and still meet water quality standards. It also establishes a pollutant budget or "diet," which allocates portions of the overall pollution load to the pollutant's various sources. The Chesapeake Bay TMDL published by EPA on December 29, 2010 establishes load allocations for nitrogen, phosphorus and total suspended solids based in part on Pennsylvania's Chesapeake WIP. In the TMDL, EPA also established a TMDL accountability system, including the development of a Phase II Chesapeake WIP and 2 year milestones. Pennsylvania completed its Phase I WIP in December 2010 at the major river basin scale (e.g., Susquehanna). The draft

Phase II WIP is due to EPA on December 15, 2011, and the final is due March 1, 2011.

Pennsylvania Success Stories

Pennsylvania has a long history of success since it became active in Chesapeake Bay restoration activities in 1983. Much of this success is due to the support of Pennsylvania's General Assembly and partnerships with the agricultural sector. This leadership derives from the Commonwealth's set of agricultural stewardship firsts, including:

- The first Bay state to require mandatory farm nutrient management plans;
- The first Bay state to regulate nitrogen and phosphorus in its nutrient management program;
- The first EPA-approved regulatory program for concentrated animal feeding operations;
- The first Bay state to permanently preserve 20 percent (more than 3 million acres) of land in the watershed.
- The first Bay state to meet its goal to plant 3,736 miles of forest buffers by the year 2010. The state has planted a total of 3,894 miles of forest buffers along waterways since 2002; and
- Pennsylvania is home to the largest Conservation Resource Enhancement Program (CREP) in the entire nation. The CREP program delivers more than \$50 million in state and Federal assistance and targets key edge-of-stream BMPs to maximize water quality.

Recent History With Respect To the Phase II Water Implementation Plan Process

You are probably most interested in the most recent events regarding the Phase II WIP process as that is what has been the topic of most of the discussion and some very recent media attention in both Pennsylvania and Virginia. So, let me address that first.

In EPA's original March 2011 Phase II WIP guide, EPA expected each state to sub-divide its load allocations to a more local level in Phase II (*e.g.*, county). As Pennsylvania and the Chesapeake watershed jurisdictions began to review Chesapeake Bay watershed model outputs at county levels, they determined that the model had serious technical deficiencies that do not provide full nutrient reduction credit for several nonpoint source Best Management Practices (BMPs). Moreover, EPA was intent on using the model in the Phase II WIP process as a metric to drive huge expenditures and determine compliance where the only proper role of any model would be as a prediction tool.

Pennsylvania aired these technical concerns early on. We directed a letter dated May 26, 2011 to Administrator Jackson on this topic. (A copy of that letter is attached hereto as *Exhibit A*). EPA was dismissive of the technical concerns outlined. Pennsylvania and other states continued to air these technical concerns to EPA at a September 16, 2011 meeting of State Secretaries and Deputy Secretaries with the EPA Region III Regional Administrator. Again, EPA was dismissive saying basically to us "get over it" or "get beyond it". EPA's public statements were similar. Indeed the Senior EPA Policy Advisor on the Chesapeake Bay dismissed without dealing with the technical points the states had been making by quipping in a Virginia newspaper article, "let's get on with it." (A copy of that article is attached hereto as *Exhibit B*). The issue proved hard for EPA to escape as public media attention rose as is evidenced by the Virginia newspaper article just mentioned and a front page article of the October 2, 2011 *Altoona Mirror* under the headline: "Krancor: EPA Is Rushing Bay Cleanup Regulations; Pennsylvania Experts Disagree With Agency's". (A copy of the *Altoona Mirror* Article is attached as *Exhibit C*).

I can report, though, that perhaps the persistence and the public media attention may have proven worthwhile. Right after the *Altoona Mirror* story ran, we received a letter from the Regional Administrator in which EPA, for the first time, recognizes that there are limitations to the application of the watershed model at a finer scale, and clarified its Phase II WIP guide to allow jurisdictions to submit watershed model input decks at the major basin (*e.g.*, Susquehanna) scale. The letter also says that the model is one of several points by which EPA will measure the state's performance. Also, EPA has modified to some degree the nature of what has to be in the Phase II WIP—EPA says that the Phase II WIPs don't have to be so specific—we can identify "local area targets" or actions that local areas can take to fulfill their contributions toward meeting Chesapeake goals. Further, EPA also said that "common sense" will be used to assess progress by jurisdictions in developing their

Phase II WIPs and achieving milestone commitments, and consider other tools and data besides the model.

Time will tell whether EPA is serious or just placating, especially regarding the comment about using “common sense”. We certainly still have disagreement with EPA on the nature of the model and what it should or can be used for. However, it does appear that, at least for the Phase II WIP process, we may now be able to proceed with that in an “agree to disagree” mode.

Ultimately, the jurisdictions and EPA have the same goal—to remove the Chesapeake Bay from the CWA list of impaired waters and to improve local water quality. As long as EPA uses a common sense approach, Pennsylvania will be continue to be a strong partner at the table.

Having gotten you up to date, let me now go back a bit in history and explain how we got to where we are now which will give an opportunity for me to provide more details about the actual process.

Phase I WIP Background

In Pennsylvania, our Chesapeake watershed stakeholders were actively involved in the development of our Phase I WIP and were a major reason that we were able to draft the plan successfully. The Department of Environmental Protection (DEP) convened a Chesapeake WIP Management Team to guide the development of the WIP. Over 125 individuals participated in the Management Team and its three workgroups focusing on agriculture, development and wastewater issues. Pennsylvania submitted its draft Phase I WIP to EPA on schedule—September 1, 2010. DEP continued to work with EPA to refine the WIP through the end of December. While EPA praised Pennsylvania in a December 29, 2010 letter, ultimately, when EPA issued the Chesapeake Bay TMDL, they imposed enhanced oversight and potential actions for agriculture and wastewater, and a regulatory “backstop” for urban/suburban stormwater.

Pennsylvania’s Phase I WIP included both nonpoint source and point source reduction strategies. The nonpoint source strategy included a long list of Best Management Practices (BMPs) submitted to EPA’s Chesapeake Bay watershed model. The point source component included the Point Source Compliance Strategy for wastewater treatment plants previously adopted in 2006. Because the point source strategy did not change, our Phase I WIP focus was to identify and develop the programs that support the implementation of non-point source BMPs to meet Pennsylvania’s TMDL allocation.

Pennsylvania’s WIP is based on three themes. The *first* is Milestone Implementation & Tracking. EPA uses the Chesapeake Bay watershed model to measure state progress—but the watershed model only knows what is reported to it. We determined that there are many BMPs being installed voluntarily with no government funding that do not get reported to the model. DEP supported several pilot projects to get a handle on the unreported BMPs. For example, in Bradford County, it was determined that 85% of the no-till activities are not cost-shared or reported to the watershed model. The WIP includes several new initiatives to improve BMP reporting.

Another key initiative is to promote the “Million Pound” project. The goal is to achieve a million pounds of nutrient reductions annually through grants and other funding sources. Pennsylvania Infrastructure Investment Authority (PENNVEST) funds are newly targeted to green initiatives and non-point source projects. Pennsylvania’s Growing Greener grants give special consideration for Chesapeake Bay nutrient reductions.

The *second* theme of Pennsylvania’s WIP is Advanced Technology and Nutrient Trading. Pennsylvania has learned that harnessing market forces can be an effective way to achieve environmental regulatory goals at less expense than traditional command and control regulations. For example, in 2008, Fairview Township decided to use credits to meet its nutrient reduction obligation with a cost savings of approximately 75%. The Commonwealth has been leading the way nationally in developing its nutrient trading program. The program is one of the first programs in the country to have both nonpoint sources and point sources participating in a nutrient credit trading program. Pennsylvania’s program is also designed to be protective of the Chesapeake Bay by capping the amount of credits that can be annually traded.

Pennsylvania has completed over ten nonpoint source to point source trades—where farmers go above and beyond their compliance requirements to sell credits to wastewater treatment plants. DEP has certified 97 projects for credit generation. And PENNVEST now has a track record of successful auctions to buy and sell credits. PENNVEST completed two auctions in 2010 and has two auctions planned for 2011. Auctions will continue next year and the years beyond. In addition to the day to day operation of the nutrient trading program, DEP is working with EPA Region

3 as they complete programmatic reviews of offset and credit trading programs across the Chesapeake Bay watershed. DEP worked closely with EPA when developing Pennsylvania's nutrient trading program, which EPA supported at the time. DEP can understand EPA's desire to examine the Bay jurisdictions' programs from a regional perspective. But Pennsylvania feels strongly that the Federal agency should respect the Bay jurisdictions' programs that are working successfully toward the restoration and maintenance of the water quality of the Chesapeake Bay.

Pennsylvania has promoted advanced technology projects by providing financing loans from PENNVEST. DEP has been working with the Department of Agriculture and a number of companies looking to install various technologies such as co-generation on dairy, poultry and hog operations. Many of these technologies can produce electricity and marketable soil amendments; reduce methane emissions; and generate renewable energy, nutrient reduction and carbon credits which can then be sold. Projects of this nature can support three priorities in the Chesapeake Bay region: maintaining a vibrant farming economy; restoring and protecting the water quality of Pennsylvania streams and the Chesapeake Bay; and providing crucial economic development benefits to rural businesses and communities. Manure-to-energy projects are just the first of many promising technologies the Commonwealth supports that advance broad based environmental benefits.

The *third* theme of Pennsylvania's WIP is enhancing compliance efforts for wastewater treatment plants, agriculture and stormwater. Pennsylvania's Point Source Strategy developed in December 2006 remains in place—and the Nutrient Trading Program provides an option for compliance. New funding from EPA will support compliance and inspection activities for our CAFO, stormwater and agriculture regulatory programs. For agriculture, for instance, each Pennsylvania conservation district will be required to undertake 100 farm visits in the first year. Over 4,000 farm operations will be notified of Pennsylvania's existing environmental requirements.

Phase II WIP

On August 1, 2011, EPA issued revised TMDL planning targets for the Phase II WIPs based on a revised Chesapeake Bay watershed model. While the numbers look different from Pennsylvania's 2010 TMDL allocations, they require the same level of effort as for the 2010 TMDL allocations. To facilitate local implementation of necessary reduction actions to meet the allocations, EPA directed the Chesapeake watershed states to sub-divide the reductions by local areas in the Phase II WIP. Pennsylvania chose to sub-divide loads at the county-level, as the EPA Chesapeake Bay watershed model is based in part on county level data. As discussed earlier in this testimony, that guide has since been clarified to allow jurisdictions to submit watershed model input decks at the major basin (*e.g.*, Susquehanna) scale instead of more local areas.

For the Phase II WIP, we need to build on local partnerships—those efforts going on in county conservation districts and municipalities that work to improve local stream water quality. Lancaster County's Clean Water Consortium, Lycoming County's Nutrient Trading Program, York County's Integrated Water Resources Plan, and the Conewago Creek Watershed Initiative are examples of local people taking local action to restore local streams.

On August 3, DEP convened a Phase II Chesapeake WIP Summit, our first major outreach to communicate to local stakeholders on what EPA expects for the Phase II WIP. On August 10, EPA held a Chesapeake Bay Model Workshop at the Rachel Carson State Office Building, to inform stakeholders on the models that are used to build our WIPs and measure our progress.

DEP worked with its WIP Management Team and workgroups to develop draft goals at the county level throughout the Chesapeake watershed. We took the Draft WIP County Planning Target sheets to eight Regional County Workshops, starting October 13 through November 2, to ground truth them and receive feedback. Invitees to the workshops included county conservation district managers, county planning commission directors, and municipalities representing the PA League of Cities and Municipalities, PA State Association of Township Commissioners, PA State Association of Boroughs, and the PA State Association of Township Supervisors. However, anyone was welcome to attend and listen to the discussions.

The county planning targets addressed only those loads that can be reduced by Best Management Practices (BMPs). This included both regulatory and non-regulatory loads for agriculture, stormwater and forest. Wastewater treatment plant point source reductions were not included because they were previously addressed by the 2006 Chesapeake Bay Compliance Strategy. The county planning targets were for planning purposes only, and do not become regulatory allocations at the county level. The identified Pollution Reduction Actions represented one scenario from the Chesapeake Bay watershed model that meets the reduction targets. There

are other equally valid combinations of actions that could also meet the reduction target. With input from counties and municipalities, DEP will then prepare its Draft Phase II WIP watershed model input deck at the major basin scale for submission to EPA by December 15.

Similar to the Phase I WIP, EPA will evaluate each state's Phase II WIP. Should we meet EPA's expectations, there is opportunity to have EPA remove the TMDL "backstop" imposed on the urban stormwater sector. That backstop provided notice that EPA would consider expanding the Municipal Separate Storm Sewer Systems (MS4s) coverage in Pennsylvania's Chesapeake watershed should we not make sufficient progress in reducing urban stormwater loads. If we do not meet EPA's expectations, they could impose additional consequences. We are looking for EPA to bring its new "common sense" approach to evaluating the Phase II WIPs.

Conclusion

In your letter of invitation, you also asked for information on how Pennsylvania's Chesapeake WIP will impact its rural communities. Attached to this testimony is a detailed summary of Pennsylvania's progress to implement agricultural activities identified in the Phase I WIP. These activities include funding for County Conservation District technical staff and BMP implementation from several of sources: Pennsylvania General Fund, PENNVEST, EPA's Chesapeake Bay Program, and USDA Natural Resources and Conservation Service. In addition, the WIP also includes a basin-wide component to achieve agricultural regulatory compliance. The Federal EPA has certainly focused on the Chesapeake Bay as a priority item for attention. In some cases this has resulted in unfunded mandates to the states.

We all share the core desire to keep up the progress on making the Bay even cleaner than it is now. While doing so, we do need to be mindful of how we are going to pay for this progress and what it is we are paying for. We need to be mindful of using available funds in an efficient and cost-effective manner so that we get the most "bang for the buck" that we can and avoid spending a lot of "bucks" for very little "bang". We also believe that it is important that the Federal Government "put its money where its mouth is" and if it is going to prioritize the Chesapeake Bay program, to appropriately also prioritize it among the competing voices for the pool of Federal funding that is available to bring to the effort.

ATTACHMENT

PA Chesapeake Bay Watershed Implementation Plan

Agricultural Section—Strategy to Fill Gaps

Update September 2011

Non-Regulatory Efforts

Chesapeake Bay Implementation Grant Special Projects Funding:

- DEP targeted priority practices (stream bank restoration/riparian buffers, fencing, manure storages/barnyard practices, cover crops/no-till, nutrient management/E&S plans) and priority watersheds. DEP awarded 46 projects to conservation districts for a total of \$800,492.95. Of the 46 projects, 41 were awarded for priority activities including 17 projects for nutrient management/conservation plans, six for fencing and four for cover crops/no-till planting. Of the other five—less than 10% of the funds were awarded—two supported on-going staffing commitments and three were for additional outreach activities. In addition, all but two of these 46 projects were in the targeted watersheds. These two supported (1) a county-wide outreach effort in Bradford and (2) on-going staffing commitment in Susquehanna County

Chesapeake Bay Implementation Grant Technician/Engineer Funding:

- DEP revised the technician contracts for 2011–2012 to include specific tasks to expand the compliance assistance outreach for agriculture. The scope of work in these technician contracts required staff to spend a portion of their time contacting farms in their county to ensure all farm operators are aware of their responsibilities under PA erosion and sedimentation control regulations and the Manure Management Manual.

Agricultural Conservation Technician Funding:

- PA Department of Agriculture, through the State Conservation Commission, provided ongoing cost-share funding \$527,000 in FY 2011–12 for Agricultural Conservation Technicians (ACT) in the CB watershed to provide technical assistance to farmers.

REAP Conservation Tax Credits:

- The State Conservation Commission in FY 2011–12 allocated more than \$6 million (out of \$10 million available) in REAP state tax credits to farmers for conservation BMPs, no-till planters, no-till drills and low disturbance manure incorporation equipment.

PENNVEST Non-Point Source Funding:

- On July 20, 2011, PENNVEST approved over \$1.9 million for six projects to address agricultural non-point source pollution. All six are in Lancaster County and will reduce nutrient runoff into local streams and the Chesapeake Bay watershed. The specific projects were:
 - A \$163,213 grant to construct a manure storage facility at a poultry operation in Paradise Township.
 - A \$573,188 grant to construct a manure storage facility at a farm in Ephrata Township.
 - A \$176,210 grant to construct a manure storage facility at a farm in Mount Joy Township.
 - A \$157,534 grant to construct manure litter storage shed at a poultry operation in Strasburg Township.
 - A \$657,050 grant to construct manure composting facility as well as an infiltration basin at a farm in Drumore Township.
 - A \$212,056 grant to construct a manure storage facility and make other improvements at a second farm in Strasburg Township.
- On April 20, 2011, PENNVEST approved five projects to address agricultural non-point source pollution. Three of the projects (\$1.069 million) were in the Chesapeake Bay watershed in Lancaster and Montour Counties. The specific projects were:
 - \$425,397 grant to construct various manure-control facilities at a dairy and poultry operation in West Lampeter Township that will reduce nutrient runoff into Pequea Creek in Lancaster County.
 - \$148,802 grant to construct manure-control facilities at a poultry farm in Strasburg Township, where nutrient runoff during wet weather is contaminating Big Beaver Creek in Lancaster County.
 - Montour County Conservation District received a \$495,000 grant to install manure and animal control facilities at two livestock farms where there is significant nutrient runoff into Mahoning Creek, Beaver Run and ultimately the Chesapeake Bay.
- On April 1, the PA Association of Conservation Districts hired Paul Herzer as the Non-Point Source Application Developer (AKA “NPS Circuit Rider”) to assist county conservation districts, watershed groups, environmental groups, municipalities and DEP Regional Offices with the PENNVEST application process. Funding for this position was awarded by DEP to PACD from the EPA Section 319 grant funds.
- PENNVEST announced the second round of nutrient credit trading auctions. These auctions will be held on November 2 and November 9, 2011. The Pennsylvania Infrastructure Investment Authority (PENNVEST), working in conjunction with the Department of Environmental Protection (DEP), will be hosting auctions for the sale and purchase of nutrient credits in the Susquehanna and Potomac watersheds to be conducted this fall. There will be two “spot” auctions of verified credits, applicable to the 2011 compliance year (*i.e.*, October 1, 2010–September 30, 2011). Both auctions will afford wastewater treatment plants in these two watersheds to purchase credits as a means of meeting their nitrogen and phosphorous discharge limits for the compliance year.

NRCS Financial Assistance—In Federal FY 2010, the NRCS provided more than \$37 million in technical and financial assistance to Pennsylvania farmers in the CB watershed for the installation of best management practices through their CB Watershed Initiative (CBWI) and the Environmental Quality Incentive Program (EQIP).

NRCS Training for Field Staff:

- NRCS, working with Penn State, developed the **AG 101: Understanding PA Farm Operations** online sessions that explore the many facets of farm types, operations management, economics, social aspects, and environmental consider-

ations. The “winter burst” and “summer burst” of the series were held in 2011 and looked at what Pennsylvania agricultural producers manage as they grow food, fiber, and fuel. **AG 101** was developed to enhance the work of conservation practitioners who are on the front lines supporting producers in choosing, planning, and implementing the best management practices that preserve soil, water, and air quality. **AG 101** was jointly developed and sponsored by Penn State Cooperative Extension, SCC and the Pennsylvania Natural Resources Conservation Service in collaboration with PennAg Industries and the Pennsylvania Farm Bureau.

- NRCS, in cooperation with various partners, continues to provide annual training (1 week, intensive classroom and field experience) to approximately 50 entry level agricultural conservation technicians and conservation planners that work with farmers to plan and implement BMPs.

Legacy Sediment BMP:

- DEP is cooperating with Robert Walter and Dorothy Merritts of Franklin and Marshall College in the development of a new BMP often referred to as Legacy Sediment. The Chesapeake Bay watershed model focuses largely on modern land use, particularly agriculture and construction, as the dominant sources of high suspended sediment and nutrient loads. Research by Walter and Merritts documents, however, that historic sediment and associated nutrients eroded from the stream corridor upstream of breached millponds are also an important component of the total load in modern streams. Results show that stream corridor and streambank erosion is a major contributor to the suspended sediment and particulate—phosphorus loads carried by many streams, and that minor, but substantial, nitrogen loads are released as well. DEP’s Legacy Sediment Workgroup developed the new Natural Floodplain, Stream, and Riparian Wetland Restoration BMP that addresses aquatic resources impaired by legacy sediment in 2008. Current activity is focused on establishing nutrient and sediment reduction efficiencies for the BMP so it can be included in the Chesapeake Bay watershed model. A demonstration project is underway in the Big Spring Run Basin in Lancaster County. The project involves approximately 5 acres of natural floodplain and riparian wetland restoration and 3,200 feet of natural stream restoration. The BMP implementation is supported by a funding partnership of DEP, Chesapeake Bay Commission, private landowner owner, Suburban Lancaster Sewer Authority, Foundation for Pennsylvania Watersheds, and Pennsylvania Environmental Council.

Regulatory Efforts

Continue Existing Regulatory Programs:

- DEP, in cooperation with a number of agricultural agencies and organizations expanded outreach to ag community to increase compliance with Chapter 102 and manure management requirements. Chapter 102 regulations which in part regulate all agricultural operations that plow and till, were updated late in 2010. A revised PA Manure Management Manual was updated and recently released for use.
- Prepared “Am I in Compliance” brochure with distribution of ~20,000 copies since January 2011. Prepared “Ag E&S Barn sheet” for use in conservation district 100 site visits.
- Three training sessions held in conjunction with NRCS, State Conservation Commission (SCC) and PACD on February 24, March 2 and March 10 for about 200 people. The training was aimed at staff from USDA Natural Resources Conservation Service (NRCS), PA Department of Environmental Protection (DEP), and Conservation Districts who are involved in agricultural erosion and sediment control plans and conservation planning. Speakers from NRCS, SCC and DEP answered the question: what is an Agricultural Erosion & Sedimentation Plan? A detailed review of the Chapter 102.4(a) requirements will be explained. Examples of the requirements for Ag E&S plans are: maps, treatment of animal heavy use areas, near stream cover requirements, and tolerable soil loss conditions for crop fields.
 - PA SCC continued its oversight of the PA NM Program (Act 38) that requires that CAFOs and CAOs to development and implement an approved PA NM Plan for their operations. The SCC provided approximately \$1.7 million to fund NM technicians in county conservation districts within the CB watershed in FY 2011–12.

- PA Department of Agriculture, in cooperation with the SCC, continued certification programs for Certified NM Specialist (approximately 350 persons), Certified Manure Haulers and Brokers (approximately 925 persons) and Certified Odor Management Specialists (approximately 23 persons), providing more than 200 days of classroom and field based training annually to certified specialist in Pennsylvania.

Evaluate and Modify Regulatory Tools—Chapter 102 Regulations:

- In July 2011, NRCS developed the “Conservation Planning and Regulatory Compliance Handbook” for NRCS staff. This guidance referenced Pennsylvania’s Chapter 102 regulations and provided tools and guidance for NRCS staff involved in conservation planning that addresses the requirements for Ag E&S. Guidance does not implement Pennsylvania’s regulatory program, but provides guidance as to what requirements are found in Pennsylvania and how this interfaces with NRCS conservation planning activities.

Evaluate and Modify Regulatory Tools—Manure Management Manual:

- In 2011, DEP, in cooperation with SCC, PDA, NRCS and Penn State Cooperative Extension developed revisions to the Manure Management Manual. Final revisions were presented to DEP’s Agricultural Advisory Board in June. Manual was released for use in late October as a PA DEP Technical Guidance Document.

Basin-wide Component to Achieve Agricultural Regulatory Compliance:

- In 2011, DEP continued revise delegation agreements with county conservation districts.
- In 2011, DEP continued development of “Model Agricultural Compliance Policy.” A preliminary draft has been developed and given a cursory review by DEP’s Bay Ag Water Quality Initiative Workgroup. Revisions are on-going with additional review by county conservation districts and others, in anticipation of presentation at “All Bay Meeting” in January 2012. On-target to meet roll-out in July 2012.
- In 2011, DEP revised the conservation district Bay technician contracts for 2011–2012 to include specific tasks to expand outreach for agriculture. The scope of work in these technician contracts required these 42 staff to undertake 100 site visits per staff person—or equivalent staff person—and DEP expects over 4,000 site visits by June 2012. Over 200 were conducted by September 2011. In addition, each Bay conservation district was requested to submit a plan that identifies how each district will engage all farms in this regulatory outreach. These plans are required to be submitted in October 2011. Significant training of staff via webinar and supplies of outreach material were provided. DEP press release was made and significant positive press coverage was received.
- In 2011, DEP received \$2.466 million from EPA via the Chesapeake Bay Regulatory and Accountability Program (CBRAP) grant. DEP used these funds to, among other things, support five new DEP staff positions. In March 2011, four of these staff were hired. (The 5th position is not yet hired, due to DEP difficulty in hiring this one staff position.) One staff position was in Harrisburg and has been engaged in development of the Manure Management Manual and the CAFO General Permit. Two staff positions were hired for the Southcentral Regional Office and have been engaged in compliance inspections. One position was hired in the Northcentral Regional Office and has been engaged in compliance inspections and regulatory outreach activities.
- WIP indicates “Conservation District Chesapeake Bay staff can address 18,000 farm operations—about half of the farms in the watershed—and inform them about compliance with their regulatory requirements.” In 2011, DEP expects over 4,000 site visits will be made by these staff. Outreach plans for these conservation districts are expected to be available by December 2011 indicating how all 40,000 farm operations will be addressed by 2015.

EXHIBIT A

May 26, 2011

Hon. LISA JACKSON,
Administrator,
 U.S. Environmental Protection Agency
 Washington, D.C.

Dear Lisa Jackson:

Thank you for your letter to Governor Corbett of April 7, 2011, stating recognition and support for Pennsylvania's Chesapeake Bay Total Maximum Daily Load (TMDL) Watershed Implementation Plan. Pennsylvania shares the goal of restoring and protecting the Chesapeake Bay and has long recognized our role in the restoration and protection of this national asset. The Pennsylvania Department of Environmental Protection (PADEP) and I appreciate the acknowledgment from EPA.

I would like to take this opportunity to reach out to you directly to request your assistance in needed additional work between our agencies related to urban stormwater management. While we share the same Chesapeake Bay clean up goals, Pennsylvania is concerned with aspects of the TMDL issued by EPA in December 2010, and the application of the Chesapeake Bay Watershed TMDL model to the municipal stormwater sector in particular. We do not think EPA's approach to this sector will achieve the goals even if the municipalities could implement and afford it, which they cannot. The urban stormwater sector is identified as contributing only approximately 6% of the problematic load. EPA contractors have estimated that it will cost municipalities \$5.3 billion to address the problem. This extraordinary cost is simply not reasonable, not cost effective and not likely to result in significant needed environmental gains and comes at a time when local governments are in significant economic distress.

You should be aware that Pennsylvania has serious concerns regarding the Chesapeake Bay Watershed TMDL model EPA is using. Put simply, we do not think the application of the model to Pennsylvania MS4 permits is scientifically or technically appropriate. The model projects loads based upon very gross inputs. The model does not reflect conditions at the local level for purposes of predicting specific local load reductions to be included in individual permits, and was not developed for such a use. Additionally, there are specific problems related to the urban stormwater sector based upon what we know to be inaccurate inputs and information related to stormwater management in Pennsylvania. For example, mining impacts are currently included in the urban stormwater sector of the model. Likewise, according to the U.S. Geological Survey (USGS), there can be up to 15% error in the accuracy of the monitoring data used to calibrate the model itself. This variability at the gross level is magnified as you try to apply it at finer and finer levels.

Pennsylvania has articulated these reservations to EPA for quite some time, and has been frustrated with the lack of collaborative dialogue on these issues. Our professional staff are the experts on Pennsylvania waters, Pennsylvania land uses and regulatory programs. PADEP is in the process of collecting the information we believe to be critical to making the model results more reflective of on-the-ground construction, post construction and MS4 BMP implementation in Pennsylvania, and is also working with the National Association of Conservation Districts, other states and NRCS to determine how to better capture the full spectrum of agriculture BMPs for credit in the model. PADEP would welcome the opportunity to work more closely with EPA as a partner and resource in improving the accuracy of the model results for these sectors.

Pennsylvania has also been very concerned about EPA Region III's request to include specific numeric reductions extrapolated from the boundary TMDL in the 218 Pennsylvania Chesapeake Bay MS4 permits. This is technically unsupportable and unsustainable. Apart from the concerns about the reliability of the model, inclusion of percent reductions extrapolated from the boundary TMDL is scientifically problematic because the scale of the Chesapeake Bay Watershed TMDL model is basin-based at a county and larger level and is not readily transferable or defensible as applied at the smaller scale, such as townships or boroughs which are the vast majority of Pennsylvania small regulated MS4s.

Further, while Pennsylvania appreciates the flexibility and collaboration you reference in your April 7, 2011, letter with regard to the approach to agriculture, PADEP and our municipality stakeholders have been frustrated with EPA's continued failure to acknowledge the challenge of Pennsylvania's unique municipal structure—which results in Pennsylvania having more regulated Municipal Separate Storm Sewer Systems (MS4s) than any other state and 1/6 of the nation's total with nearly 1,000 as of the 2000 Census. PADEP has also been further disheartened and frustrated by the lack of support and acknowledgement by EPA of Pennsylvania's strong stormwater management program.

Unfortunately, with regard to the urban stormwater sector, Pennsylvania does not agree the TMDL development effort has been collaborative. But we do remain hopeful that such collaboration is possible. An important consideration we believe EPA needs to recognize is Pennsylvania's recently finalized stormwater regulations which require post construction stormwater best management practices be implemented

and maintained when a land development project disturbs one or more acres of land—regardless of whether the project is located in a regulated MS4 area. Implementation of these regulations on average results in significantly less pollutants being discharged to Pennsylvania waters and ultimately the Bay than is contemplated in the Chesapeake Bay model. We are confident that significant pollutant reductions to the Bay will continue to be realized through the ongoing implementation of our stormwater management programs.

Toward that end PADEP would like to engage EPA in a fundamental way regarding the Federal MS4 program, as well as the implementation of the Chesapeake Bay TMDL in the urban stormwater sector in Pennsylvania.

Pennsylvania's program is effective in part because it is not constrained to the artificial—and unworkable—"point source" regulatory framework. The legal authority for Pennsylvania's strong stormwater program is based upon our state anti-degradation program and state stormwater management laws and regulations. Pennsylvania's program works because it recognizes changes from land development, to the volume, rate and quality of overland stormwater flow, are by definition different from traditional continuous flow end of pipe point source discharges. The variable nature of wet weather driven stormwater discharges and the regulation of change in those stormwater flows requires a distinct regulatory program that is based upon and supports a best management practice approach. The limitations of the traditional "point source" framework that is well suited to end-of-pipe controls does not translate effectively to the regulation of pollution associated with changes in stormwater associated with land development activities.

We will continue to lead, as we have, not only to restore and reclaim the Chesapeake Bay, but to protect and maintain Pennsylvania's water resources which are among the most significant assets of the Commonwealth.

I appreciate your letter and would like the opportunity to have PADEP staff sit down with Mr. Corbin and provide our perspective on what works in Pennsylvania, and how Pennsylvania's program can serve as a model for improvements to the national program.

If you have any questions, please contact Margaret Murphy, Assistant Counsel, by e-mail at [Redacted] or by telephone at [Redacted].

Sincerely,



Hon. MICHAEL L. KRANCER,
Secretary.

CC:

U.S. Senator ROBERT P. CASEY, JR.;
U.S. Senator PATRICK J. TOOMEY, SR.;
U.S. Representative ROBERT A. BRADY;
U.S. Representative CHAKA FATTAH;
U.S. Representative GEORGE JOSEPH KELLY, JR.;
U.S. Representative JASON ALTMIRE;
U.S. Representative GLENN THOMPSON;
U.S. Representative JAMES GERLACH;
U.S. Representative PATRICK LEO MEEHAN;
U.S. Representative MICHAEL G. FITZPATRICK;
U.S. Representative WILLIAM SHUSTER;
U.S. Representative THOMAS ANTHONY MARINO;
U.S. Representative LOUIS J. BARLETTA;
U.S. Representative MARK S. CRITZ;
U.S. Representative ALLYSON YOUNG SCHWARTZ;
U.S. Representative MICHAEL F. DOYLE;
U.S. Representative CHARLES DENT;
U.S. Representative JOSEPH R. PITTS;
U.S. Representative THOMAS TIMOTHY HOLDEN;
U.S. Representative TIMOTHY F. MURPHY;
U.S. Representative TODD RUSSELL PLATTS.

EXHIBIT B

*Published on HamptonRoads.com PilotOnline.com (<http://hamptonroads.com>)
Scott Harper, (757) 446-2340, scott.harper@pilotonline.com*

New model for Bay cleanup muddies goals, cities say

For 2 decades now, the Chesapeake Bay cleanup has been guided largely by a computer model. Housed in Maryland, it spits out targets and forecasts and helps officials set goals for what should be done to restore North America's largest estuary.

The states involved in the celebrated cleanup, including Virginia, have a say in how the model works and help set its guidelines, but its operation falls mainly to the U.S. Environmental Protection Agency.

How the modeling is done, and what data are fed into the computer, have been bones of contention for years. Today, they are central to pending lawsuits from farmers and developers who argue that an aggressive push from the Obama Administration is based partially on flawed, incomplete science and should be stopped.

Now another wrinkle has surfaced.

Virginia and several other states—including Maryland, Pennsylvania and Delaware—are complaining that a newly tweaked version of the model, known as 5.3.2, is leading to some weird and incomprehensible results for what local governments are expected to accomplish in the coming years to dramatically improve water quality by 2025.

In James City County, for example, data stemming from the previous model urged the county near Williamsburg to reduce nitrogen from farms, streets, storm drains and development sites by 8 percent, phosphorus by 11 percent and sediment by 20 percent. The guidance worried local officials, unsure how they would pay for environmental improvements and controls to hit those targets.

However, computer runs performed by the state using the new model prescribe something completely different: no reductions needed for nitrogen, and a 20 percent surplus of phosphorus and a 350 percent cushion for sediment.

In short, on paper the county went from a polluter to one that doesn't have to do anything.

While the James City County discrepancies are extreme—new data show that most Virginia localities have to do more, not less, to help save the Bay—state and local officials face a quandary: How exactly to proceed in the face of changing targets?

"What do we say to our localities? 'Well, we think that these practices we are asking you to implement might help you reach your goal, but we really don't know what that goal is and we aren't sure the money you spend to implement these practices will make any difference?'" said Doug Domenech, Virginia's secretary of natural resources, Gov. Bob McDonnell's top environmental official.

The EPA, environmentalists and some scientists concede that the modeling is imperfect and will continue to be updated and improved. But they also say the states are not required to be so precise in their calculations, and that no one asked them to break down data county by county, pound by pound of pollutants, for what they need to do to help the effort.

The model, they add, is not designed to be so specific and its main strength is defining what states must do river by river.

"They're getting down into the weeds, and we're telling them they don't need to go there," said Jeff Corbin, the EPA's senior adviser on the Chesapeake Bay. "Use common sense. Let's get on with it."

Carl Hershner, a scientist at the Virginia Institute of Marine Science, said model critics are missing the point of the new push to get serious about restoring the Bay.

"None of this stuff should impede the planning for what everyone knows is needed to be done," Hershner said. "We need to better control nutrients entering the Bay, and every state, county and city has to help do that."

The two main nutrients, nitrogen and phosphorus, are good for the Bay in proper amounts. But in excess, as today, they spark algae blooms that rob oxygen from water, making life difficult for aquatic life. Sediment that washes off the land clouds water quality, shallows creeks and rivers, and smothers key underwater grasses.

In settling a lawsuit years ago, the EPA pledged to clean up the Bay enough to remove it from a national list of dirty waters. In December, the EPA and its partner states agreed to a pollution diet, or TMDL, short for Total Maximum Daily Load, to achieve this goal.

The diet, which the computer model helped to define, called on Bay states to reduce nutrients and sediments through various means and to implement those improvements by 2025, with 60 percent of them complete by 2017. Virginia estimates its part of the deal could cost as much as \$8 billion.

Amid economic woes and lean budgets, officials in the McDonnell Administration say they have to be precise in how they spend such money, and that the computer model or any other tool should help guide where to get the biggest bang for the buck.

If the model is not precise enough to tell localities what they need to do without fear of penalty from the EPA, it should be refined to do so before moving forward, state environmental officials say.

“Dealing with numbers like this is just ridiculous when you’re trying to put together a plan that the EPA will hold you accountable for,” said Anthony Moore, an assistant secretary of natural resources overseeing Bay issues.

Moore and other senior officials from concerned states met with EPA leaders at a “modeling summit” last month. Chiefly, the states complained that many computer problems stem from calculating the impact of farm pollution.

One of the primary strategies for curbing fertilizer runoff from agriculture is implementing nutrient management plans on farms. But in many cases, the new model shows that such plans increase nitrogen and phosphorus pollution, not reduce it, Moore said.

In response, the EPA’s regional director, Shawn Garvin, sent a letter to Virginia and other states that attended the summit. Garvin wrote that the EPA will correct its model but that the states should continue writing their plans reflecting how local governments will contribute to the effort. The plans are due Dec. 15.

Garvin also stressed that state calculations based on the new model do not have to be so specific.

“EPA does not expect the jurisdictions to express the ‘local area targets’ in terms . . . such as pounds of pollutant reductions by county,” he wrote.

Instead, Garvin added, the next round of state plans “could identify ‘targets’ or actions that local and Federal partners would take to fulfill their contribution toward meeting the Chesapeake Bay TMDL allocations.”

Virginia officials, while disappointed, said they will press on, though they worry local governments may balk at committing to pollution cuts amid shifting targets.

John Carlock, an environmental specialist with the Hampton Roads Planning District Commission, which represents local governments across the region, described the changing models as “extremely frustrating for everyone.”

The commission had serious problems with the previous model and threatened to challenge its recommendations in court.

“The states and the EPA are coming to the conclusion that the model works pretty well at the state level, OK at the river basin level, but not so good at the local level,” Carlock said. “We absolutely need more consistency.”

Source URL (retrieved on 10/28/2011—14:24): <http://hamptonroads.com/2011/10/new-model-bay-cleanup-muddies-goals-cities-say>.

EXHIBIT C

THE ALTOONA MIRROR

Krancer: EPA is rushing bay cleanup regulations

Pennsylvania experts disagree with agency’s

October 2, 2011

By William Kibler (bkibler@altoonamirror.com)

State Department of Environmental Protection Secretary Michael Krancer is in a rush to develop Marcellus Shale gas in Pennsylvania, despite environmental concerns, according to local environmentalist Stan Kotala.

But Krancer wants to slow what he thinks is a Federal rush to put regulations in place to clean up Chesapeake Bay.

“We do not see eye-to-eye about the scientific validity of the models used to drive all these costly decisions,” Krancer said of his department and the Federal Environmental Protection Agency.

The model has “serious flaws,” he said, and Pennsylvania’s technical experts disagree with EPA’s.

The EPA has “turned a deaf ear” to those misgivings, and the regulatory process is “moving quickly,” despite the misgivings, he said.

“We want to get the Bay clean,” he said. “But we don’t want to rush to judgment”—given the big investments, he said.

He doesn’t have as much of a problem with Bay regulations already in place, but he doesn’t have much confidence in regulations that may be in the works.

It would be a “very embarrassing situation” if the state and communities within it spend a collective billion dollars only to learn a few years later that the regulations had missed their target, he said.

“We should be driven by sound science, not litigation deadlines,” he said.

The EPA disputes Krancer’s interpretation. In a statement released by the EPA Mid-Atlantic Region office, an official said, “EPA’s focus, and our role, is to hold

states accountable for the commitments they have made. Despite the comments made by Secretary Krancer, we are sure they plan to live up to those commitments.”

States, including Pennsylvania, have developed implementation plans with a series of individual steps that will protect the Bay.

The EPA determines how much of various pollutants the Bay can handle from the rivers that drain the states in the watershed, then allocates total maximum daily loads for those pollutants for each state.

The agency believes things will work out if the state just follows the program.

Kotala said he generally thinks the EPA’s plan to protect the Chesapeake has been appropriate.

Pennsylvania itself also has taken “some fantastic steps,” he said.

Most notably is state Rep. Jerry Stern’s Resource Enhancement and Protection Program, which helps farmers implement best-management practices to avoid stream pollution, Kotala said.

Unfortunately, the program has endured significant cuts, he said.

The CHAIRMAN. All right. Thanks, Mr. Secretary.

We will have testimony from all the witnesses and then we will open up for some questioning.

Chairman Brubaker, good to see you again. Thanks for coming down to testify and the floor is all yours.

**STATEMENT OF HON. MICHAEL BRUBAKER, CHAIRMAN,
CHESAPEAKE BAY COMMISSION; SENATOR,
COMMONWEALTH OF PENNSYLVANIA, ANNAPOLIS, MD**

Mr. BRUBAKER. Well, thank you, Mr. Chairman.

Good morning, Chairman Thompson, Ranking Member Holden, and Chairman Goodlatte. And I want to say it is very nice to see you.

My name is Mike Brubaker. I am an agronomist—that is a plant and soil scientist—and I have practiced for 25 years and have written many nutrient management plans. But after serving as CEO of multiple private sector agricultural consulting firms that operated frankly in each of your states, I now serve as a Pennsylvania State Senator representing the 36th Senatorial Districts, which covers parts of Lancaster and Chester Counties. I am also honored to serve this year as Chairman of the Chesapeake Bay Commission, which is a tri-state legislative commission representing the General Assemblies of Pennsylvania, Maryland, and Virginia on matters of Bay-wide concerns. The Commission is now in its 31st year and predates the Bay program, of which we are a member.

Over the years, the Commission has witnessed the evolution of Bay restoration efforts from the first gathering of a few Congressmen and state legislators to the current effort which is dominated by the TMDL. The TMDL, while ambitious, is ultimately about clean water. So if clean water is important, and I believe that it is, then the question is not whether we should move forward or not but how can we best move forward to support implementation in a time of challenging budgets and a struggling economy and how can we implement it fairly? And I have three responses to that statement.

One is numeric goals, two is partnerships, and three is innovation. On numeric goals, we have the numbers on the TMDL but then our states, our municipalities, and our farmers should be given a certain amount of flexibility in how we reach those numbers. The WIP process can allow for that flexibility both in our initial decision-making and our ability to adapt as new information becomes available.

Second, we need to strengthen our partnerships across all of government. In fact, I would argue it is even more important now to do it than ever before. Under the Phase II WIPs, the important role of local partners is being acknowledged and enhanced. After all, at the local level is where implementation ultimately occurs. And Congressman Goodlatte has been focusing on that.

However, this should not mean that the buck merely is being passed down the chain. Each level and branch of government has an important role to play in support of the common goal. Both states and the Federal Governments can support local efforts through financial incentives and technical assistance that allow for flexibility. At the Federal level in particular, USDA conservation programs including technical assistance remain the single biggest source of support for implementation of nonpoint source best management practices. Programs offered nationwide such as EQIP and the Regional Chesapeake Bay Watershed Initiative Program have been a critical source of support for our farmers.

Congressman Holden and Congressman Goodlatte and other Members of this House Agriculture Subcommittee were instrumental in the establishment of the CBWI, which has allowed agricultural communities to make some of the most significant progress of any sector in the watershed. That kind of progress can only continue with your support.

It is a combination of cost-sharing and technical assistance that will lead us to lasting success. Federal cost-share dollars are leveraged through word-of-mouth and changing acceptance of what constitutes normal practices within the agricultural community itself, the kind of system change that comes through active participation of the local technical assistance providers.

Third, innovation—as a state legislator, I understand the current budget situation that our states and the Federal Government are facing. I know that I cannot limit my remarks to a mere request for funding dollars. Instead, I want to acknowledge the important role of innovation—both innovative technologies and innovative funding programs—in making our limited dollars work more effectively. Innovation has provided some of the greatest strides in nutrient and sediment reductions to date. Example: phosphate-free detergents; phytase, a feed additive for poultry; and no-till are all examples of gains that have been made inside this watershed through innovation.

Now, emerging technologies promise future gains. Precision agriculture, GPS technologies, and manure-to-energy technologies are just a few examples. These practices produce benefits for the environment and for the farmers' bottom line, benefits that could help redefine sustainable agriculture. But we currently lack the technical assistance and the verification mechanisms needed to get on-the-ground practices tracked accurately. Without them, we have a lost opportunity.

When it comes to funding, we can be innovative by moving away from a single-focused program and instead give priorities to projects that achieve multiple goals such as manure-to-energy.

I see my time has expired, so I look forward to your question and answers later on.

[The prepared statement of Mr. Brubaker follows:]

PREPARED STATEMENT OF HON. MICHAEL BRUBAKER, CHAIRMAN, CHESAPEAKE BAY COMMISSION; SENATOR, COMMONWEALTH OF PENNSYLVANIA, ANNAPOLIS, MD

Good morning, Chairman Thompson, Ranking Member Holden, and Members of the Subcommittee. Thank you for the opportunity to present my testimony before you today.

My name is Mike Brubaker. I am an agronomist by training, and after serving as CEO of private agricultural consulting firms, I now serve as a Pennsylvania State Senator, representing the 36th Senatorial District covering parts of Chester and Lancaster counties. I am also honored to serve this year as Chairman of the Chesapeake Bay Commission, a tri-state legislative commission representing the General Assemblies of Pennsylvania, Maryland and Virginia, on matters of Bay-wide concern. Individually, the members of the Commission represent distinct areas of the watershed and bring an intimate knowledge of the local residents and their social, economic and environmental challenges. Collectively, the 21 members share the perspective of the full watershed and provide the least parochial and most comprehensive outlook among the leaders of the Bay Program.

The Commission is now in its 31st year; it is important to note that its establishment pre-dates that of the Chesapeake Bay Program, of which we are a member. This history demonstrates the commitment that state government and state legislators, in particular, have to the restoration of this National Treasure.

Our members are not term-limited, and we have a mix of new members as well as members who have served for more than 2 decades. Consequently, the Commission has witnessed first-hand the evolution of the Bay restoration effort, from the first gathering of a few concerned state legislators, to the current effort which is heavily influenced by an ambitious Total Maximum Daily Load (TMDL).

I have been asked by this Subcommittee to review the implementation of Phase II of the Chesapeake Bay TMDL Watershed Implementation Plans and its impact on rural communities. That impact will be felt by all sectors, and we need to achieve reductions from all sectors, if our water quality goals are to be met. However, because the jurisdiction of this Subcommittee relates to agriculture, I have chosen to focus my remarks primarily on agricultural implementation.

To begin with, while ambitious, our water quality goals, and the level of activity needed to meet them, are necessary if we are to achieve clean water in the Chesapeake Bay and the rivers and streams that feed it. Clean rivers and streams as well as a clean Chesapeake Bay are not only important environmental goals, but also important economic goals. Whether it be fly fishing in the cool streams of Pennsylvania or cruising down the Bay on a summer evening, clean rivers and a clean Chesapeake supports critical economic, recreational, environmental, and aesthetic elements of our lives.

The question is: how can we best support and promote clean water in a time of challenging budgets and a struggling economy? In answer, I offer four recommendations:

1. Innovation

Innovation is needed not only in the technology and practices used to achieve nutrient and sediment reductions, but also in the ways that we fund the implementation of those practices.

To date, innovation has provided some of the greatest strides in nutrient and sediment reduction to date. The phosphate detergent bans that replaced the phosphorus in home laundry and dishwashing detergents with a less-polluting surfactant; and “phytase,” a feed additive for poultry which reduced both the phosphorus in the manure and the cost of feed to the farmers are both examples of gains made through innovation.

Emerging technologies continue to offer new promise. Farmers are increasingly implementing precision agriculture techniques, which improve the nutrient efficiency of both livestock growth and cropping systems. These practices produce benefits for both the environment and the farmer’s bottom line—benefits that could help to redefine the sustainability of agriculture. For example, by combining farmer judgment with GPS technology, operators can now avoid double or even triple seeding when the tractors are turning around. The same is true for fertilizer and pesticide application with the result being a 5–32% savings in the fields. But we currently lack the technical assistance needed to show individual farmers how these and other technologies can be applied on their own farm and thus achieve widespread adoption. Furthermore, we lack a clearly verifiable and transparent mechanism to accurately track implementation of these practices that will allow our farmers to get credit for their improved environmental performance.

On the horizon are advanced manure-to-energy systems that will allow for more efficient recycling of nutrients, thus mitigating the nutrient imbalances that currently exist in the Chesapeake watershed. These systems have the additional benefit of providing a reliable, domestic source of renewable energy. Future technologies can be supported through policies that generally support entrepreneurship, as well as a review process that can quantify credit for nutrient and sediment reductions based on sound science and verification.

In times of thin budgets, we should also look for innovative methods of funding. Instead of programs that focus on one goal, funding priority should be given to projects that aim to achieve multiple goals, such as manure to energy projects which can provide energy independence and water quality benefits while strengthening agricultural sustainability.

Nutrient trading is another example of an innovative funding strategy. Instead of focusing on specific practices or technologies, trading allows the market to reward the most cost-effective strategies. However, as mentioned above, an effective market can only be achieved when the credits can be quantified through a review process based on sound science and verified implementation.

2. Clear, predictable goals based on performance, not prescription

The existing Watershed Implementation Plan (WIP) process established under the Chesapeake Bay TMDL allows states to develop clear actions for attaining necessary pollution reduction goals. It also allows the state to prioritize these specific actions. This is a sound approach, and one that should also extend to implementation at the municipal and farm level. While there should be certain basic standards to be met for compliance, the actual practices required to meet those standards will vary from town to town and farm to farm. Local choice is the key.

Similarly, farmers who voluntarily step forward and “do the right thing,” and then verify the implementation of those practices to achieve necessary WIP pollution reductions, should receive a level of certainty or predictability, for a time certain, that they will not be subject to new or more rigorous standards if the Federal Government changes its mind about what is the expectation for compliance under the WIP. While our knowledge and understanding of the Bay will change over time, resulting pollution reduction demands should be deliberative and predictable to those already acting in a responsible manner.

A process is currently underway among our state governments to define what a certainty program might look like for the region. While there may be a place for Federal action on this matter, we ask that both Congress and EPA consider the outcome of this state-led effort before finalizing any action.

3. Technical Assistance

The key to the success of all implementation is the presence of knowledgeable people—boots on the ground—who make it happen. Local USDA and conservation district staff, and other technical service providers, deliver locally-relevant and science-based information to farmers and other landowners. Regardless of cost-share assistance, the presence of trusted local partners is imperative to success.

While technical assistance funding associated with cost-share through programs such as EQIP and CBWI is important, traditional planning support through the Conservation Technical Assistance budget, and targeted supplemental support such as that provided through the SWAT (strategic watershed action teams) is also critical. Historically, technical assistance funding has not significantly increased, despite an increasing need (see *Figure 1*).

Additionally, efforts should be made to assure that technical assistance is available throughout the life of a cost-share contract. Although practice contracts can last 3-5 years, technical assistance is funded year-to-year, leaving a project vulnerable to a lack of planning or engineering to see it through.

4. A strong partnership across all levels of government

The current WIP process, which provides a clear Federal standard and allows for state flexibility in implementation, is now moving to a new phase where the important role of local partners is being acknowledged and enhanced. However, this process should not result in the responsibility merely being passed down the chain. Each level and branch of government has an important role to play in support of the common goal.

At the local level, planning, coordination and implementation will result in the lasting change we desire, but people are key to making it happen. Both state and Federal Governments can support local efforts through financial incentives,

technical assistance and providing flexibility. This support can take the form of direct funding or program assistance, or eligibility for enhanced support that could be dependent on the implementation of ordinances or other actions.

At the state level, we have the responsibility to directly engage local governments and other partners to be clear about what must be accomplished. As we explore and evaluate the many ways we can support local efforts, we must consider flexibility that enables cost-efficiency. This approach should be applied broadly to include actions such as the authorization of stormwater authorities, the eligibility criteria for state funding, the establishment of clear statewide standards for pollution reduction, and the development of robust trading programs. The state's role is critical for coordinating our funding programs to leverage their value and achieve multiple benefits.

At the Federal level, USDA conservation programs, including technical assistance, remain the single biggest source of support for implementation of non-point source best management practices (BMPs). Nationwide programs such as EQIP (Environmental Quality Incentives Program) and the regional Chesapeake Bay Watershed Initiative (CBWI) have been a critical source of support for our farmers.

Created in the last farm bill, through the bipartisan leadership of the Congress, including key Members of this Subcommittee, CBWI has uniquely demonstrated the success of targeted conservation. Not only does CBWI target Federal money to a region with a significant need for additional conservation, CBWI allows that money to be further targeted to the sub-watersheds and specific BMPs that will achieve the most cost-effective reductions. It is the combination of Technical Assistance with cost-share dollars that provides the magic.

Let me take a minute to illustrate just how important this targeted approach has been to the agricultural progress made thus far. The agricultural community has contributed handsomely to achievement of our water quality goals, with the sector more than half way to the goal line, thanks in large part to the funding provided via EQIP and CBWI.

In the USDA Conservation Effects Assessment Project (CEAP) report for Chesapeake Bay, the agency concludes that 810,000 acres of farmland have a high level of need for conservation practices, while a moderate level of need exists on approximately 2.6 million acres. All totaled, to make our water quality goal, NRCS has committed to applying 4 million acres of new conservation by 2025. Translated, this will mean that NRCS must apply conservation practices on a minimum of 270,000 acres each year from 2010–2025. Since 2009, CBWI funds have been used to develop contracts for treating approximately 510,000 acres of working lands and account for 74% of NRCS's annual "acre goal" for 2010 and 2011. EQIP and other conservation support programs round out the difference and provide the foundation for meeting state implementation goals.

If CBWI funding were to be continued in the 2012 Farm Bill at an annual rate of \$50 million baseline, and carried forward from 2013–2025, NRCS could fund approximately 16,250 more contracts to treat about 2.34 million additional acres in priority watersheds. Other financial assistance funds provided via the formula allocations of such programs as EQIP are also spent in priority watersheds. However, CBWI forms the core of the agency's financial assistance in these areas.

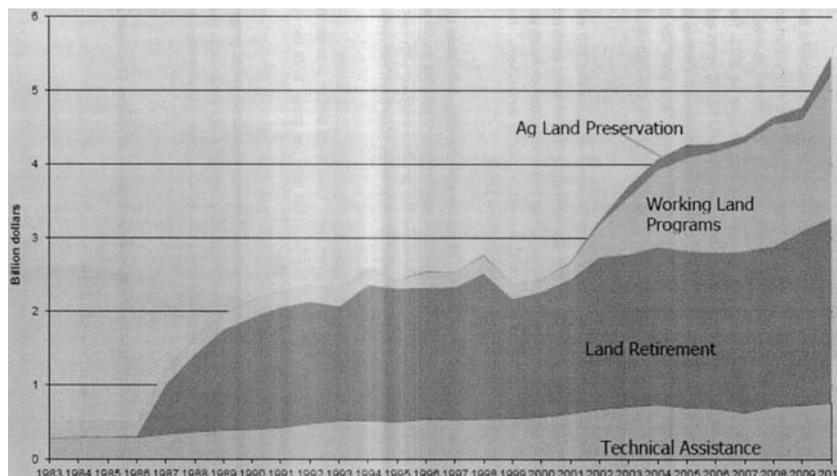
These dollars are further leveraged through word of mouth and changing definitions of normal practices within the agricultural community itself. Only a decade ago, farmers practicing no-till were the exception. Today, after targeted outreach efforts about this practice coupled with cost-share assistance, a majority of our crop acres are no-tilled. And, most of these acres have been converted to no-till without direct cost-share.

You cannot harvest a crop without first planting the seed. Cost-share dollars provide the seed, technical assistance and outreach provides a robust soil in which that seed can grow. With the right combination, we can reap the benefits of improved water quality.

As stated earlier, promoting innovation, coordination of energy and conservation programs, as well as acknowledgement of state-specific programs of regulatory certainty, are other ways that the Federal Government, and this Subcommittee in particular, can be of assistance to our farmers and local partners in their conservation efforts.

Thank you again for the opportunity to testify before you today. I am happy to answer any questions you may have.

Figure 1
USDA Conservation Funding 1983–2010



Source: ERS analysis of USDA budget summary data.
 Produced by Penn State University College of Agricultural Sciences.

The CHAIRMAN. Thank you, Chairman.
 It is a pleasure to introduce Mr. Shaffer.

STATEMENT OF CARL SHAFFER, PRESIDENT, PENNSYLVANIA FARM BUREAU FEDERATION; MEMBER, BOARD OF DIRECTORS, AMERICAN FARM BUREAU FEDERATION, CAMP HILL, PA

Mr. SHAFFER. Thank you, Chairman Thompson, Ranking Member Holden. I really appreciate the opportunity to testify on behalf of the Pennsylvania Farm Bureau and the American Farm Bureau Federation.

Pennsylvania's Department of Environmental Protection is working with more than 150 partners in developing the Watershed Implementation Plan. This is the process the Congress intended under the Clean Water Act. Unfortunately, in our view, EPA is micromanaging states and usurping their authority. An example of this can be seen in EPA's disapproval of Pennsylvania's first Water Implementation Plan. Not only did EPA reject our first plan but they were less than helpful when responding to questions about their expectations of states. Moreover, the timeline for which the states were given to develop the plan was inadequate, and states were expected to draft plans without knowing the required reductions.

The process of developing Phase II of the WIP is taking a similar track. Pennsylvania's Department of Environmental Protection is working to reach out to county and local governments in the 43 counties within the Bay watershed to obtain the necessary data and insight. This activity takes time to get it right. Like the development of the TMDL, the submission of the Phase I WIP, the EPA is hurrying the process while offering little guidance of any value.

What is most disturbing is the EPA is still telling state and now local governments to develop a plan based on poor and inadequate data. In September, Pennsylvania pointed out that EPA's model continues to assume inaccurate manure application rates. Specifically, the Commonwealth wrote, "within EPA's model about 50 percent of the cropland and 90 percent of all row crops receive manure." Well, in USDA's National Agricultural Statistics Service reports, only 24 percent of the total harvested cropland receives manure.

Despite this knowledge of real and valid data, EPA continues to threaten retaliatory action against states if they do not meet the unsupported and ever-changing goals. As taxpayers, Farm Bureau members are concerned that millions of dollars may be spent to chase paper compliance with a model that uses faulty assumptions rather than valid and readily available data. EPA's modeling has not given taxpayers in the Bay watershed assurance that the model will get us close to the required reductions.

If millions and millions of dollars are spent, the practices are implemented, and reality proves the modeling projections are wrong, what then? Will farmers and other businesses and communities be expected to spend even more? State agencies also share these concerns. Pennsylvania's previous Administration wrote, "in general, Pennsylvania's concern that EPA's approach to the Draft Chesapeake Bay TMDL is neither practical, equitable, nor cost-effective and could reverse progress in meeting our water quality goals." Last month, Virginia wrote to EPA saying, "the current watershed model is undermining the credibility of our collective efforts."

As I stated just 7 months ago, farmers are seriously concerned about their ability to continue to operate their farms in the Chesapeake Bay watershed. One reason is that EPA's TMDL establishes a binding allocation and timelines regardless of cost. Several Bay states estimate that implementation will cost billions of dollars. We believe the TMDL threatens the economic health of businesses, individuals, and communities throughout the Bay watershed.

Finally, I would be remiss if I did not mention the positive outcomes realized and real water quality improvements that have occurred due to farm bill conservation programs. Many farm bill conservation programs have helped agricultural producers implement conservation measures to comply with regulatory mandates by EPA.

I would really like to thank the Committee for convening this hearing and I would be pleased to respond to any questions. Thank you.

[The prepared statement of Mr. Shaffer follows:]

PREPARED STATEMENT OF CARL SHAFFER, PRESIDENT, PENNSYLVANIA FARM BUREAU FEDERATION; MEMBER, BOARD OF DIRECTORS, AMERICAN FARM BUREAU FEDERATION, CAMP HILL, PA

Thank you, Chairman Thompson and Ranking Member Holden. I appreciate the opportunity to appear before you today and to provide comments on behalf of the farm and rural family members of Farm Bureau. My name is Carl Shaffer, and I have the privilege of serving on the Board of Directors of the American Farm Bureau Federation and as President of the Pennsylvania Farm Bureau. Farm Bureau represents farms of all sizes, spanning virtually all commodities grown and sold in our great nation. I am pleased to offer this testimony, on behalf of the Pennsylvania

Farm Bureau, the American Farm Bureau Federation and its more than 6.2 million member families.

I own and operate a farm in Columbia County, where I raise green beans for processing, corn and wheat. All the land I farm is in the Chesapeake Bay Watershed, and most of the land is within sight of the Susquehanna River. As we speak, at least two agencies of Pennsylvania's state government—the Department of Environmental Protection (DEP) and Department of Agriculture—are working to develop Phase II of the Watershed Implementation Plan (WIP) for the Chesapeake Bay Watershed. Pennsylvania Farm Bureau has been involved in the WIP process since it first began almost 2 years ago, and we sit on the WIP Management Team, a group of industry, governmental and environmental groups working with DEP officials provide advice and insight on objectives and actions the Commonwealth should pursue to reduce pollution in the Chesapeake Bay Watershed in a manner that is environmentally effective and economically feasible.

The planning process being implemented by our state DEP—working with more than 150 partners and state law—is one that, we believe, Congress intended to be implemented under the 1972 Clean Water Act in effectively managing pollution of waterways and responding to more serious water pollution problems. Unfortunately, in our view, recent regulatory actions by the Environmental Protection Agency (EPA) to micromanage and dictate environmental performance in the Chesapeake Bay Watershed have needlessly and unlawfully usurped the responsibilities that the Act intended to be reserved and addressed by the states. An example of this can be seen in EPA's review and disapproval of Pennsylvania's first WIP. Not only did EPA reject Pennsylvania's first plan, but throughout that process, state agencies and the affected industries would repeatedly ask EPA officials if a certain approach would be sufficient in meeting the goals and objectives of the Federal agency. Those questions were most often met with responses seriously lacking helpful guidance. Moreover, the timeline for which Pennsylvania, and other states for that matter, was given for development of the plan was woefully inadequate, and states were expected to draft plans without knowing what their required nutrient and sediment reductions would be.

The process of developing Phase II of the WIP is taking a similar track. Pennsylvania's DEP is working diligently to reach out to county and local governments in the 43 counties of Pennsylvania within the Bay Watershed to obtain the necessary data and insight on workable solutions to reduce nutrient and sediment runoff at the local level—an objective that EPA is demanding in the Phase II segment of Watershed Plans. Despite the deadlines and expectations of EPA, this action is taking a significant amount of time in order to get it right. Like the development of the TMDL and the submission of the Phase I WIPs, EPA is driving a hurried process on the part of the states while offering little guidance of value. What's most disturbing is that EPA is still asking state, and now local, governments to develop a plan based on poor and inadequate data.

The timeline that Pennsylvania is expected to meet, along with the other Bay states, is quite unreasonably ambitious. The Draft Phase II WIP must be submitted to EPA by Dec. 15, 2011 and the final plan is then due by March 30, 2012.

The demands that EPA is putting on Bay states in Phase II is further crippling states' ability to devise a program that will encourage meaningful and effective long-term benefits, already hampered by the demands that EPA has already placed so far through EPA's excessive TMDL regulation. Let me spend a moment to highlight some of the problems with EPA's total maximum daily load (TMDL). Under EPA's Chesapeake Bay TMDL, all the pollutant loadings to the Bay and the reductions in those loadings take place in "model world." The model world appears to have no basis in reality and has very little to do with the real conservation efforts of farmers. Please note the attached timeline* because it enumerates the concerns with EPA's models raised by scientists, states and other stakeholders. In the short time that I have, I want to focus on the lack of scientific realities specific to Pennsylvania agriculture.

Nutrient management provides a good example. EPA's TMDL says that regulated agricultural operations in the Pennsylvania part of the watershed for the Susquehanna River can deliver no more than 761,488.58 pounds of nitrogen, 18,589.44 pounds of phosphorus, and 2,688,715.58 pounds of sediment to the Bay. These numbers apply to farms in Pennsylvania, even though the Susquehanna River itself is meeting Pennsylvania water quality standards for nutrients.

One way EPA seeks to force reductions in nutrient and sediment loads is by increasing the rate of adoption of best management practices (BMPs). For agriculture, EPA assumes that 47.2 percent of farms have already adopted nutrient manage-

*The document referred to and other submitted documents are retained in Committee file.

ment practices. In its TMDL, EPA requires 85 percent of farms to adopt “enhanced nutrient management practices.”

EPA’s requirement makes no sense because *all* Pennsylvania agriculture operations that generate manure are already subject to nutrient management requirements. However, EPA’s Chesapeake Bay models do not credit non-cost-shared nutrient management practices, so they misrepresent the on-the-ground reality of nutrient management on Pennsylvania farms. This flaw was pointed out by numerous stakeholders. For example, in its draft Watershed Implementation Plan, Pennsylvania stated:

A significant number of agricultural and other best management practices that have been implemented in Pennsylvania have not been ‘tracked’ and entered into the Chesapeake Bay Model. A significant level of interest in this deficiency was expressed by Pennsylvania’s Agricultural Watershed Implementation Plan workgroup. Pennsylvania pilot project efforts in Lancaster and Bradford counties, as well as preliminary evaluation of data from NASS indicates that as much as 84 percent of some implemented BMPs have not been entered into the Bay model, resulting in potentially significant nutrient and sediment reductions not being accounted for in the reductions attributable to Pennsylvania.

In another example, EPA’s model assumes that only 57,659 tons of manure are transported from Pennsylvania to locations outside of the Chesapeake Bay Watershed. However, Pennsylvania told EPA in September 2010 that all Chesapeake drainage county conservation districts in Pennsylvania report the export of manure from the county, and 227,527 tons left the Chesapeake Bay Watershed.

EPA’s model also assumes that at least 15 percent of all manure at an animal feeding operation production area is simply “lost” and ends up in the waterways. Even though EPA was told that this assumption was ludicrous, it made no changes.

EPA did not correct these discrepancies between its model and reality and finalized the Chesapeake Bay TMDL in December 2010, knowing full well that it had not properly accounted for agricultural BMPs and was misrepresenting manure management in Pennsylvania and other jurisdictions. EPA cited an out-of-court settlement agreement as its excuse for rushing to complete the TMDL, even though it had received requests to extend the deadline, including requests from Reps. Goodlatte and Holden of this Subcommittee.

Instead, EPA promised to make some changes to land use and nutrient management assumptions in the Chesapeake Bay Model in 2011, in time for the revised model to be used for the Phase II Watershed Implementation Plans. However, in the new models (Phase 5.3.2) EPA only changed the number of acres of impervious surface and some nutrient management assumptions. It did not address the lack of credit for non-cost-shared BMPs. It did not address the fact that a single piece of land can utilize multiple BMPs. It did not correctly apply the recommendations of the Agricultural Work Group regarding nutrient management. And, it did not address the 15 percent manure loss assumption that is built into the model.

As a result, EPA made its model worse, not better. EPA again rushed to meet the arbitrary deadline it established for state submission of Phase II Watershed Implementation Plans and has again developed a model that does not reflect reality.

When the Chesapeake Bay Watershed states began using EPA’s revised model to try to develop their Phase II Watershed Implementation Plans, they began to get inconsistent results. For example, when Virginia tried to use EPA’s model to determine how much Charles City County needed to reduce sediment, it found that, while the old model told them that Charles City County needed to *reduce* sediment by 48 percent, the new model says that Charles City County could *increase* sediment by 406 percent. Obviously, states and every community or business in the Watershed that has been assigned an allocation and a responsibility under EPA’s TMDL is concerned. EPA’s refusal to take the time to improve its models, or to reduce its reliance on models, is undermining the public’s confidence. Worse, EPA’s Federal TMDL could cause people to spend scarce resources on conservation measures that are directed to the wrong sources or the wrong areas.

A news article reporting the previously referenced inconsistencies in Virginia quoted an EPA official dismissing the concerns of local and state governments on modeling data saying, “Use common sense. Let’s get on with it.” Another EPA official is quoted as saying, “None of this stuff should impede the planning for what everyone knows is needed to be done.” Unfortunately, common sense tells us as farmers that ever-shrinking public dollars, and hard earned private capital, must be applied in a manner to achieve actual and proven water quality improvements, not compliance with a model based on assumptions that puts out inconsistent prescriptions for water health.

As taxpayers, Farm Bureau members across the nation are concerned that millions of dollars can be potentially spent to chase paper compliance with a model that uses faulty assumptions rather than valid and readily available data, and a computer model that shows inconsistencies, as displayed in the Charles City County instance. EPA's questionable modeling has not given taxpayers in the Chesapeake Bay Watershed reasonable assurance that the practices the model is directing the states to implement and the millions of dollars the states will need to spend to implement these practices will get it even close to the reduction goals EPA is demanding states to meet. If the millions are spent, the practices are implemented, and reality proves the modeling projections are wrong, then what? Will farmers, other businesses and communities be expected to spend even more monies and resources to pursue other practices and programs directed through a modified model?

As farmers, business-owners and economic engines of the nation's economy, Farm Bureau members are worried that the private investments they are making to improve water quality, based on the flawed model, will be for naught and will not be credited to them as individuals, or to the agricultural industry, in the same model.

On Nov. 8, 2010, Pennsylvania's DEP and Department of Agriculture, under the previous Administration of then-Governor Ed Rendell, wrote to EPA stating:

In general, Pennsylvania is concerned that EPA's approach to the Draft Chesapeake Bay TMDL is neither practical, equitable, nor cost-effective and could reverse progress in meeting our water quality goals.

In a meeting with EPA on Sept. 16, 2011, the Watershed jurisdictions rebelled against using EPA's model. As noted by the Commonwealth of Virginia in a Sept. 28, 2011 letter to EPA summarizing that meeting: "the current Watershed Model is undermining the credibility of our collective efforts."

In the Sept. 16, 2011 meeting, concerns were raised by Pennsylvania, Maryland and Virginia. For example, Pennsylvania pointed out that EPA's model continues to assume inaccurate manure application rates. According to Pennsylvania:

Within EPA's model about 50 percent of crop land and 90 percent of all row crops receive manure. USDA's National Agricultural Statistics reports that 24 percent of total harvested cropland receives manure.

EPA's response to the states' concerns has not been entirely satisfactory. In a letter dated Oct. 5, 2011, EPA finally admitted that its models could not support allocations below the scale of a major river basin. However, EPA is still demanding Phase II Implementation Plans from states that include a narrative of how the states are to meet those river basin-wide allocations. Also, EPA's letter says nothing about the validity of the thousands of allocations that are already in the Final TMDL. Finally, in a question-and-answer document issued on Oct. 17, 2011, EPA repeated its threats to take retaliatory action against states if they do not meet EPA's ever-changing expectations.

On Oct. 17, 2011, EPA also released a plan for responding to the modeling concerns raised by the states. Unfortunately, each concern that involved a change to the model was pushed back to 2017. The only fix EPA is willing to make before 2017 is the recognition of additional BMPs. In response to concerns about wildly varying loadings resulting from the new model, EPA suggests that states focus their communication on implementation goals rather than pounds per acre reductions. That advice is difficult to follow when the TMDL specifies specific pounds of reductions for over 488 individual sources and communities with large storm sewer systems as well as aggregate (by river basin) pounds of reduction to be met by all the animal feeding operations, all the row crop agriculture, all septic systems and smaller municipal storm sewer systems in each river basin.

Even though the TMDL currently has aggregate pollutant loadings for agriculture on a river basin basis, EPA plans to develop a "certainty framework" that would track a farm's progress towards meeting the modeled reductions needed to meet a modeled result on a farm-by-farm basis. As noted above, EPA's models are not accurate at the county scale, much less the farm scale, and the Federal TMDL should not impose specific reductions on specific farms or areas of land.

Pennsylvania's Secretary for Environmental Protection, Michael Krancer, who is also providing testimony today, has the unforgiving task of trying to weave the effective environmental programs and regulatory measures already being done in Pennsylvania into EPA's unrealistic and deeply flawed requirements. Pennsylvania Farm Bureau appreciates the opportunities we have been given to participate in state processes for planning and development of programs that have proven, not theoretically, benefits to local watersheds.

Pennsylvania's farm families strongly agree with the approach set forth by the Clean Water Act that gives state agencies the lead in working with non-point

sources. To that end, let me provide some examples on how Pennsylvania's agricultural community and our state's environmental regulatory agency, have taken significant steps in working cooperatively to improve our water quality. This positive effort has provided measurable benefits to the citizens of the Commonwealth who live near or use waterways downstream.

In Pennsylvania, water quality improvements have been made as a result of the following state regulations and initiatives (as well as others, not specifically mentioned below):

- *Pennsylvania Erosion and Sediment Control Regulations*

All farms must implement BMPs to control erosion and sedimentation for all disturbed lands, including plowing and tilling activities. Written erosion and sedimentation (E&S) control plans must be kept on site for all plowing and tilling activities that disturb 5,000 square feet or more. Plans must contain plan maps, soils maps, waters of the Commonwealth, drainage patterns, BMPs, descriptions of tillage systems used and schedules.

- *Mandated State Standards for Storage and Land Application of Manure*

Every animal farmer, regardless of the farm's size or animal concentration, must operate his or her farm and manage animal manure in a manner that is consistent with the practices and standards identified in DEP's "Manure Management Manual for Environmental Protection." Any practice that substantially deviates from the manual's practices must obtain specific approval or permit from DEP. Every farmer who generates manure or receives manure for land application is required by state law to develop and implement written manure management plans that demonstrate the use of management practices that control nutrient runoff from farms.

- *Pennsylvania Clean Streams Law*

This statute prohibits discharges of animal waste into streams. The degree of penalties to be assessed are based on the willfulness of the violation, the damage or injury that occurs to the waters or natural resources of the Commonwealth, the costs for correcting or mitigating the damages, and other relevant factors. Substantial penalties are often assessed on violations that result in fish kills or other serious injury to aquatic life.

- *Pennsylvania's Nutrient and Odor Management Act*

This law prohibits Concentrated Animal Feeding Operations (CAFOs), Concentrated Animal Operations (CAOs) and any operation receiving animal manure from a CAFO or CAO from mechanically land applying the manure within 100-feet of a perennial or intermittent stream with a defined bed or bank, a lake, or a pond. Exceptions exist where a qualified 35-foot vegetated buffer is established along the water bodies. Recent statutory and regulatory changes to the Act also require the development and implementation of nutrient plans approved by regulatory agencies to minimize runoff of nitrogen and phosphorus into waters of the Commonwealth, and require owners of land receiving manure generated from a CAFO or CAO farm to demonstrate through nutrient balance calculations that nutrients from the manure will not exceed the nutrient needs of plants and vegetation to be grown on the land.

- *Pennsylvania Concentrated Animal Feeding Operation (CAFO) Program*

The program requires either National Pollutant Discharge Elimination System (NPDES) general or individual permits for animal operations with over 1,000 Animal Equivalent Units (AEUs) and CAOs with over 300 AEUs. Pennsylvania's CAFO permitting program has been expanded to include: poultry operations that use dry manure handling systems and are CAOs with more than 300 AEUs or that have 1,000 or more AEUs; horse operations that are CAOs with more than 300 AEUs or that have 1,000 or more AEUs; or any animal operation defined as a large CAFO under the Federal CAFO Regulations. The scope of farms required under state law to obtain NPDES permits is broader than the scope of farms required to obtain NPDES permits under Federal law.

- *Best Management Practices Manual for Pennsylvania Livestock and Poultry Operations*

This manual was developed to outline BMPs which can assist livestock and poultry operations in their effort to protect local and regional natural resources, and to allow them to successfully integrate into the neighboring community. Some of the BMPs described are mandatory due to current regulations; other voluntary efforts are suggested to assist producers in addressing specific concerns.

- *Pennsylvania Fish and Boat Code*
State law prohibits the placement or allowance of any substance harmful to fish into streams. In addition to imposition of fines, a person who places or allows a substance into a stream is required to pay damages for fish that are killed or injured as a result of the substance being introduced into the stream. Penalties and damages are in addition to any penalties that may be assessed under the Clean Streams Law.
- *Pennsylvania Stream Protection Program*
This program allows streams to upgrade to High Quality (HQ) or Exceptional Value (EV) protection status. The program regulates activities and discharges adjacent to upgraded streams.
- *Pennsylvania Dam Safety and Encroachment Act*
Permits are required for activities located in, along or across streams or wetlands. Pennsylvania's wetland protection regulations exceed Federal requirements.
- *Pennsylvania Flood Plain Management Act*
The construction of manure storage facilities in a flood plain must meet upgraded construction standards.

Stream health and aquatic rebirth in the Keystone State are improving each year. An example of this occurred at a recent Pennsylvania Fish and Boat Commission meeting on April 11–12, 2011 where nearly 100 streams—in 32 different counties—were presented to the commission for adoption as “Wild Trout Streams.” The Pennsylvania Fish Commission defines such a stream as “a remote, natural and unspoiled environment where man’s disruptive activities are minimized.” Wild trout are an excellent indicator of water quality and stream health. These upgrades in stream classifications were made possible by the ongoing and collaborative efforts of farmers, landowners and state and local regulators applying local and individualized solutions to water quality concerns.

Pennsylvania also has an effective nutrient management program in place. Pennsylvania’s Nutrient and Odor Management Act provides the opportunity for animal farms whose animal numbers and concentrations are below those of a regulated CAO or CAFO to voluntarily act in developing and implementing reviewed and approved nutrient management plans in the same manner as regulated CAOs or CAFOs. Those who do so are given modest protections from enforcement penalties. Each year, the Commonwealth sees an increase in volunteer nutrient management planning—in the early 1990s fewer than 2,000 acres were enrolled in Pennsylvania’s nutrient management program; today this program covers 1.3 million acres. Several years ago, Pennsylvania’s DEP estimated that approximately half of the total manure being generated by the Commonwealth is now being managed under approved nutrient management plans of regulated and volunteer farms. This demonstrates farmers’ desires to be good stewards of the land and to protect our natural resources for future generations. Furthermore, Pennsylvania was the first state in the Union to implement mandatory requirements for nutrient management plans for CAOs and CAFOs, a practice that was in place long before the current scrutiny on the Chesapeake Bay TMDL.

Additionally, Pennsylvania’s State Conservation Commission implements the Dirt and Gravel Road Program. This program is an innovative effort to fund environmentally sound maintenance of unpaved roads that have been identified as sources of erosion and sediment pollution. The program is based on the principle that informed and empowered local effort is the most effective way to stop pollution. The Dirt and Gravel Road program has inspected 16,500 miles of public unpaved road, and has set up 16,600 “worksites” where road runoff negatively impacts a stream are mapped and assessed. This program has stabilized more than one quarter of a million square feet of streams near 640 miles of rural roads since 1997. These state and local efforts are significantly reducing sediment discharge. Expansion of Federal jurisdiction over these small streams would only complicate an already successful program.

Although Farm Bureau and state officials try to work cooperatively in developing effective and feasible regulatory initiatives to improve water quality, we can and do have material disagreements over regulatory measures the Commonwealth ultimately decided to impose. A very recent example is the aforementioned revision of the “Manure Management Manual,” which will likely be finalized by DEP very soon. DEP rejected a number of concerns and recommendations offered by Pennsylvania Farm Bureau that we believed would place significant and unworkable requirements on smaller animal farm operations without providing any meaningful enhancement of water quality. While disappointing, DEP’s response illustrates the

larger picture—that Pennsylvania’s regulatory agencies are not unduly influenced by industry and in fact, do make their own independent judgments. In discussions with other state Farm Bureaus, we believe that other states apply the same independence in judgment as applied by DEP in regulatory management of water quality.

We believe any contention that state agencies are incapable of effectively regulating and improving water quality are quickly dismissed when a Federal regulator applies common sense to the assessment of Pennsylvania’s accomplishments. Surely other states in the Bay Watershed, and nationally, have similar improvements in water quality that have little to do with Federal edicts. EPA has made it quite clear that their current focus on the in the Chesapeake Bay Watershed is a model for other watersheds across the nation. While we believe their actions go beyond their authority under the law and have filed a complaint in Federal court, farmers will continue the work of stewarding our natural resources, improving water quality and feeding America.

As I stated just 7 months ago, farmers are seriously concerned about their ability to continue to operate their farms in the Chesapeake Bay Watershed. This is because of the continuous onslaught of regulations, guidance and other requirements being issued by the EPA. EPA’s focus on agriculture and its over-reaching restrictions are particularly troublesome because agriculture has worked successfully with the U.S. Department of Agriculture (USDA) to reduce its environmental impact on the Bay.

EPA’s TMDL wrongly establishes binding allocations and timelines *regardless of cost*. Clean Water Act and EPA regulations specifically allow states to consider economic consequences and to modify water quality goals when necessary to avoid substantial economic and social disruption. EPA asserts that the TMDL will restore jobs and help the Bay economy, but it has not provided any data to support these claims. The Bay states, however, estimate that implementation will cost billions of dollars (*e.g.*, \$7 billion for Virginia, \$3 billion to \$6 billion for New York). Farm Bureau believes the TMDL threatens the economic health of businesses, individuals and communities throughout the Chesapeake Bay Watershed.

Finally, I would be remiss if I did not mention the positive outcomes realized, and real water quality improvements that have occurred due to farm bill conservation programs, including the Environmental Quality Incentive Program (EQIP), the Conservation Reserve Program (CRP)—or its state counterpart, the Conservation Reserve Enhancement Program (CREP), the Emergency Conservation Program (ECP), the Farm and Ranchland Protection Program (FRPP), the Chesapeake Bay Watershed Initiative (CBWI) and others. Many of the farm bill conservation “working lands” programs, including those referenced, help agricultural producers implement conservation measures to comply with regulatory mandates by EPA.

I would like to thank the Committee for convening this hearing and for all your hard work on behalf of agriculture across the country. I will be pleased to respond to questions.

The CHAIRMAN. Thank you, Mr. Shaffer. And I now yield to Mr. Goodlatte for purposes of the introduction of our final witness on this panel.

Mr. GOODLATTE. Well, Mr. Chairman, thank you for that honor.

I am very pleased that we have with us Turner Perrow, a member of Lynchburg City Council who comes to us not only with experience of the impact of this issue on local government, but also with a civil engineering degree from Virginia Military Institute. And having worked as a consultant engineer designing overflow and other infrastructure projects while working closely with the City of Lynchburg, he has a professional engineering designation, so I think he can speak to this issue from a couple of vantage points. In 2008, he was elected to represent the city’s 4th Ward and I am delighted that he has come up here to be with us today.

Turner, welcome.

**STATEMENT OF HON. EDGAR J.T. PERROW, JR., WARD IV
REPRESENTATIVE, LYNCHBURG CITY COUNCIL,
LYNCHBURG, VA**

Mr. PERROW. Thank you, Congressman. Good morning, Mr. Chairman, Members of the Committee. I am very concerned about what our locality and others are being compelled to do. It is estimated that the cost to Virginia communities alone is over \$7 billion. The schedule for the implementation of these new Chesapeake Bay Total Maximum Daily Load final report regulations is arbitrary; no other TMDLs that we are aware of have a fixed schedule or are required to have a fixed schedule by the Clean Water Act. Instead of establishing a realistic schedule based on the ability to implement, the schedule is being driven purely by the EPA's voluntary settlement of a lawsuit with the Chesapeake Bay Foundation and others.

As a member of Virginia's Phase II Watershed Implementation Plan Stakeholders' Advisory Group, I was told that the model—the theoretical mathematical program used to predict pollutant loading—is seriously flawed. On a macro scale, it is thought to be fairly accurate in its ability to establish the overall loading reductions needed for the Bay to meet Water Quality Standards. However, on a smaller scale there are significant and validated concerns.

In the recent 5.3.2 model release, Lynchburg's load reduction goals have significantly increased compared to the prior model version, while another community just downstream in the same river basin is shown to be able to increase its sediment loadings by 350 percent. This obviously does not make sense, which calls into question the overall validity of the model and creates significant challenges for local governments to be able to plan and defend investments needed to clean up the Bay.

In October, the EPA basically acknowledged in correspondence with the Bay states that the model does not work at a local scale. We are also pleased that the EPA has recently issued a memorandum offering flexibility for localities nationwide to prioritize various Clean Water Act actions, although it is difficult to see how this flexibility would apply in the Chesapeake Bay watershed states given the magnitude and schedule of EPA Chesapeake Bay's TMDL requirements.

In the City of Lynchburg, the additional cost to be incurred due to the Bay TMDL Report potentially includes a \$70 million wastewater treatment plant upgrade and an estimated \$110 million capital investment in stormwater infrastructure. Annually reoccurring costs of \$12 million are to be expected. This is a four percent increase of our city's expenses, approximately \$140 annually per household. We are approximately a 72,000-person city.

Since Fiscal Year 2010, we have cut our budget by 11 percent and expect another two percent cut this year. Our revenues have held steady, but our mandated fixed costs continue to rise. As a result of this great recession, our local government has trimmed all the fat we can find in our budget, but this year, we are going to cut deeper. The added cost of the Bay TMDL Program cannot be sustained in our budget.

The end result is that Lynchburg and other localities are being forced to impose upon our citizens and our businesses a stormwater

fee to meet these demands. Should the \$70 million wastewater treatment plant upgrade be necessary, we will have to increase our sewer rates which are already among the highest in the state. This will hit our water dependent manufacturers hard, as will the proposed stormwater fees which correlate to manufacturer's significant impervious area. This will encourage sprawl in areas where a fee has not been imposed and where sewer rates are lower. Business will be incented to move further into counties, and tax bases will be lost in population centers. This will have an overall negative impact to water quality.

If this program is the model for the EPA's future regulations of TMDLs across the county, we will witness the hardships I described spread to the entire country. What happens when the Mississippi River or the San Francisco Bay are subjected to these standards? In effect, the settlement between the Chesapeake Bay Foundation and the EPA is dictating the future TMDL regulations across our country.

Regulatory agencies need to consider the funding implications of their regulations on municipalities and not continue to just assume that the cities or states can get their funds for whatever they deem to regulate. A citizen of Lynchburg recently sent me an e-mail that said, "I did not ask for the changes, nor did I get to vote on acceptance of the stormwater changes placed on the City of Lynchburg. I understand that there could be penalties for noncompliance with the new stormwater regulations; nonetheless, I do not want to increase my payments from my fixed income to my city to comply with regulations that I didn't have the opportunity to vote on."

As our elected representatives, I respectfully urge you to consider the imposed hardships that these regulations place on our constituents and debate the policy based on its costs and benefits.

In summary, I am a strong supporter of a healthy Bay. The Chesapeake Bay and the James River on which I grew up are part my heritage as a Virginian. The Bay is both a natural and strategic asset of our country. Cleaning up the Bay is the correct action to take; however, the science must be proven, the timeframe realistic, and it cannot be such a sudden financial impact to our citizens and our businesses.

Thank you, Mr. Chairman. I will await any questions you may have.

[The prepared statement of Mr. Perrow follows:]

PREPARED STATEMENT HON. EDGAR J.T. PERROW, JR., WARD IV REPRESENTATIVE,
LYNCHBURG CITY COUNCIL, LYNCHBURG, VA

Good morning Mr. Chairman and Members of the Committee,

My name is Turner Perrow, and I am a member of Lynchburg City Council. In addition to being on council, I am a licensed professional engineer in the Commonwealth of Virginia. Therefore, I understand both the engineering and the fiscal impacts of the Chesapeake Bay Total Maximum Daily Load (TMDL) Final Report developed by the EPA.

I am very concerned about what our locality, and others, are being compelled to do. It is estimated that the cost to Virginia communities alone is over \$10 billion. The schedule for the implementation of these new TMDL regulations is arbitrary; no other TMDLs that we are aware of have a fixed schedule, or are required to have a fixed schedule by the Clean Water Act. Instead of establishing a realistic schedule based on the ability to implement, the schedule is being driven purely by the EPA's voluntary settlement of a lawsuit with the Chesapeake Bay Foundation and others.

As a member of Virginia's Phase II Watershed Implementation Plan Stakeholder's Advisory Group, we were told that the model, the theoretical mathematical program used to predict pollutant loading, is seriously flawed. On a macro scale, it is thought to be fairly accurate in its ability to establish the overall loading reductions needed for the Bay to meet Water Quality Standards. However, on a smaller scale there are significant and validated concerns. In the recent 5.3.2 model release, Lynchburg's load reduction goals have significantly increased compared to the prior model version, while another community downstream in the same river basin is shown to be able to increase its sediment loadings by 350%. This obviously does not make sense, which calls into question the overall validity of the model and creates significant challenges for local governments to be able to plan and defend investments needed to clean up the Bay. In October, the EPA basically acknowledged in correspondence with the Bay states that the model does not work at local scale. We are also pleased that EPA has recently issued a memorandum offering flexibility for localities nationwide to prioritize various Clean Water Act actions, although it is difficult to see how this flexibility would apply in the Chesapeake Bay watershed states given the magnitude and schedule of EPA's Chesapeake Bay TMDL requirements.

The additional cost to be incurred due to the Bay TMDL Report potentially includes a \$70M wastewater treatment plant upgrade and an estimated \$110M capital investment in stormwater infrastructure. Annually reoccurring costs of \$12M are to be expected—a 4% increase of our City's expenses, approximately \$140 annually per household. Since FY 2010, we have cut our budget by 11% and expect another 2% cut this year. Our revenues have held steady, but our mandated fixed cost continue to rise. As a result of this great recession our local government has trimmed all the fat we can find in our budget, but this year, we'll cut deeper. The added cost of the Bay TMDL Program cannot be sustained in our budget.

The end result is that Lynchburg and other localities are being forced to impose upon our citizens and our businesses a stormwater fee to meet these demands. Should the \$70M WWTP upgrade be necessary we will have to increase our sewer rates which are already among the highest in the state. This will hit our water dependent manufacturers hard, as will the proposed storm water fees which correlate to manufacturer's significant impervious area. This will encourage sprawl to areas where a fee has not been imposed and where sewer rates are lower. Business will be incented to move farther into counties, and tax basis will be lost in population centers. This will have an overall negative impact to water quality.

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In summary, I am a strong supporter of a healthy Bay. The Chesapeake Bay and the James River, on which I grew up, are part my heritage as a Virginian. The Bay is both a natural and strategic asset of our country. Cleaning up the Bay is the correct action to take, however, the science must be proven, the timeframe realistic, and it cannot be such a sudden financial impact to our citizens and our businesses.

Thank you.

The CHAIRMAN. Thank you, Councilman. I appreciate all the testimony of all the witnesses on the second panel.

I want to start out my first questions for Secretary Krancer. Secretary Krancer, are you aware of what the potential cost of implementing the TMDL will be on Pennsylvania?

Mr. KRANCER. I can't give you an exact number—billions. I think I heard Virginia was \$7 billion. Regretfully, as pointed out earlier,

there has been no cost-benefit analysis and even if there is one from EPA, which is supposed to come out when? I think I heard next year after the WIPs are submitted, which is again cart before the horse. We would like to look at the cost-benefit analysis that EPA does produce. I have seen substantial debate about similar cost-benefit analyses that EPA has produced with respect to its air regulations.

The CHAIRMAN. And I am assuming in a good year, billions of dollars would be fairly crushing on the state budget. And living in the Keystone State, I think Pennsylvania is like most states today, difficult economic times.

Mr. KRANCER. No question about it. Our governor, Governor Corbett, just closed a \$4.2 billion budget deficit that was left for him in his first year. So correct, the economy is not where we would like it to be, although in Pennsylvania with the help of our newly discovered gas industry, we are going to be doing better, but we need to do much better obviously.

The CHAIRMAN. Thank you.

Chairman Brubaker, first of all, in your testimony you had identified I thought some—I had them marked here but I am not finding it right now—four different aspects, innovation and the other three, which I thought really were spot on in terms of looking at addressing this. I wanted to address one of those. And you had mentioned in your testimony as well about the importance of numerical goals and my question is: given some of the testimony we have heard and the discrepancy of some specific communities in terms of variance with the current TMDL model impacting those local communities, are you confident given these reported discrepancies that the numerical goals, the TMDLs that the EPA is putting out there at this point in time are 100 percent accurate?

Mr. BRUBAKER. I can't speak to the level of accuracy. I certainly, as the last witness concluded his testimony, am a believer as I believe that we all want a clean Bay. The question is, how do we best get there? And those points that you referred to, first was promoting innovation, second was coordinating energy and conservation programs, third was supporting both cost-share and technical assistance, and fourth is acknowledging states' specific programs and regulatory issues.

So I do have concerns about how we are going to find the dollars necessary. I believe some of the achievements that we can make in the future are very much focused on innovation, so we need to signal to the research and development communities of this nation and the world that we are serious about bringing new innovation into the Chesapeake Bay to help us reduce the nitrogen and phosphorous and sediment.

The CHAIRMAN. And I do think all those things are important, but I mean I can't help—I came out of healthcare for 28 years. You don't jump to surgery before you have an accurate diagnosis, and the TMDL model has some real accuracy issues on a local level. I think that is just step one—or it is not step one because we have been doing this for 30 years. It is the next step. Let us make sure that model is accurate.

Mr. Shaffer, the EPA is facing some serious credibility issues with inconsistencies in their modeling and decisions continue using

assumptions when readily available data exist. What are your thoughts on ways that we could rebuild their credibility in this process? Because in the end we do want a clean Bay. There is no one in here that doesn't want a cleaner Bay.

Mr. SHAFFER. I think all of agriculture, especially across Pennsylvania where I can speak for it, has proven that time and time again that they want clean water going down to the Bay. They want clean water for their families. And they have proven that by all that we have accomplished voluntarily. And I want to repeat that—voluntarily without any EPA mandates. What we have accomplished so far and what we will continue to do, farmers are great stewards of their land and they really have a great pride in the job they are doing with conservation practices. I think what is very important, how we are able to accomplish this and one of the things the Senator just said, as technology develops, we adopt it, we utilize it, we are able to put it on the farm, put it on the ground to improve. And that is the way we have this curve going in the right direction and we will continue to do so.

The CHAIRMAN. Thank you. And my final question this round, Mr. Perrow, you touched on the fact that EPA suggested that this model and regulations of TMDLs would hopefully be used across the country. I think that is an accurate portrayal. I think this is why it should be important to every Member of Congress. This is coming to a watershed near you in the future and really the Chesapeake Bay is being used as a pilot. Do you think that these standards are even attainable at this point?

Mr. PERROW. Thank you, Mr. Chairman.

The standards are attainable over time but the schedule that is set, we can't meet the schedule. Earlier, as the Administrator discussed, the EPA was trying to fine tune the model. However, they are going to wait another year for that and it won't be until 2017 until they revise it. Meanwhile, at the local level, we have to implement these changes right away. So we are making decisions, City Council, to set up a stormwater utility and to implement these programs and fees right now. So we can't wait for this.

Yes, it is attainable with time and with practical, proven results, but not on the schedule that has been set.

The CHAIRMAN. So I mean my perception—and I want to see if you agree with this—TMDLs where they serve as a vision and a roadmap seem like they are pretty positive. They take us in the right direction. But I don't think that is what my impression what the EPA is doing with this. It is more being used as punitive regulations at this point.

Despite the fact that I know the Administrator didn't call them a regulation, I know one when I see one. Maybe it is not termed that but—

Mr. PERROW. Yes, sir, I agree with your assessment. Initially, the schedule is developed by what were the goals to meet the Chesapeake Bay cleanup, just the goals to what localities and the watershed was supposed to do. However, in the settlement, it is my understanding that those goals became the hard deadline. And whereas we are striving to meet those goals, we are worried about actions being taken by the EPA such as not renewing our wastewater treatment plant discharge permit or MS4 permit, which come up

for renewal here shortly. So that is the mechanism by which they can enforce implementing these arbitrary goals immediately, and that is what we are very concerned about.

The CHAIRMAN. Thank you.

And I now recognize the Ranking Member for questioning.

Mr. HOLDEN. Thank you, Mr. Chairman.

I apologize to you and to our witnesses. Ranking Member Peterson called a meeting of the Minority Members so I had to attend that and that is why I am by myself on this side.

But getting back to the onsite farm inspections. Secretary Krancer and Mr. Shaffer, do you believe that the EPA has authority under the Clean Water Act, Section 308?

Mr. KRANCER. Well, Representative, I promised I would stop practicing law after I got to this position in which now I have lawyers, although it is a promise I break virtually daily if not repeatedly during the day. They seem to think they have that authority. Quite honestly, they seem to think recently since I have been in office that they have a lot of authority to do a lot of things. We are not sure in Pennsylvania where that stops yet but we are working on it.

Mr. HOLDEN. Mr. Shaffer, do you care to comment?

Mr. SHAFFER. It is our read on the Clean Water Act they absolutely do not have the authority to come on farms for enforcement actions, and we have several high-level comments on that that we feel we are absolutely right on that.

One of the most concerning things is in talking to the Pennsylvania Department of Agriculture, EPA has requested for GPS coordinates for every dairy farm in the Chesapeake Bay watershed. Now, I am sure they don't want to add those people to their Christmas card list, and so they have a plan of enforcement, and they are just going to keep pulling forward until they are stopped.

Mr. HOLDEN. Secretary Krancer, you and the Administrator had different observations of the relationship between the Commonwealth and EPA as we move forward in this process, and you referenced an October letter and he said we will have to wait and see. Can you elaborate on the October letter, what was expressed?

Mr. KRANCER. Right, the October 5 letter—and that was a topic of some of Administrator Garvin's testimony—talked about how the EPA now, somewhat suddenly, views the model—at least what they are saying they view the model. They are not viewing it anymore as local as they had before. And quite honestly, it had been months—I think I mentioned this—that we had been trying to pound on EPA, get the message to EPA. We went to the public, to the press both here and—or I should say in Pennsylvania and in Virginia, and virtually within a week after the media attention—because I guess you can't hide forever—and I would also add the Congressional oversight. I think the Congressional oversight, the questions you all have been asking for months, the questions we have been asking for months, as I said in my testimony, that persistence, that public attention might be worthwhile, but I am cautiously optimistic on that.

As I say in my testimony, I am going to wait and see. We are all going to have to wait and see whether EPA is merely placating

or whether they are serious or whether they are just trying to do what we used to call in the ACC basketball area some four corners.

Mr. HOLDEN. Thank you, Mr. Secretary.

Mr. Shaffer, I know you have to be careful how much you can say about the litigation, but could you tell us as much as you possibly can? You know, what drove you to go that far? That is a pretty extreme step that is going to cost your organization a lot of money. Can you tell us as much as you can?

Mr. SHAFFER. Let me first just say, Congressman, one reason why we did do it that is not valid. We didn't do it to shirk any responsibility of being good stewards of the land. So let me make that very clear. We are going to continue working to clean up the waters of Pennsylvania.

The reason we felt we had no other choice is because we feel EPA is just basically violating the Clean Water Act, that they don't have the authority to do what they are doing, and unfortunately, this is the only way of dealing with it. And we feel very strongly about it and where we are at right now, we are on a timeline. We have entered a motion to complete the record, and in doing so, we feel we don't have all the information and documents we need from EPA to move forward. So there is a delay in the summary judgment briefing right now until that decision is made on our motion to complete the record.

But that is where we are at right now, but like I said, I want to once again reiterate it has nothing to do with our responsibility as good stewards of the land. We are going to continue to do that; we are going to continue to make the strides we have made and move forward in the future. But we feel that the violation of the Clean Water Act has major ramifications for all of us down the road.

Mr. HOLDEN. Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman. Now, I recognize Mr. Goodlatte for questioning.

Mr. GOODLATTE. Well, thank you.

And Mr. Shaffer, let me just add to what you just said in response to Congressman Holden. We agree with your position. In fact, the House of Representatives has voted to cut off the funding not for programs that help farmers comply with existing regulations, that keep cattle out of streams and so on, but simply to cut off the funding for the implementation of this—as Secretary Krancer has called it—cart-before-the-horse effort on the part of the EPA. Unfortunately, so far the Senate hasn't gone along with our efforts, but we will continue to try to support your efforts in that regard.

Councilman Perrow, again, welcome. I am very familiar with the situation in the City of Lynchburg and have, when possible, attempted to help the city comply with the combined sewer overflow problem that you have had. And for the past 17 years, the city has been making significant upgrades to its storm and wastewater system. In total, this investment will probably reach a half a billion dollars for a city of 75,000 people. In addition to this, you now have to make another \$150 million, possibly more, upgrade mandated by the TMDL. Can you explain to the Committee what this means at a local level? As a councilmember, what kind of priorities are you

having to balance for these costs? Unlike the Congress where we don't have a balanced budget amendment to the United States Constitution—which by the way both these gentlemen support—the City of Lynchburg, like virtually every other city in the country, has to balance its budget. So what are you looking at when you are faced with \$150 million add-on to what you are already spending here?

Mr. PERROW. Thank you, Congressman. Our annual budget is \$306 million and so just as an example, we are looking at a \$12 million reoccurring cost for stormwater alone. Our public bus service costs \$7 million. That is nearly double what our public bus service costs.

As I pointed out earlier, we already have some of the highest sewer rates in the state. The CSO program is driven out of sewer fees under a consent order. We have to balance the household median income with the sewer rates and set our sewer rates that way and drive the program to completion. What has startled me in working on this program initially, this CSO program was initially budgeted to be a \$200 million program, and now we are 75 percent finished with it and it is still a \$200 million program and the total cost, as the Congressman said, are expected to be half a billion. I see the exact same problem potentially arising out of these stormwater infrastructure that would have to go in place as part of the TMDL report.

Now, another item in—excuse me if I am getting too technical—it makes me scratch my head because maybe we, instead of separating the sewers like we were directed to do several years ago, we should have all left and combined and treated the whole thing. It is very frustrating to me from a local standpoint that it almost seems like we are going back and having to rework a system that we thought we had fixed due to the changing regulations. This is a significant impact to our business and to our taxpayers in the City of Lynchburg. We are getting a significant amount of pushback from our constituents who just don't understand exactly why they need to pay these increased fees and what good the fees are doing. So it is very troubling for our city, sir.

Mr. GOODLATTE. Thank you. In fact, because of those fees that you are already mandated to gather and because of the prospect of what you are facing here, you say that this has particularly hurt some businesses. Is the city concerned about the ability to attract new businesses to the city when some of the localities near Lynchburg may not be in the Bay watershed and don't have to live under the mandates of the TMDL?

Mr. PERROW. Yes, Congressman. As you are aware, Lynchburg is an independent city, which makes us in the Commonwealth of Virginia a little bit different. But we have to impose these regulations based on the density of the City of Lynchburg, yet a potential business could move a foot over the property line and not be subjected to the same regulations that we are. We are concerned about this because our primary driver in our budget is on real estate taxes. And if more businesses or more residents attempt to escape the fees and move outside the city's limits, we are going to lose tax base. And if we lose tax base, we lose the ability to offer the services that we normally provide to our constituents and we become

a failing city. And that is something we cannot allow to happen. So yes, sir, we are very concerned about the impact to our businesses and the ability to attract and recruit new businesses to the area.

Mr. GOODLATTE. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman.

Just to follow up with a few more questions.

Secretarty Krancer, I have heard in testimony, both written and verbal, identifying the need for more technical assistance. In fact, a term I use frequently and I read it somewhere within the testimony—I don't know who to give a credit to; I will have to go back and look—but I was pleased to see that term in your boots on the ground. And I wanted to see in your testimony you address what DEP has done to provide training to many different target audiences, to have qualified technical assistance out there to help folks to deal with these issues. Can you expand on that a little bit of what DEP is doing?

Mr. KRANCER. Well, sure. We work in partnership with our Department of Agriculture and, quite honestly, our stakeholder community, our ag community, municipality community, all the other communities that are involved in this. And you have really given me a good opportunity here to tell you and tell the entire Congress what a great job our agricultural community in Pennsylvania has done already over the past 10, 20 years, the great job our municipality community has done, our developer community has done.

We have done in Pennsylvania a ton of heavy lifting with respect to the Bay over the past 5, 6, 10 years, and we are going to continue to do all that. And we work very hard at stakeholder outreach, at technical assistance outreach with whatever resources we can garner. Obviously, now those resources are somewhat not as available as they had been in the past, but I don't want it to be ever said about Pennsylvania that Pennsylvania is not already doing a tremendous job. And that is part of the bone I had to pick with EPA is that we have done all these things over the past few years and gotten little credit for it just because of the mathematical construct they are using. So in some cases we are having to start all over again even though we have done a ton already. So I hope that answers your question.

The CHAIRMAN. Thank you.

Chairman Brubaker, thank you for your service to Chesapeake Bay, but obviously I also want to thank you for your service to the Commonwealth of Pennsylvania and the Pennsylvania Senate. It is great to have you there with the work that you do.

I think this really gives you a unique perspective process. You know, assuming that the estimates that have been put forth that pegged the cleanup for some of the states at more than \$10 billion, given your leadership within the state legislature, if you get a bill for \$10 billion, what are your thoughts? What does that mean to the Commonwealth of Pennsylvania?

Mr. BRUBAKER. Well, thank you, Mr. Chairman. You referred to the boots on the ground comment. That was in the Chesapeake Bay Commission's testimony that you received because we as a commission do believe in technical assistance.

The CHAIRMAN. Right.

Mr. BRUBAKER. And I share Secretary Krancer and President Shaffer's comments about what Pennsylvania farmers have done over the last 20, 30, 40 years. I share pride with each of these gentlemen in what Pennsylvania farmers have indeed accomplished. Specifically on technical assistance also, the Chesapeake Bay Commission believes a significant part of technical assistance can go to the existing, unquestioned regulatory compliance. As has been testified by a number of people here prior, our farmers, our businesses in the Commonwealth of Pennsylvania and the entire Chesapeake Bay watershed want to comply. And our entire business community and farm community is not in total compliance with every piece of existing unquestioned regulatory state and/or Federal regulatory issue. So at the Commission, we are attempting to not get down in the weeds on TMDL *versus* tributary strategy, but we certainly support aggressive technical assistance working in partnership.

And another thing we have in Pennsylvania that makes a significant difference as a very, very cost-effective partner is the Conservation Districts. So we don't have the money inside of our state budget. We do not have a reserve to pay that bill, so therefore, we believe in partnerships, technical assistance, and innovation.

The CHAIRMAN. And you are talking about cost-effective approaches, but if the Commonwealth of Pennsylvania is faced with a \$10 billion bill and that mandate materializes, that is what occurs, what would have to happen in Pennsylvania to be able to pay that bill, to fund those mandated initiatives?

Mr. BRUBAKER. The General Assembly a few years ago put on a referendum, a ballot, an H2O Initiative, ask our taxpayers if they wanted us to do some bonding to secure some additional dollars to put into our local communities like the local community that has been testifying here. So when a local community gets a mandate the sewer water plant needs to be upgraded, many times the only way that they have to pay for that is to distribute that among their users. They are not able to do that. So we put it on a referendum and it passed overwhelmingly that our taxpayers at that time, a few years ago, wanted to have a few hundred million dollars to send to our local communities to help them with some of these regulatory mandates that they were facing.

The CHAIRMAN. And I always appreciate that kind of giving the citizens that voice and that choice. Unfortunately, EPA TMDLs are not giving anyone a choice. I don't think that would be an option because if a mandate comes, it is going to have to be paid.

Mr. Shaffer, there are a lot of—and I don't want to get too deep into the lawsuit—but a lot of press releases from other associations and environmental groups saying that the Farm Bureau filed a suit against EPA to stop water quality improvements, and it was all about giving farmers a free pass. Just wanted to get your response to that accusation.

Mr. SHAFFER. That definitely raises the hair on the back of my neck when I hear that because it is the furthest thing from the truth. I think once again the farmers in Pennsylvania, probably throughout the watershed, have proved this isn't the case by all the things they voluntarily already have done, spent millions of dollars on new technology, adapted it, put it on the farms without EPA's

foot on their head to make them do it. They have done it voluntarily.

I think what you have heard today goes back to what the lawsuit is really about. When I say they violated the Clean Water Act, the Clean Water Act provides that the states should take care of the waters in their state, and they are the best ones to do that. When there is a goal of conservation, an environmental problem to fix, we work with our state agencies to devise the best way to go about fixing that because every state, the type of agriculture is different, the topography is different. So one-size-fits-all solution is definitely not the answer. I can say that is one of the reasons for the lawsuit is to make sure that we continue doing the work we have done within the state and devise a solution to any problem that arises.

The CHAIRMAN. Well, I want to thank the panel for coming, for testifying, for bringing your experience from many varied perspectives on these very important issues.

Before we adjourn, I want to invite the Ranking Member to make any closing remarks he has.

Mr. HOLDEN. I want to thank our witnesses for being here today, and thank you for having the hearing, Mr. Chairman.

The CHAIRMAN. All right. I thank the Ranking Member. I thank all Members for participating.

You know, we know there is a problem. You know, this is a long-standing problem. The quality of the water in the Chesapeake Bay, this is an initiative that is not new. It has been going on for 30 years, and we have made great progress and from all aspects. But I certainly have questions. I still have questions even coming out of this second hearing. I have questions about a model that is flawed at the local level. You know, I take the EPA's opinion that certainly at a river basin level it works, but frankly, we institute these costly mandates on local communities, on local farmers, you have to get a good diagnosis before you decide which part of the body to operate on. And they haven't done that yet. I think that they are showing some will to look at it, but they are still moving ahead with these timelines. That is my other concern. They are rushing a timeline and a fixed schedule here.

And finally, it is a matter of jurisdiction. Whether it is regulation or not regulation, I happen to think they are regulations. It looks like, smells like, tastes like regulations, I think it is—from the EPA *versus* a state responsibility. I mean we have in the short time I have been in Congress—this is just about the end of my third year—I see a lot of blurring of the lines of who is responsible for what. And this is maybe one of the most glaring missteps. The states took it upon themselves to come together and work together, to pool their resources with this commission.

And so those are just some of the questions I certainly have. But I want to thank everybody for coming today. I know we are going to continue to provide oversight on this, and I suspect we will have a future hearing or two as well, especially after the EPA provides us those—it looks like next spring they promised a cost-benefit analysis, and it would be a good opportunity to be able to walk through that within a week or so after that is published and we receive it.

And so under the rules of the Committee, the record for today's hearing will remain open for 10 calendar days to receive additional material and supplementary written responses from witnesses to any questions posed by a Member.

This hearing of the Subcommittee on Conservation, Energy, and Forestry is adjourned.

[Whereupon, at 11:54 a.m., the Subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

LETTER SUBMITTED BY HON. GLENN THOMPSON, A REPRESENTATIVE IN CONGRESS
FROM PENNSYLVANIA

September 28, 2011

Hon. SHAWN M. GARVIN,
Regional Administrator,
U.S. Environmental Protection Agency,
Philadelphia, PA

Dear Mr. Garvin:

The purpose of this letter is to follow-up on our discussions concerning the reduced accuracy of the Phase 5.3.2 Watershed Model. Virginia's concerns echo those you received last July from the Commonwealth of Pennsylvania.

Virginia remains committed to do our share of the watershed wide effort to restore the Chesapeake Bay. We will continue to implement practices that reduce nutrient and sediment pollution as outlined in the Virginia Watershed Implementation Plan and will dedicated millions of dollars to the effort this year. Unfortunately, as explained below, we have discovered that the model contains inexplicable inaccuracies that must be corrected. The current watershed model is undermining the credibility of our collective efforts. Virginia proposes several adjustments to the current process so the clean-up efforts can stay on track and continue moving forward.

Virginia has significant concerns with several aspects of the Phase 5.3.2 Watershed Model. As explained in our presentation to you on September 16th (see attached), the most notable problem exists with the lack of adequate nutrient reduction credit applied to nutrient management plans. This is a problem not only in Virginia but covers numerous counties across the entire Bay watershed as illustrated on slide 4 in the presentation. This serious shortcoming alone renders one of our most effective and commonly used BMPs useless in meeting nutrient reduction goals.

We have found that the model, as currently constructed, is not appropriate for use in assigning loads in permits, developing local load targets, or measuring reduction progress. It is especially not appropriate for imposing any consequences. Attempting to use the model in these ways negatively impacts our planning for the Phase II WIP, along with the credibility of the EPA, and of most concern, exposes Virginia to potential litigation. We ask for your help to resolve these matters through what we believe are reasonable steps.

We are aware that modeling of a watershed as large and complex as the Chesapeake Bay is a monumental task. The current model may be an adequate tool for predicting overall pollution loadings on a watershed basis. However, as we demonstrated in our discussion and presentation on September 16th, and the Maryland presentation sent by Jim Edwards on September 12, when used on a local government level outrageous anomalies occur in the model that are inconsistent with current scientific knowledge.

As a consequence of these discussions, we have developed the attached "Path Forward" document that outlines needed changes and adjusts the schedule. A commitment from EPA to correct these concerns is needed as a precursor to continued Phase II WIP planning efforts.

It is clear that the model, as currently constructed, is not capable of producing meaningful, realistic loading targets for use at the local level and that our time is better spent working with local governments on implementation of the suite of practices described in our Phase I WIP or equivalent measures. Our modified approach to meet our commitments for Phase II and the 2012-2013 Milestones is also described in the attached "Path Forward" document.

Virginia is ready to move forward with the Phase II planning process and development of milestones. However, recognition from EPA of the current problems and limitations of the model, along with a commitment to work together to address them will be key to our success.

I look forward to further discussions on our proposed path forward.

Sincerely,



DOUG DOMENECH.

CC:

JEFF CORBIN, *Senior Advisor to the Administrator for Chesapeake Bay and Anacostia River;*

JIM EDWARDS, *Deputy Director*, Chesapeake Bay Program.

ATTACHMENT 1

Path Forward

Proposed Approach for Phase II WIP Development

9/21/11

Three-Track Approach to Implement Phase I WIPs and develop Phase II WIPs

Overview:

- The Chesapeake Bay jurisdictions have expressed serious concerns about using 5.3.2 watershed model output for localities nutrient and sediment reduction targets under the framework of the Chesapeake Bay TMDL and the approved Phase I Watershed Implementation Plans (WIP).
- While useful as a planning and evaluation tool at the watershed scale, the model was not constructed for use at the local scale and its output raises serious questions and concerns among state agencies and our local partners.
- Anomalies present in the output are difficult to explain and in many ways do not represent the “real world” of local watershed management and water quality planning and implementation.
- In order to ensure that these identified issues do not divert attention from the more important task of implementation of the Phase I WIPs and meeting associated TMDL targets, the following approach is proposed that would result in model revisions and ongoing implementation using Phase I WIP practices as the basis for the Phase II WIPs.

The following tracks are proposed to take place simultaneously:

Track 1

EPA continues to work on correcting identified model issues so that it can be used with greater confidence in setting local (sub-segment shed) target loads for N, P and S. The following steps are recommended:

- Holistic review of the following issues:
 - How to model Agricultural Nutrient Management (efficiency or Land Use Change)
 - Calculation of nutrient rates on acres not under nutrient management
 - Load reductions associated with application of nutrient management plans
 - Changes in manure routing preferences through time
 - Amount and nutrient content of poultry manure
 - Biosolids application (include all states or exclude all states)
 - Regional factors due to Phase 5.3.2. Watershed Model calibration
 - Submitted *versus* credited BMPs
 - BMP stacking (Urban and Continuous No-till)
- Modify Scenario Builder code
- Test Model to determine if modifications produce expected results
- Re-calibrate watershed model
- Run scenarios
- Review outputs to evaluate other concerns and check for unintended consequences
- Upon agreement by EPA and the jurisdictions, use refined model to establish loading targets at the local level.

Track 2

States develop Phase II WIPs based upon the existing practices identified in the Phase I WIP/TMDL input deck and submit these interim plans to EPA by June 1, 2012. These plans will focus on achieving the 2017 goals.

- Continue current local engagement efforts to collect improved land use, BMP implementation and local implementation strategies as the Phase II WIP is developed. Local engagement efforts will shift focus from meeting local target loads to maintaining implementation levels consistent with the Phase I WIPs.
- The Phase II WIP would provide a mix of BMPs at the segment-shed level.

- States refine the interim BMP targets once the model is deemed sufficient to assign target loads and corresponding levels of BMP implementation needed at the local level as part of the next milestone cycle or the Phase III WIP development.

Track 3

States develop 2012–2013 Milestone implementation actions and strategies and submit these plans to EPA in accordance with the current schedule.



**Chesapeake Bay TMDL
Watershed Implementation Plan – Phase II**

Stakeholder Advisory Group

August 16, 2011

1

Phase II SAG Agenda
August 16, 2011

- **Welcome and Introductions**
Anthony Moore, Assistant Secretary for Chesapeake Bay Restoration
- **Progress Updates**
 - **Nutrient Credit Exchange** - Russ Baxter, DEQ
 - **James River Study** - Alan Pollock, DEQ
 - **Slowly Available Nitrogen Study** - Andres Alvarez, VDACS
 - **Resource Management Plans** - Christine Watlington, DCR
 - **Phase II Development Process** - Joan Salvati, DCR
 - **VAST (Virginia Assessment Scenario Tool)** - Joan Salvati, DCR
- **Overview of 5.3.2 model** - David Johnson, DCR
 - **Virginia's concerns** - David Johnson, DCR
 - **Discussion of Virginia's Path Forward** - Frank Dukes, IEN
- **Preliminary overview and discussion of 2012-2013 milestone strategies** - James Davis-Martin - DCR

2

Nutrient Credit Exchange Study – Update

Russ Baxter
Virginia Department of Environmental Quality

3

Nutrient Credit Exchange Study – Update Watershed Implementation Plan

- Calls for Study of Nutrient Credit Exchange with schedule sanctioned by the General Assembly and the Governor (Section 1.7)
- Identifies Key Issues:
 - Availability of Credits:
 - “Drivers”: Onsite Septic, Urban, Ms4
 - Baselines: At what point are credits generated?
 - Certification, enforcement and accounting
 - Permitting: Including trading and offsets in permits
 - Use of public or private nutrient “banks” or funds

2011 SESSION

INTRODUCED

SENATE JOINT RESOLUTION NO. 334
Effective January 11, 2011
 Passed January 11, 2011

Senate Joint Resolution 334 (2011)

Requesting the Secretary of Natural Resources to study the expansion of the Chesapeake Bay Watershed Nutrient Credit Exchange Program. Report.

Patron—Wynne

Referred to Committee on Rules

11101390

WHEREAS, the General Assembly established the Chesapeake Bay Watershed Nutrient Credit Exchange Program (S 21-148.19.12 et seq.) in 2005 in order to (i) meet pollution reduction and organic agriculture cost-effectively; (ii) accommodate continued growth and economic development in the Chesapeake Bay watershed; and (iii) provide a foundation for establishing market-based incentives to help achieve the nutrient source reduction goals; and

WHEREAS, an investment of over \$1.5 billion in implementing this program over the next five years has enabled the Commonwealth to achieve significant reductions in nutrient loads discharged to the Chesapeake Bay from Virginia's municipal and industrial wastewater treatment facilities; and

WHEREAS, the General Assembly expanded the program in 2009 to allow for nutrient source reduction efforts to be secured for new land development projects; and

WHEREAS, with the advent of the Chesapeake Bay Total Maximum Daily Load (TMDL) mandated under the Federal Clean Water Act, Virginia's Watershed Implementation Plan recognizes that a further expansion of the Nutrient Credit Exchange Program could assist in the implementation of programs and practices necessary to meet the nutrient reductions required by the TMDL; and

WHEREAS, such a program that could allow trading and offset of nutrients among municipal, county, septic, wastewater, agriculture and forestry activities would allow the improved decisions regarding the implementation of needed nutrient reduction practices in a timely and cost-effective manner;

WHEREAS, this free market-based approach and the expansion of credit markets could bring additional resources from the private sector to nutrient reduction efforts and the Commonwealth has approved such a program as its Watershed Implementation Plan; and

WHEREAS, a broad-based study with representatives from public and private source sectors and state and local government would allow for the development of a comprehensive program that would meet the needs of the Commonwealth and the relevant nutrient source sectors; now, therefore, be it

RESOLVED by the Senate, the House of Delegates, concurring, That the Secretary of Natural Resources be requested to study the expansion of the Chesapeake Bay Watershed Nutrient Credit Exchange Program.

In conducting its study, the Secretary of Natural Resources shall convene a stakeholder committee to study and develop recommendations relating to the creation of a comprehensive Chesapeake Bay Watershed Nutrient Exchange Program that operates effectively to include both rural and urban source pollutants. The stakeholder committee shall include representatives from the nutrient source sectors in the Chesapeake Bay TMDL, private sector interests with expertise and expertise in market-based approaches and nutrient credits and trading, state agency personnel, local government, conservation and environmental organizations, and any other persons deemed by the Secretary to have relevant knowledge, perspective, or experience. The Secretary may request the participation of the U.S. Environmental Protection Agency or other Federal agencies with expertise and expertise.

Technical assistance shall be provided to the Secretary of Natural Resources by the Department of Conservation and Recreation and the Department of Environmental Quality. All expenses of the Commonwealth shall provide assistance to the Secretary of Natural Resources for this study, upon request.

The Secretary of Natural Resources shall complete his meetings by November 30, 2011, and shall submit to the Governor and the General Assembly an executive summary and a report of his findings and recommendations for publication as a House or Senate document. The executive summary and report shall be submitted to provided to the president of the Division of Legislative Automated Systems for the processing of legislative documents and reports no later than the first day of the 2012 Regular Session of the General Assembly and shall be posted on the General Assembly's website.

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Nutrient Credit Exchange Study – Update
SJR 334 – Schedule Requirements

- “The Secretary of Natural Resources shall complete his meetings by November 30, 2011”
- “The executive summary and report shall be submitted as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents and reports no later than the first day of the 2012 Regular Session of the General Assembly”

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Nutrient Credit Exchange Study – Update Study Workplan

- April 13
Introductions and overview of current program, WIP elements and TMDL.
 - June 16
Overview of Chesapeake Bay watershed programs. Review of key issues raised by committee members and presentation of policy questions
 - August 25
Overview of Wetlands Banking – Does it serve as a model for Nutrient Bank?
Distribution and Discussion of draft “Strawman” Report Outline
 - October 12
Review of draft report and release for public comment
- Between Meeting Four and Five: PUBLIC COMMENT SOLICITED ON DRAFT REPORT
- November 16
Meeting Five: Review of Public Comment and final review of draft report by Committee

7

Nutrient Credit Exchange Study – Update Key Issues

- Document distributed to members for review and comment – currently reviewing and analyzing responses.
- Based on WIP, TMDL and issues raised by committee members including baselines, program structure, certification and banking, “drivers” and a host of other issues.

8

Nutrient Credit Exchange Study – Update Study Website

www.deq.virginia.gov/vpdes/NutCrdExStudy.html

Contact:

russ.baxter@deq.virginia.gov

804-698-4382

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James River Chlorophyll Study

In Response To
Chesapeake Bay TMDL



10

James River Basin

Two Track Approach

Phased Implementation

- VA Phase I WIP outlines nutrient reduction actions to achieve TMDL Implementation 60% reduction target by 2017
- Additional reductions scheduled after 2017 Phase III WIP

Scientific Study with Standards Adjustment

- Conduct 3-4 year additional scientific study to provide a more precise and defensible basis for setting chlorophyll standard
- Revise standard/TMDL by 2017, as appropriate

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James River Chlorophyll Study

Status: Implementation

- Proposed revisions to Watershed General Permit for wastewater discharges conforms to Bay TMDL
- Comment period ended July 22; presentation to State Water Control Board this fall
- Revised Permit due to be effective January 1, 2012

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James River Chlorophyll Study

Status: Scientific Review

- Additional scientific study to provide a more precise and defensible basis for setting final nutrient allocations
- DEQ contracted with VCU to assist in managing study and Science Advisory Panel
- Panel's first meeting – August 22
- Initiating Rulemaking process – to help ensure schedule is achieved; NOIRA under Executive Review; plan to set up Regulatory Advisory Panel

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Slowly Available Nitrogen Study

Andres Alvarez

Virginia Department Agriculture and Consumer Services

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Resource Management Plans

Christine Watlington
Virginia Department of Conservation and Recreation

15



Phase II Development Process and VAST

Joan Salvati
Virginia Department of Conservation and Recreation

16

Phase II WIP and Milestones Project Schedule - Revised

- Draft Local Goals to Localities - 06/01/2011
- EPA Delivers Phase 5.3.2 Model - 07/1/2011-08/01/11
- Final Local Goals to Localities - 08/01/2011- TBD
- Deploy VAST with user training - 08/01/2011- 09/15/2011
- Initial Local Conservation Information - 10/01/2011
- Preliminary 2012-2013 Milestones to EPA - 11/01/2011
- Draft Phase II WIP to EPA - 12/01/2011- 12/15/2011
- Final 2012-2013 Milestones to EPA - 01/03/2012
- Final Local Conservation Strategies - 02/01/2012
- Final Phase II WIP to EPA - 03/30/2012

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Virginia's Phase II Approach Community Conservation Information

- Review of Baseline Data
 - Reduction goal, loads and model outputs for localities
 - Locally available data (land use, BMPs on the ground, etc.)
- Inventory/Assessment
 - Local land use cover conditions
 - Inventory existing BMP's
 - Incorporate local land use and BMP data into assessment tool
- Existing Program Evaluation
 - Review existing mechanisms to implement BMP's
- Conservation Strategies
 - Use assessment tool to identify cost effective BMP scenarios
 - Identify strategies to implement BMP scenarios
- Identify additional resources and programs required to achieve implementation goals
 - Estimate costs of local implementation

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Virginia's Phase II Local Engagement Status

- Secretary's office presentations to Planning District Commissions – completed in May
- Follow up meetings with PDCs exploring their interest in participating – completed mid-June
- Delivery of Chesapeake Bay Model information to PDCs – completed model delivery to 14 of 16 PDCs June 30
- Most PDCs are serving as facilitators of meetings and activities of localities as they discuss and develop the Community Conservation Information

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Virginia's Phase II Local Engagement Status (cont.)

- Localities and PDCs actively working on inventorying BMP and local land use information
- Many localities are beginning to work on strategy development
- Resource needs identified:
 - DCR/DEQ technical assistance
 - EPA technical assistance – Circuit Rider; Tetra Tech
 - Grants
- Localities and PDCs are actively engaging with local partners
- Meeting calendar on DCR website

Virginia's Phase II Local Engagement Calendar of Events

- August 23rd - Central Shenandoah WIP II Workshop
 - Blue Ridge Community College, Weyers Cave, VA
- August 25th - Scenario Builder (EPA)
 - Augusta Government Center, Verona, VA
- August 29th - Eastern Shore WIP II Workshop
 - Eastern Shore Community College, Melfa, VA
- August 31st - Middle Peninsula/Northern Neck WIP II Workshop
 - Virginia Institute of Marine Science, Gloucester Point, VA
- Early September TBD - Northern Shenandoah WIP II Workshop
- Early September TBD - Region 2000 WIP II Workshop
- Early September TBD - Crater WIP II Workshop

Overview of Phase 5.3.2. Watershed Model

David Johnson
Virginia Department of Conservation and Recreation

Overview of Phase 5.3.2. Watershed Model Disproportionate Impact of Revised Targets

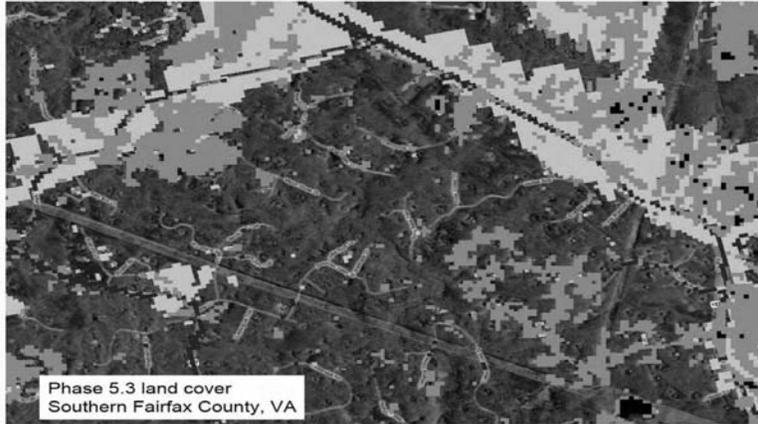
(Millions of Pounds)

	N December 2010	N August 2011	Difference	P December 2010	P August 2011	Difference
PA	73.93	78.83	4.9	2.94	3.6	0.66
MD	39.09	41.17	2.08	2.72	2.81	0.09
VA	53.42	52.46	-0.96	5.36	6.46	1.1
WV	5.45	5	-0.45	0.59	0.64	0.05
NY	8.77	8.35	-0.42	0.57	0.64	0.07
DE	2.95	3.39	0.44	0.26	0.28	0.02
DC	2.32	2.37	0.05	0.12	0.12	---
	185.93	191.57		12.54	14.55	

Overview of Phase 5.3.2. Watershed Model EPA Model Changes Proposed from 5.3.0

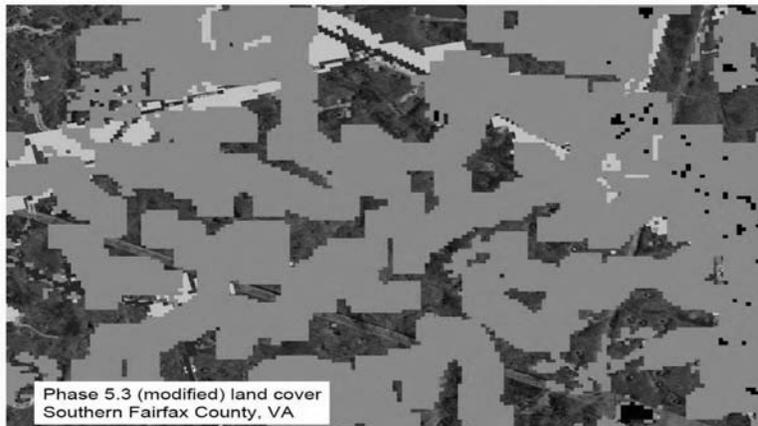
- Updated land use with more complete urban coverage
- Modified nutrient management
 - Increased non-NM application rates
 - Stop automatic transfer of manure
 - Dispose of excess manure in a sequence determined by the states

Overview of Phase 5.3.2. Watershed Model Urban Land Use – 5.3.0.



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Overview of Phase 5.3.2. Watershed Model Updated Urban Land Use – 5.3.2.



26

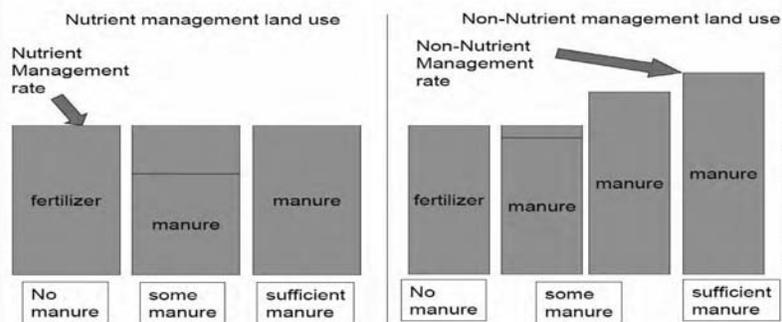
Overview of Phase 5.3.2. Watershed Model Impact from Updated Urban Land Use – 5.3.2.

- 61% Increase in urban impervious acres statewide
 - 94% Increase in delivered nitrogen loads from impervious lands
 - 29% Increase in delivered phosphorus loads from impervious lands
 - 81% Increase in delivered sediment loads from impervious lands
- 40% Increase in urban pervious acres statewide
 - 37% Increase in delivered nitrogen loads from pervious lands
 - 8% Decrease in delivered phosphorus loads from pervious lands
 - 57% Increase in delivered sediment loads from pervious lands
- 8.5% Reduction in septic systems and associated loads
- Comparing between models versions may be misleading due to calibration process

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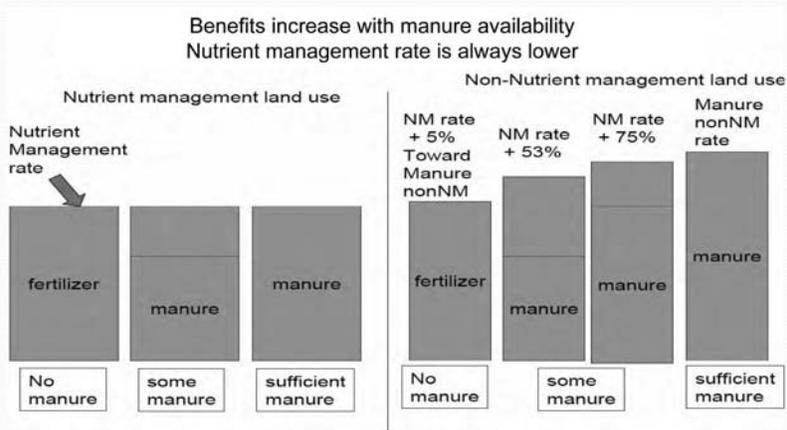
Overview of Phase 5.3.2. Watershed Model Nutrient Management – 5.3.0.

No benefit except where there is excess manure
(Accomack, Page, Rockingham)



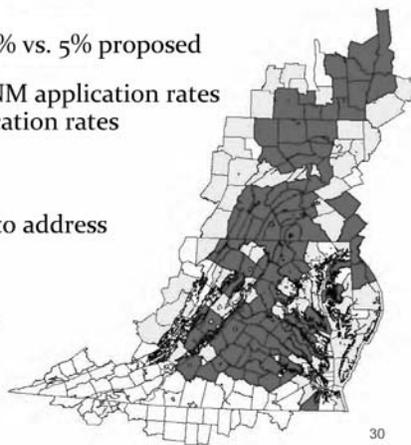
28

Overview of Phase 5.3.2. Watershed Model Nutrient Management – 5.3.2. Proposed



Overview of Phase 5.3.2. Watershed Model Nutrient Management – 5.3.2. Actual

- Fertilizer only differential of 1.3% vs. 5% proposed
- 42 Counties in Virginia where NM application rates are greater than non-NM application rates
- Bay watershed wide problem
- Discussions with EPA ongoing to address NM issues
 - BMP based patch
 - Holistic review of how nutrient management is modeled
 - Model revision to fix it





**Overview of Phase 5.3.2. Watershed Model
Virginia's Path Forward**

SAG Discussion and Recommendations

Frank Dukes
Institute for Environmental Negotiation
University of Virginia

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Overview of 2012 – 2013 Milestone Strategies

James Davis-Martin
Virginia Department of Conservation and Recreation

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2012 – 2013 Milestone Development

- Evaluate Phase I WIP actions
- Evaluate 2011 milestone actions and contingencies
- Identify new State programs (Fertilizer control, Enhanced Nutrient Credit Exchange Program, RMP, etc.)
- Develop 2012-2013 Actions
- SAG review of preliminary milestones
- Gubernatorial review of preliminary milestones
- Submit preliminary milestones to EPA (11/01/2011)
- Identify resource requirements to achieve implementation goals
- Submit final milestones to EPA (1/03/2012)

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2012 – 2013 Milestone Concepts Sample Milestones Currently Under Consideration



DCR - Implement voluntary BMP conservation practice collection statewide by the end of 2013



DCR - Renew the enhanced funding for livestock exclusion

DEQ - Issue and begin implementation of new Watershed General Permit that incorporates TMDL Wastewater requirements



DEQ - Report on progress on implementing Industrial Stormwater monitoring requirements



VDH - Report the number of AOSS meeting the current BMP for 50% TN reduction installed (voluntarily) each year.

DOF - Initiate 4 BMP training sessions for forest harvesting contractors on BMPs during the milestone period

DOF - Create a workgroup to develop an "action plan" with the objective of developing strategies for incorporation into the Phase II WIP that offset the impacts of forestland conversion to more intensive land uses



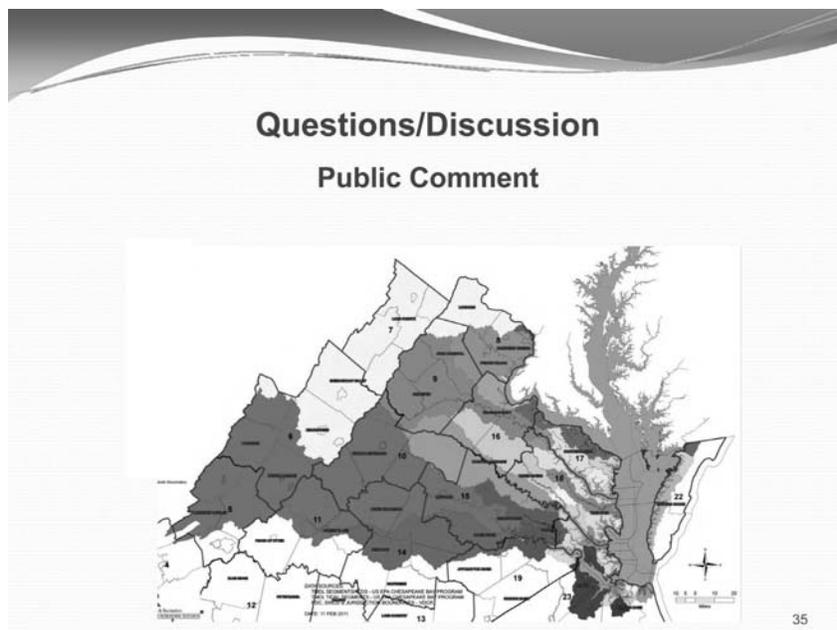
VDACS - Contractor-applicator training and certification regulation



VDACS - Amendments to the Virginia Fertilizer Law

VDOT - Provide training on the Best Management Practices (BMPs) for use on construction and maintenance activities

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SUPPLEMENTARY MATERIAL SUBMITTED BY EPA

During the November 3 hearing entitled, *Hearing To Review the Chesapeake Bay TMDL, Agricultural Conservation Practices, and Their Implications on National Watersheds* *Hearing To Review the Implementation of Phase II of the Chesapeake Bay TMDL Watershed Implementation Plans and Their Impacts on Rural Communities*, requests for information were made to EPA. The following are their information submissions for the record.

Insert 1

Mr. OWENS. And finally, when you do your cost-benefit analysis, are you taking into account the increase in cost to the consumer for production of food in the ag community that arises out of increased regulation?

Mr. GARVIN. I will have to get back to you on that, Congressman. I am not sure all the factors that are going into the analysis, but we can make that available to you and to the chair and the Subcommittee.

Mr. OWENS. If it is not included, would the EPA consider including that as a factor?

Mr. GARVIN. Well, I will go back and have a conversation and figure out what is being included and what is not and we will get back to you.

EPA's TMDL cost study, is intended to assess the costs of pollution controls and associated administrative actions identified in the Chesapeake Bay jurisdictions' Watershed Implementation Plans (WIPs), with many of these actions being the same conservation practices that Bay region farmers have implemented over the years, often with financial assistance from state and Federal programs. Moreover, the TMDL includes provisions for innovative approaches, including nutrient credit offsets and trading, that provide economic opportunities for agricultural interests that adopt practices to reduce nutrient discharges to the Chesapeake Bay and its tributaries.

There are a number of challenging complications to assessing any changes in the cost to the consumer that could be directly attributed to specific actions in the Bay including the interstate distribution of food, the percentage of food prices that can be attributed to changes in production practices, the broader impacts of the major influences on supply, demand, and price for food products in domestic and international markets among a wide range of additional factors.

Separate from EPA's cost analysis; we understand there are other organizations examining the impacts of the Chesapeake Bay TMDL on food prices to consumers. EPA will stay abreast of their findings.

Insert 2

Mr. GIBBS.—especially making a determination of non-point is a lot more challenging as you know. And my experience in the past, you have in different streams different flow rates, weather conditions, rainfall that can impact it. And I know in my area in the past years we had an issue with the EPA at one time. They were doing what I call drive-by evaluations, windshield drive-bys and weren't getting the right data. And so I guess being an outsider of the Chesapeake, that is when I would question and make sure that the monitoring process to develop the model makes sense.

And the second part of that, in my one watershed we had been involved for about 10 years of a nutrient trading program—

Mr. GARVIN. Yes.

Mr. GIBBS.—and how that has been so successful, they have lowered the load into that watershed working with a cheese manufacturer and working with those local farmers around there, and it has been real successful and kept the jobs and the economic growth. Are there any type programs like that going on in this watershed?

Mr. GARVIN. Yes, Congressman. The TMDL actually had a section, an appendix that dealt with a placeholder for trading. A number of the states came in with their state strategies that relied—in varying degrees on trading. What we have been doing with the states currently is we have been meeting with them, discussing what trading programs they do or they don't have, getting a better sense of what they are. One of the issues is making sure that when we are doing trading we are not double counting, when we are doing trading that there is a common exchange rate so that we are talking apples and apples when we are looking at numbers. And so we have been working close with the states on that, and I am hoping in the next couple of weeks—and we will share this with the Subcommittee—that we will be providing some feedback to the states on that review.

EPA is working with each of the Bay jurisdictions on the development and implementation of effective trading and offset programs that meet the basic requirements described in Section 10 and Appendix S of the Bay TMDL. As a first step, EPA has undertaken a review of existing offset and trading programs. Program reviews included assessments of basic principles such as: trading “baselines” (*i.e.*, what pollutant reductions are eligible to generate credits for offsets and trading); “quantification” methods (*i.e.*, how much credit is generated by implementation of specific best management practices); and “certification/verification” requirements (*i.e.*, how the implementation and proper maintenance of best management practices are monitored to ensure that reductions being sold as offsets or credits are actually being achieved).

As part of the review process, EPA and the jurisdictions have had a series of constructive meetings and calls at the end of 2011 and at the start of 2012. EPA intends to finalize trading program assessment reports for each jurisdiction by the end of March 2012. The observations in the assessment reports will inform the ongoing development of each jurisdiction's offset and trading program, a key component of the Phase II Watershed Implementation Plans.

SUBMITTED QUESTIONS

Letter and Response from U.S. Environmental Protection Agency

October 28, 2011

Hon. GLENN THOMPSON,
Chairman,
Subcommittee on Conservation, Energy, and Forestry,
House Committee on Agriculture,
Washington, D.C.

Dear Chairman Thompson:

Enclosed are responses to questions for the record following the November 3, 2011 Subcommittee hearing to review the Implementation of Phase II of the Chesapeake Bay Total Maximum Daily Load (TMDL) Watershed Implementation Plans and their impacts on rural communities.

If you have any further questions, please contact me, or your staff may contact Greg Spraul in my office at [Redacted].

Sincerely,



LAURA VAUGHT,
Deputy Associate Administrator for Congressional Affairs.

Questions Submitted By Hon. Glenn Thompson, a Representative in Congress from Pennsylvania

Question 1. When will the Cost-Benefit Analysis for the Chesapeake Bay TMDL be completed? Will EPA make any changes to the TMDL based on the results of the analysis?

Answer. The EPA's Chesapeake Bay Program Office and National Center for Environmental Economics are scheduled to complete their initial analyses of costs and benefits by the end of 2012. More complete and final analysis is expected to be completed by the summer of 2013. The analysis will incorporate the final Phase II Watershed Implementation Plans (WIPs). The Chesapeake Bay TMDL establishes the amount of nutrients and sediment the Chesapeake Bay can receive and still meet state-established water quality standards. The cost-benefit analysis being conducted by the EPA will not change the TMDL's science-based assessment of the Bay's pollution capacity. However, when complete, the analysis will provide insights as to the costs and benefits of implementing practices to achieve the TMDL pollution allocations and will help inform continued implementation of the Bay TMDL by the EPA, states, and other partners.

Question 2. Can you explain why EPA does not consider the Chesapeake Bay TMDL a regulation? What criteria do you use to evaluate what the agency considers a regulation?

Answer. The Chesapeake Bay TMDL is not a regulation. TMDLs, including the Bay TMDLs, are not self-implementing or enforceable and do not by themselves require or prohibit any actions. A TMDL sets a pollutant reduction target or goal to be implemented through various other regulatory and non-regulatory programs as appropriate, including the National Pollutant Discharge Elimination System (NPDES) permit program.¹

Section 303(d) of the Clean Water Act (CWA) requires states and the District of Columbia to "establish" lists of impaired waters that fail to meet state-established water quality standards and to "establish" TMDLs for those listed water bodies "at a level necessary to implement the applicable water quality standards." In Section 303(d), Congress did not call TMDLs "rules" or "regulations" or say that the states or the EPA must "promulgate" TMDLs through rulemaking (as Congress explicitly did for water quality standards in Section 303(c)(4) of the CWA).

The EPA has adopted implementing regulations for Section 303(d) of the CWA that further describe the characteristics of, and the process to, establish a TMDL. See generally 40 CFR Part 130; 40 CFR 130.2 (definition of a TMDL); 40 CFR 130.7 (process to establish TMDLs). Those implementing regulations also do not specify that TMDLs are to be established by either states or the EPA through rulemaking. Even though the Bay TMDL is not a "rule," the EPA did provide opportunity for public input into its establishment.

Questions Submitted By Hon. Tim Holden, a Representative in Congress from Pennsylvania

Question 1. EPA keeps saying that the Chesapeake Bay TMDL has been a collaborative process, but the states are telling us that EPA has been very heavy-handed and top-down. These cartoons (*Mr. Whiskers and Ball & Chain*) were part of a presentations on the Chesapeake Bay TMDL that were given by Jeff Corbin in 2010, when he was your Chesapeake Bay advisor. Do you think that reflects an accurate representation of your relationship with the states?

Answer. No, the cartoons do not represent the EPA's relationship with the states and they were not used to reflect that relationship. The EPA believes the states will produce effective Phase II WIPs to meet their TMDL targets to improve local waters and the Chesapeake Bay.

¹ *Sierra Club v. Meiburg*, 296 F.3d 1021, 1025 (11th Cir. 2002).

Question 2. It is my understanding that West Virginia was the only Bay state to be considered deficient for the Phase I WIPs. What backstop measures did EPA implement in this state given this deficiency status?

Answer. West Virginia was not the only state to have backstop measures in the final TMDL.

The EPA established backstop allocations that assumed further limitations in pollution from significant wastewater treatment plants in New York because New York's Phase I WIP did not demonstrate sufficient pollutant reductions. The EPA established backstop adjustments to stormwater loads in Pennsylvania and agricultural loads in West Virginia because the Phase I WIPs did not demonstrate sufficient reasonable assurance that load reductions in these states and sectors would be achieved and maintained.

Finally, the EPA identified the following states and sectors as requiring enhanced oversight:

- Pennsylvania agriculture and wastewater;
- Virginia stormwater; and
- West Virginia stormwater and wastewater.

For West Virginia, the EPA applied a backstop adjustment to agriculture allocations because the Final Phase I WIP lacked:

- Detailed strategies for how the state was going to ramp up voluntary, incentive-based conservation to levels necessary to meet TMDL allocations.
- Strong contingency plans such as new policies, programs, or mandates in the event that voluntary approaches are not sufficient to meet reduction goals.

The EPA is in the process of reviewing West Virginia's demonstration of near-term progress implementing the agricultural section of its WIP, including Concentrated Animal Feeding Operation (CAFO) Program authorization and permit applications and issuance. Based on review of West Virginia's Phase II WIP submittal, the EPA will assess whether this backstop adjustment for agriculture can be removed or reduced.

Question 3. What specifically have you been doing to increase your dialogue and better communicate with the agriculture community?

Answer. The EPA conducted an extensive outreach campaign throughout the development of the TMDL, including outreach to the agriculture community (see *Attachment 1*). The EPA consulted with the agricultural community through three primary forums: (1) stakeholder meetings on TMDL development during the fall of 2009 through fall of 2010; (2) formal and informal discussions with each jurisdiction's department of agriculture during WIP development; and (3) discussions with agricultural groups on the TMDL and modeling efforts through industry-specific meetings and Chesapeake Bay Program Agriculture Workgroup discussions.

For Phase II WIP development, we have participated in all meetings where states have requested our presence. For example, Pennsylvania recently completed eight county workshops. The EPA, and/or University of Maryland staff employed at the Chesapeake Bay Program, were present at every workshop at the state's request. Also at the request of the states and the Chesapeake Bay Commission, the EPA held five Scenario Builder workshops and nine trainings for the Chesapeake Assessment and Scenario Tool (CAST) between August and October 2011 in order to help the states and stakeholders better understand and use the Chesapeake Bay Program modeling tools. As noted in the next question, the EPA also has been involved in a number of discussions, along with USDA, state officials, and agriculture stakeholders to explore the option of state agricultural certainty programs.

Last summer, EPA Administrator Lisa Jackson, other senior EPA staff, and I spent a day in Lancaster County, Pennsylvania where we toured a dairy farm and participated in a roundtable discussion with members of the agriculture community. We met with local farmers and saw the innovative practices being implemented by the agriculture community benefiting both farm operations and local water quality. These kinds of interactions are very useful and we will continue to rely upon them as a key way of hearing from the agriculture community.

In addition, as discussed below in response to *Question 6*, the EPA and USDA have been collaborating for well over a decade on agriculture issues and are continuing to collaborate on our respective modeling efforts.

Question 4. In your testimony you mention the development of agricultural certainty programs and this is a concept that we have been exploring as an option for producers as well. How do you envision an agriculture certainty program working? What do you see as the Federal role in the development of this type of program?

Answer. The EPA has been involved in a number of discussions, along with USDA, state officials, and agriculture stakeholders to explore the option of state agricultural certainty programs. In December 2010, the EPA and USDA sent a joint letter to the state agriculture secretaries and environment secretaries to confirm interest and communicate agency support for developing state certainty programs (see *Attachment 2*). Most recently on October 6, EPA senior officials joined more than 40 representatives from USDA and the Chesapeake Bay watershed states to discuss key elements and principles of an agriculture certainty program in the Chesapeake Bay region. A follow up meeting with agriculture and environmental groups was held November 7.

We believe that such 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. Although Virginia already has enabling legislation and is promulgating regulations related to such programs, other states are still in the very early stages of possible program development.

Question 5. The 2011 milestones under the Bay TMDL identified funding resources anticipated for the total Bay watershed (\$2.4B) and each jurisdiction (for example, \$1.2B for Virginia, \$774 million for Maryland, \$67 million for PA) to achieve initial nitrogen and phosphorus load reductions. Has actual funding matched what was projected? If not, what shortfalls have occurred? How are any funding shortfalls affecting implementation and development of the Phase II WIPs?

Answer. In their 2009–2011 milestones,² the Chesapeake Bay watershed jurisdictions projected that they would spend a total of \$2.36 billion between 2009 and 2011 to reduce nitrogen and phosphorus. In 2009, the jurisdictions reported that they had committed a total of \$669.6 million.³ In 2010, the jurisdictions reported that they had committed a total of \$761.9 million, a 14 percent increase over 2009. The funding for these 2 years totaled \$1.43 billion, or 61 percent of the total identified in the milestones. The jurisdictions would need to provide an additional \$930 million, representing a 22 percent increase over 2010, to meet the commitments identified in their 2009–2011 milestones. In June 2010, the jurisdictions reported to the Chesapeake Bay Executive Council that they were generally on track to implement pollution control practices necessary to achieve load reduction commitments and thereby meet the commitments identified in the 2009–2011 milestones. In instances in which the jurisdictions were behind, the jurisdictions were implementing contingency actions.

Question 6. Following the release of USDA's CEAP report in March 2011, EPA announced that it would be working with USDA to evaluate the CEAP model results for possible collaboration and incorporation into the Chesapeake Bay Program Model. What information from the CEAP report was incorporated and what was not? Are the two agencies still coordinating on data? If so, how?

Answer. Yes, the EPA and USDA are coordinating on model input data. We are committed to strong partnerships and collaboration with states not only to support the data collaboration effort but to continue to coordinate financial resources to support conservation practices in the Bay watershed. We see opportunities for continued collaboration, as detailed in the June USDA/EPA joint Chesapeake Conservation Data Collaboration workplan (see *Attachment 3*). The EPA and USDA believe that maintaining agriculture's viability is essential to sustaining ecosystems in the Chesapeake Bay basin.

Despite being built for two different efforts, the Chesapeake Bay Program (CBP) Watershed Model and the CEAP cropland model provide consistent results regarding the relative nutrient loads from agricultural lands at the large basin scale and the additional management actions that are needed. Although the CEAP cropland model is not a TMDL model, it provides valuable information that will help enrich the CBP Watershed Model.

NRCS data (and USDA Farm Service Agency data) from 2004–2011 are being incorporated into the CBP Watershed Model via the data-sharing agreement that USDA forged with the U.S. Geological Survey (USGS). USGS is currently aggregating the data to a scale that complies with farm bill confidentiality provisions and working with USDA and the states to ensure protocols are in place for removing any duplicate records. By the end of February 2012, USGS will deliver to the EPA a list of reportable NRCS/FSA practices at the county level.

The CEAP cropland report contained a wealth of valuable information related to conservation practice implementation and effectiveness on cropland; however it is

²http://archive.chesapeakebay.net/pressrelease/EC_2009_allmilestones.pdf.

³See ChesapeakeStat at: http://stat.chesapeakebay.net/?q=node/130&quicktabs__10=0.

not the type of information that can be directly incorporated into the CBP Watershed Model. Rather, the data used to develop the CEAP cropland model and the findings on conservation practice effectiveness across different landscapes can be integrated with existing data. To this end, USDA and the EPA plan to refine and increase the level of data available for understanding conservation practices implemented by farmers in the Chesapeake Bay region—both those with state or Federal cost-share assistance and those funded solely by farmers.

We have agreed to work toward standardizing data sets used in the modeling. We have also agreed to ensure that nutrient and sediment reductions from agricultural conservation practices are accurately credited—both those currently in use and future, new and innovative practices. The joint workplan (see *Attachment 3*) represents a commitment by the EPA and USDA to ensure that the latest science is used to inform these modeling efforts. This workplan was sent to Chairman Thompson in June 2011.

Question 7. In December 2010, the Chesapeake Bay Program's Scientific and Technical Advisory Committee (STAC) told EPA that it "not been responsive to important issues raised in previous reviews" of the model by STAC and that "this is an unacceptable pattern and inconsistent with the U.S. EPA Peer Review Handbook." EPA ignored State partners, their own advisory group, and other stakeholders when they all sent warning signs that the models were based on incomplete and inaccurate information. Why did you ignore the advice of your own peers and others?

Answer. The EPA disagrees that the Chesapeake Bay Program "ignored the advice" of STAC and others in the scientific community. The Chesapeake Bay Program has a long history of seeking and following the assessments and recommendations of specific and general criticisms from the scientific community. The EPA and the Chesapeake Bay Program partners considered STAC's findings and addressed them in the final Bay TMDL and the development of the jurisdictions' Watershed Implementation Plans.

Furthermore, the quotes referenced in this question are out of context. They are from a 2010 STAC report on a Partnership-requested independent review of just one component of the Partnership's Chesapeake Bay Land Change Model (one of the suite of six models and tools used by the Partnership in its shared decision making). The STAC sponsored review was "an urgent, short turn-around peer review of certain critical land use and land cover inputs to the Phase 5 Bay-wide watershed model." The quote, "this is an unacceptable pattern and inconsistent with the U.S. EPA Peer Review Handbook" was specifically in reference to the short review period; it was not directed at the full suite of models nor at the 2 decade history of peer reviews. The quote simply reflects the STAC review panel's frustration at the limited amount of time for their review and a lack of documentation on responses to a previously completed STAC review of the overall Land Change Model. STAC's overall assessment was actually very positive:

"Overall, the reviewers were impressed by the technical quality of the work. They recognized that the Chesapeake Bay Program has confronted challenging conceptual and technical issues and appropriately applied state of the art approaches."

Question 8. In your October 5, 2011 letter to the Bay jurisdictions you said that states no longer need to develop local area allocations in their Phase II WIPs. But in an EPA question and answer document dated October 17, 2011 continues to threaten Federal actions against states:

EPA has full discretion to determine whether Federal actions are appropriate based on the degree to which reduction goals are missed, the reasons why, and additional actions that jurisdictions are taking to ensure that load reductions will remain on track to meet the Partnership's goal of all practices in place by 2025 to meet applicable water quality standards. EPA has already demonstrated this discretionary authority when deciding whether to establish backstop allocations and adjustments in the Chesapeake Bay TMDL.

Why do you keep changing your expectations of the states given the flaws in your model? Even the NAS, in a review of plans to implement the TMDL, has said: "Based on the information provided, the overall accounting of BMPs in the Bay watershed cannot be viewed as accurate."

Answer. The EPA's expectations for the states have not changed. The EPA never intended (for EPA or the jurisdictions) to establish local level TMDL allocations. The purpose of local area pollution reduction targets—which are not smaller scale TMDL allocations—has always been to help conservation districts, local governments, planning commissions, utilities, and others clearly understand their contribution toward

meeting the Chesapeake Bay TMDL larger basin scale allocations. The EPA still expects Bay jurisdictions to work with their local partners to develop local area pollution reduction targets in the Phase II WIPs in accordance with the guidance explained below.

The October 5, 2011, letter put the modeling tools in the appropriate context. The letter was in response to the Bay jurisdictions' stated concerns with assigning local area targets in terms of pounds of pollutant reductions by county, given the questions they had about model results at the county scale. Specifically, the letter provides flexibility for how states choose to explain local contributions to meeting the Bay TMDL allocations and implementing the states' WIPs. The EPA is not requiring that local efforts be expressed as pounds reduced. They may now be explained in terms of implementation levels or planning actions. The EPA has offered to help the states develop and refine their methods.

This letter also does not mean or imply that the model is "flawed." The model is just one tool for assessing and evaluating WIPs and milestones. The EPA remains confident in the model and its ability to inform our decisions to implement the strategies developed by the states, through the TMDL process, to meet water quality standards in the Bay.

Question 8a. Do you think moving the goal posts is an accurate or good way to proceed? Given these facts, what is the basis for your threats?

Answer. We do not agree that the EPA is moving the "goal posts" for Chesapeake Bay restoration. In fact, the goal posts have generally been in the same place for the last fifteen years. The water quality restoration goals for Chesapeake Bay—now embodied in Delaware, the District of Columbia, Maryland, and Virginia's state water quality standards—are still the levels of dissolved oxygen, depth of water clarity, acres of underwater Bay grasses, and amount of algae our scientists established more than a decade ago as needed to support a healthy Bay ecosystem. The major river basin by jurisdiction load reduction targets established in 1997 and refined in 2003, and the level of effort to meet those targets as defined in the states' tributary strategies, have changed very little when compared to the 2010 Bay TMDL and the on-the-ground actions necessary to meet the Phase II WIP planning targets.

Every 2 years, we will assess milestone commitments and annual implementation progress to assess whether states are on pace to have 60% of practices in place by 2017 and 100% of practices in place by 2025. However, the EPA has quarterly calls with the states to track success and work through issues before they fall behind. Using a common sense approach, a determination of Federal actions, if necessary, to close any potential gap, will consider many factors, including the degree to which reduction goals are missed, the reasons why, and any additional actions the jurisdiction is taking to ensure they are on track to meet the 2017 and 2025 deadlines.

Question 9. The Final TMDL requires farmers in Pennsylvania to increase the use of nutrient management from 47% of farms to 85% of farms. In Virginia, nutrient management is supposed to increase from 35% to 86%. In New York, nutrient management is supposed to go from 18% to 62% of farms. But, your baseline numbers in your TMDL are wrong and farmers in Pennsylvania, Virginia, and New York are already achieving high levels of nutrient management.

Similarly, the Final TMDL requires farmers in Pennsylvania to increase the use of conservation tillage from 46% to 95%, from 58% to 90% in Virginia, and from 7% to 40% in New York. Again, your baseline numbers in the TMDL are wrong and according to USDA about 88% of cropland in the watershed is already subject to conservation tillage.

Answer. The Bay TMDL is not self-implementing and does not by itself require or prohibit any actions. A TMDL sets a pollutant reduction target or goal to be implemented through various other regulatory and non-regulatory programs. The TMDL does not create any Federal authority over activities that are not otherwise regulated.

The numbers included in this question come from Appendix V of the Bay TMDL and are based completely on numbers reported by Pennsylvania, Virginia, and New York. Those implementation percentages represent actions that jurisdictions reported through 2009. Actions to meet the TMDL allocations for agriculture are based on the jurisdictions' final Phase I Watershed Implementation Plans (WIPs). The states, not EPA, determine the sector allocations and strategies. While the USDA CEAP cropland report estimates a higher rate of conservation tillage than has been reported by the states, the report also estimates that nearly 80% of cropped acres, including cropland with conservation tillage, have a high or moderate treatment need, especially for controlling nutrients.

The EPA fully supports a more complete accounting of verified conservation practices (including practices funded in full by farmers which are not in state or Federal cost-share tracking databases). In the Executive Order strategy, the EPA and USDA have committed to work with the National Association of Conservation Districts (NACD) and state partners to develop non-cost-share data tracking and verification mechanisms by July 2012. The EPA needs complete, accurate and current data to improve the characterization of agricultural conservation in the watershed. CEAP findings will help inform this effort.

It's important to note that states have already factored in the data gaps in their tracking of non-cost-shared practices when they divided up load allocations among source sectors. States are counting on a certain percentage of the necessary reductions they assigned to agriculture from simply better tracking and reporting of verified non-cost-shared practices between now and 2025.

Question 9a. So, when your models are updated in 2017 do you allow them to take credit for these practices you can then declare successful implementation of the TMDL. Does this cause a problem because nothing in the watershed will have changed? Farmers were implementing nutrient management and conservation tillage before the Final TMDL and will continue to implement these practices afterwards. The only change will be in "model land." How does this help clean up the Bay? How did you select 2017 as the timeline? Was this date or the entire TMDL schedule outlined in the EPA settlement agreement?

Answer. The Chesapeake Bay Program Partnership models help the partnership decide how much more needs to be done to achieve water quality goals. Monitoring data alone will tell us when those water quality goals are met. Revised historical implementation figures will help the Partnership determine the appropriate balance of management actions between sectors, basins, and jurisdictions to most effectively achieve the goals.

The 2017 evaluation is intended to make revisions to reflect the effectiveness of the practices. The EPA will continue to work with the states, USDA, and conservation districts to incorporate the most accurate and up-to-date information on what conservation practices are on the ground in the next round of Chesapeake Bay Program model updates, which will be complete in advance of the Phase III WIPs in 2017. When the CBP models are updated, they will be calibrated to water quality monitoring data throughout the watershed. Where monitoring data tell us that more needs to be done to clean up our waters, the EPA will work with partners to put more conservation actions on the ground. The Chesapeake Bay Program watershed model is currently calibrated to nearly 300 sites for flow and between 100 and 200 sites for water quality to ensure that the estimated necessary implementation actions will result in the needed pollution reductions to clean up our rivers and streams.

The commitment to the 2017 midpoint model updates and Phase III WIPs was part of the larger Chesapeake Bay Accountability Framework first outlined by the EPA and agreed upon by the Principals' Staff Committee whose membership includes the state secretaries in 2008. This framework was further refined in 2009 and 2010 by the EPA and the Bay partners. The Accountability Framework, including the schedule for Phase I–III WIPs and a midpoint evaluation for the Chesapeake Bay Program modeling tools, is discussed in more detail in the Executive Summary and Sections 7.2 of the Chesapeake Bay TMDL and in the *Federal Strategy for Protecting and Restoring the Chesapeake Bay Watershed*.

Question 10. It has come to our attention that the EPA has not handed over vital documents pertaining to on going court cases related to the TMDL. Why has EPA not cooperated? Does EPA intend to comply?

Answer. The EPA disagrees with the assertion that it has not been cooperative in the ongoing litigation regarding the Chesapeake Bay TMDL⁴ or has failed to "hand over" vital documents.

A number of parties (identified below) are now involved in litigation challenging the Chesapeake Bay TMDL. In accordance with the Court's scheduling order as proposed by the parties, the EPA timely filed its administrative record in the case on August 26, 2011. This record consisted of more than 38,000 pages and approximately 100,000 electronic model and data files. As is customary in cases like this, counsel for the EPA then conferred with counsel for the Plaintiffs over the scope of the administrative record. The EPA voluntarily agreed to add over 2,000 additional documents in October 2011, including many that Plaintiffs requested for inclusion. Plaintiffs then filed a motion seeking to add six additional documents to the

⁴*American Farm Bureau Federation et al. v. EPA et al.*, Civil Action No. 11–0067–SHR (M.D.PA).

administrative record and to seek limited discovery regarding the scope of the administrative record. The EPA opposed that motion. On December 28, 2011, the Court issued a decision granting in part and denying in part the Plaintiffs' motion to add several documents to the record, and denied the Plaintiffs' request for further discovery. Pursuant to the Order of the Court on January 11, 2012, the parties are currently engaged in filing their respective motions for summary judgment. The parties (identified below) are awaiting the decision of the Court to that motion.

- **Plaintiffs**—American Farm Bureau Federation (“AFBF”), Pennsylvania Farm Bureau, the Fertilizer Institute, National Pork Producers Council, National Corn Growers Association, National Chicken Council, U.S. Poultry & Egg Association, National Turkey Federation and National Association of Home Builders (“NAHB”).
- **Defendant**—EPA.
- **Defendant Intervenors**—Chesapeake Bay Foundation, Inc. (“CBF”), Citizens for Pennsylvania’s Future, Defenders of Wildlife, Jefferson County (West Virginia) Public Service District, Midshore Riverkeeper Conservancy, the National Wildlife Federation; National Association of Clean Water Agencies (“NACWA”), the Maryland Association of Municipal Wastewater Agencies, Inc. (“MAMWA”), the Virginia Association of Municipal Wastewater Agencies, Inc. (“VAMWA”) and Pennsylvania Municipal Authority Association (“PMAA”).

ATTACHMENT 1

EPA Engagement with the Agriculture Community

EPA, USDA, the state agricultural agencies and the agricultural community have a long history of collaborating on Chesapeake Bay restoration to ensure a healthy Bay and viable agriculture in the Chesapeake Bay watershed. USDA, the state agricultural agencies, and agricultural industry groups have been active participants in the Chesapeake Bay Program: from helping to inform modeling efforts to working together to identify and credit agricultural practices, to working with the states on their agricultural commitments in the Watershed Implementation Plans and Bay TMDL.

Continued collaboration with the agriculture community will be critical in the coming years to refine modeling tools, improve agricultural conservation tracking and verification, and accelerate agricultural nutrient and sediment reductions necessary to restore the Bay and local waters. This document summarizes EPA’s collaboration with USDA and the agriculture community on Chesapeake Bay watershed restoration efforts.

EPA Outreach During TMDL and WIP Development

EPA conducted an extensive, 2 year outreach program to exchange information with key stakeholders and the broader public during the development of the Chesapeake Bay TMDL. Outreach to the agriculture community was particularly focused and occurred throughout the region. EPA consulted with the agricultural community through three primary forums: stakeholder meetings, meetings with jurisdictions on Watershed Implementation Plan development, and meetings with agricultural community on Chesapeake Bay Program Watershed Model.

Stakeholder meetings: The outreach program in 2009 and 2010 featured hundreds of meetings with interested groups; two extensive rounds of public meetings, stakeholder sessions; a series of monthly interactive webinars accessed online by more than 2,500 people; three notices published in the *Federal Register*; and a close working relationship with Chesapeake Bay Program committees. Many agricultural groups and stakeholders participated in these meetings including the Farm Bureau, agribusiness organizations, individual farmers, as well as state agricultural agencies and conservation districts. In addition, to the general TMDL outreach meetings, EPA worked with the states to host sector-specific meetings with key stakeholders from the agricultural community, the homebuilder community, and conservation groups. EPA reached out to key agricultural leaders within each state to co-host these meetings in order to give the farming community a chance to ask questions, voice concerns, and discuss what the TMDL means for agriculture.

In addition to the public outreach and sector-specific meetings, many farming groups and regional and national agriculture associations invited EPA to brief them on the Bay TMDL. An example of one of the earliest outreach efforts is an August 2009 informal “coffee conversation” with EPA officials, organized by NRCS and the

American Farmland Trust (see *Attachment B** for a participants list, a copy of the invitation, and prep questions). Other agricultural organizations that EPA met with over the past 2 years to discuss the Bay TMDL include:

- National Pork Producers.
- National Turkey Federation.
- U.S. Poultry & Egg Association representatives.
- American Farmland Trust and NRCS organized a meeting between Bay watershed farmers and EPA senior leaders to discuss TMDL and how it relates to farmers. Virginia's Waste Solution Forum in the Shenandoah Valley.
- Conservation Technology Innovation Center annual tour 2010—audience: over 100 VA farmers, conservation district, university and NRCS representatives.
- Pennsylvania All Bay Day—audience: PA conservation districts and agency representatives.
- Mid-Atlantic Certified Crop Advisors Board—crop advisors in VA, MD, DE, and WV.
- Governor Harry Hughes Agro-Ecology Center Board.
- Maryland Association of Conservation Districts Board.
- National Webcast on “Changing Management of Nutrients in the Chesapeake Bay Watershed” hosted by the Extension Livestock and Poultry Environmental Learning Center with over 150 representatives from agricultural organizations, agencies, and land-grant universities.
- *WIP development discussions with jurisdictions*—In 2010, EPA had extensive formal and informal discussions with the state Watershed Implementation Plan stakeholder teams as the TMDL and Watershed Implementation Plans were being drafted and finalized. Many agricultural groups and stakeholders participated in these teams and were present at these meetings including the Farm Bureau, agribusiness organizations, as well as state agricultural agencies and conservation districts (See *Attachment C* for lists of WIP teams).

EPA senior leadership also held frequent discussions with state agricultural secretaries on topics such as Ag Certainty and WIP development and participated in key policy discussions with the Chesapeake Bay Program's Principal Staff Committee to the Chesapeake Bay Executive Council throughout the development of the Bay TMDL.

Looking back over the past decades, the agriculture community has been engaged since the development of the Chesapeake Bay Tributary Strategy (started in 1995) that served as a starting point for most WIPs.

Agriculture Participation in CBP Watershed Model

The suite of models used for the TMDL have been developed and utilized over 20 years through extensive collaboration with Federal, state, academic and private partners. This includes extensive input from USDA, state agricultural agencies, and agricultural organizations on the CBP Agriculture Workgroup. Use and development of the models is fully transparent and open with all decisions and refinements to the model made at public meetings of the Chesapeake Bay Program. The Agriculture Workgroup holds regular public meetings to provide extensive input into all decisions regarding conservation practice effectiveness, tracking and verification, and model refinements. The Agriculture Workgroup is co-chaired by USDA NRCS and the University of Maryland and is comprised of the following organizations:

Leadership:

—Chair, UMD and Vice Chair, USDA NRCS

Agricultural Organizations:

- Delaware Maryland Agribusiness Association
- Virginia Poultry Association
- Mid-Atlantic Farm Credit
- U.S. Poultry & Egg Association
- MD Farm Bureau

* **Editor's note:** The attachments B–C referred to in the document entitled, *EPA Engagement with the Agriculture Community*, have not been reprinted here, they can be seen in the House Committee on Agriculture hearing Serial No. 112–6, entitled, *Hearing To Review the Chesapeake Bay TMDL, Agricultural Conservation Practices, and Their Implications on National Watersheds*, dated March 10, 2011, pp. 167–174.

- Virginia Agribusiness Council
- VA Grain Producers Association
- West Virginia Department of Agriculture
- Delmarva Poultry Industry, Inc.
- VA Farm Bureau
- Delaware Pork Producers Association
- American Farmland Trust

Federal and State Agricultural Agencies:

- USDA Natural Resources Conservation Service
- Maryland Department of Agriculture
- West Virginia Department of Agriculture—Regulatory and Environmental Affairs Division
- Delaware Department of Agriculture
- Pennsylvania State Conservation Commission
- Maryland Department of Agriculture

Land-Grant Universities and Extension:

- West Virginia University
- Pennsylvania State University
- University of Maryland—College Park
- University of Delaware
- Cornell University
- University of Maryland Cooperative Extension

Conservation Districts and Commissions/Coalitions:

- Lancaster County Conservation District
- Cortland County Soil and Water Conservation District
- Madison Co. SWCD
- Chesapeake Bay Commission
- Upper Susquehanna Coalition
- PA No-Till Alliance
- Center for Conservation Incentives at Environmental Defense

EPA and State Environmental Agencies:

- U.S. Environmental Protection Agency
- Virginia Department of Environmental Quality
- Maryland Department of Natural Resources
- New York State Department of Environmental Conservation
- Virginia Department of Conservation and Recreation
- Pennsylvania Department of Environmental Protection
- West Virginia Department of Environmental Protection

In addition to extensive agriculture stakeholder involvement in the Agriculture Workgroup, EPA has also responded to requests from the agricultural community for more comprehensive briefings on the Bay TMDL and the CBP Watershed Model. On March 22, 2010, EPA worked with USDA to host a webinar on March 22, 2010 to answer the agricultural community's questions about the model and to identify opportunities for model refinements in the future. Following the webinar, EPA held a session with the poultry industry to provide a forum for the poultry industry to discuss specific poultry modeling and data issues.

USDA's Natural Resources Conservation Service (NRCS) has played a critical role in reviewing and providing data to the CBP Watershed Model, including coordinating the CBP's Nutrient Subcommittee over almost a decade, serving on the Agriculture Workgroup (currently vice chair) which makes all decisions related to agricultural modeling, participating on technical panels to develop conservation effectiveness estimates, and collaborating with EPA on USDA Conservation Effects Assessment Project and CBP Watershed Model efforts.

EPA–USDA Coordination

EPA and USDA play an active role in the Chesapeake Bay Program to work towards maintaining well-managed farms and restoring the Bay. Both agencies agree that maintaining the viability of agriculture is an essential component to sustaining ecosystems in the Bay. Both acknowledge the enormous contribution that farmers are making to improve Bay water quality. And, both are committed to strong partnerships and collaboration with states and local governments, urban, suburban and rural communities, and the private sector to achieve environmental objectives for the Bay. Throughout the TMDL process, EPA and USDA had on-going discussions and extensive briefings on the TMDL, models, state Watershed Implementation Plans, *etc.* Recent examples of that collaboration include:

- Developing and implementing the Strategy for Protecting and Restoring the Chesapeake Bay Watershed pursuant to Executive Order 13508.
- Developing a framework to provide certainty to farmers who implement practices that protect water quality in the Chesapeake Bay.
- Working with the National Association of Conservation Districts, state agricultural agencies, and agricultural community to ensure that non-cost-shared data can be tracked, verified, and credited in the CBP Watershed Model as committed to in the E.O. Strategy.
- Supporting the states in implementing the commitments outlined in their TMDL Watershed Implementation Plans.
- Aligning innovation grants programs to support key priorities for addressing water quality challenges facing agriculture (EPA's Innovative Nutrient and Sediment Reduction program and NRCS's Conservation Innovation Grants program).
- Working together to coordinate respective modeling efforts.

ATTACHMENT 2

December 22, 2010

Hon. THOMAS J. QUIGLEY,
Secretary,
 Department of Conservation and Natural Resources,
 Harrisburg, PA.

Dear Secretary Quigley:

We want to thank you and your staff for your willingness to discuss a framework to provide certainty to farmers who implement practices that protect water quality in the Chesapeake Bay. It is our hope that we have developed a constructive framework that states can use in providing to producers incentives and recognition that accelerate the adoption of conservation practices and advance the objectives of your state watershed implementation plans.

As we at the U.S. Department of Agriculture and the U.S. Environmental Protection Agency have discussed with you and your staff, certainty is viewed as a tool that states can use with agricultural producers to help achieve multiple goals for agriculture and water quality, including:

- Increasing producer interest and willingness in adopting Best Management Practices based on farm-specific conservation planning, which, in turn, would increase the pace and extent to which resource conservation and verifiable water-quality improvements are achieved.
- Providing to producers clear and consistent communications on conservation actions consistent with the objectives of the state watershed implementation plans.
- Providing assurance to agricultural business operations that investments in conservation practices will provide benefits for farms and water quality consistent with state watershed implementation plans.

While this is an effort best done at the state level, USDA and the EPA are willing to support you as you develop a state certainty program. As discussed earlier this month, by January 15, 2011, the six Chesapeake Bay basin state agriculture secretaries will follow up with their USDA Natural Resources Conservation Service (NRCS) State Conservationists to confirm interest in pursuing a certainty program. In turning this framework into a practical tool, you are encouraged to call on USDA and EPA staff for assistance. The NRCS stands ready to help you develop farm-specific plans to support such a program.

USDA and the EPA believe that maintaining agriculture's viability is an essential component to sustaining ecosystems in the Chesapeake Bay basin. We are committed to strong partnerships and collaboration with states, and we very much appreciate your contributions to improving the Bay. We look forward to working with you on this and other issues to ensure a healthy basin ecosystem, strong rural communities and a vital agricultural sector.

Sincerely,




KATHLEEN A. MERRIGAN,
Deputy Secretary,
U.S. Department of Agriculture;

BOB PERCIASEPE,
Deputy Administrator,
U.S. Environmental Protection Agency.

December 22, 2010

Hon. JOHN HANGAR,
Secretary,
Pennsylvania Department of Environmental Protection,
Harrisburg, PA.

Dear Secretary Hangar:

We want to thank you and your staff for your willingness to discuss a framework to provide certainty to farmers who implement practices that protect water quality in the Chesapeake Bay. It is our hope that we have developed a constructive framework that states can use in providing to producers incentives and recognition that accelerate the adoption of conservation practices and advance the objectives of your state watershed implementation plans.

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- Increasing producer interest and willingness in adopting Best Management Practices based on farm-specific conservation farming, which, in turn, would increase the pace and extent to which resource conservation and verifiable water-quality improvements are achieved.
- Providing to producers clear and consistent communications on conservation actions consistent with the objectives of the state watershed implementation plans.
- Providing assurance to agricultural business operations that investments in conservation practices will provide benefits for farms and water quality consistent with state watershed implementation plans.

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USDA and the EPA believe that maintaining agriculture's viability is an essential component to sustaining ecosystems in the Chesapeake Bay basin. We are committed to strong partnerships and collaboration with states, and we very much appreciate your contributions to improving the Bay. We look forward to working with you on this and other issues to ensure a healthy basin ecosystem, strong rural communities and a vital agricultural sector.

Sincerely,




KATHLEEN A. MERRIGAN,
Deputy Secretary,
 U.S. Department of Agriculture;

BOB PERCIASEPE,
Deputy Administrator,
 U.S. Environmental Protection Agency.

ATTACHMENT 3

June 28, 2011

Hon. GLENN THOMPSON,
Chairman,
 Subcommittee on Conservation, Energy, and Forestry,
 House Committee on Agriculture,
 Washington, D.C.

Dear Chairman Thompson:

At the Subcommittee on Conservation, Energy and Forestry hearing about the Chesapeake Bay in March, the USDA and the EPA stated their intention to continue efforts to refine and increase the level of data available for understanding the implementation of conservation practices by farmers in the Chesapeake Bay Region. To ensure that the work continues to progress, the EPA and the USDA scientists have developed a plan of work for the key activities that are expected to be accomplished. A copy of the plan of work for that effort is enclosed.

The additional data and refinements will serve a set of key purposes that will:

- Account for agricultural conservation practices implemented throughout the Chesapeake Bay watershed, including those practices funded solely by the farmer (not funded by Federal or state cost-share funding).
- Develop, as appropriate and feasible, a consistent estimate of pasture and hay land acres for use by the EPA and the USDA.
- Develop, as appropriate and feasible, a consistent approach for estimating fertilizer and manure applications for use by the EPA and the USDA.

In addition, there is ongoing work to (1) update and refine current conservation practice effectiveness estimates; and (2) credit new conservation practices as they are applied in the field. These efforts are intended to reflect our long term commitment to ensuring the best possible data is available. As a result of this work, we hope to increase our understanding of the impact of conservation practices and of the contribution farmers are making to restoration of the Bay.

We appreciate your interest in this important issue and will be glad to provide additional information that you may request.

Sincerely,



ARVIN R. GANESAN,
Associate Administrator.

ENCLOSURE

U.S. Department of Agriculture (USDA) and U.S. Environmental Protection Agency (EPA) Chesapeake Bay Conservation Data Collaboration

In December 2010, the EPA released the final Total Maximum Daily Load (TMDL) for the Chesapeake Bay. TMDL nutrient and sediment load allocations for the Bay Watershed States were developed using water quality monitoring data and a suite of models, including the Chesapeake Bay Program Watershed Model.

In March 2011, the USDA released its Assessment of the Effects of Conservation Practices on Cultivated Cropland in the Chesapeake Bay Region, a document known familiarly as the Chesapeake Bay Conservation Effects Assessment Project, or CEAP report. The USDA's CEAP effort is based on a combination of farmer surveys and modeling used to estimate the impact of conservation practices on the landscape.

There is a lot of interest from Chesapeake Bay stakeholders and within the USDA and the EPA to ensure consistency between the two modeling efforts and that they are informed by the best data available describing implementation of conservation by farmers in the Chesapeake Bay region. Below are commitments by the two agencies to that end.

Improve tracking and reporting of conservation practices in the Chesapeake Bay Program (CBP) Watershed Model

As called for in the May 12, 2009 Executive Order 13508—*Strategy for Protecting and Restoring the Chesapeake Bay Watershed*, the USDA and the EPA are working with state agricultural agencies, conservation districts, and other key agricultural groups to ensure that non-cost-shared practices are tracked, verified, and reported for credit in the CBP Watershed Model.

Additionally, the USDA is surveying approximately 1,400 producers through the National Resources Inventory (NRI) in 2011 to estimate the level of conservation practice implementation and to refine the spatial scale of available data. Combined with the similar work conducted from 2003–2006 (presented in the 2011 CEAP report), the results of this survey will provide an estimate of additional on-the-ground implementation of conservation practices between the two survey time periods.

Commitments:

The USDA and the EPA will work with state agricultural agencies, conservation districts, and other key agricultural groups to develop a mechanism for tracking, verifying and reporting non-cost-shared conservation practices on agricultural lands for use in the CBP Watershed Model.

Timeframe: Complete by July 2012.

Using CEAP results from 2003–2006 and the pending 2011–12 analysis, the USDA and the CBP Partnership will explore inclusion of the additional practices identified in these surveys into the CBP Watershed Model.

Timeframe: Begin in 2012.

Develop consistent estimates of pasture and hay land use in both models

The CBP Watershed Model and CEAP Model use different approaches for estimating pasture and hay land in the Chesapeake Bay watershed. The U.S. Geological Survey developed a methodology for estimating land use for the CBP modeling effort in which the pasture and hay land use is based on the USDA Census of Agriculture data rather than satellite imagery.

Commitment:

The Natural Resources Conservation Service (NRCS) and the CBP will work together to investigate the appropriateness of using a common approach for estimating pasture and hay land in both models.

Timeframe: Begin in 2011.

Coordinate fertilizer and manure nutrient input assumptions in both models

The NRCS and the CBP independently developed databases to estimate nutrient applications to cropland and arrived at similar figures for total application. However, differences likely exist in application timing and amounts applied by region, crop, and management system. A consistent approach for fertilizer and manure nutrient inputs that is informed by the significant work by the USDA and the CBP partnership would likely improve both models.

Commitment:

The NRCS and the CBP will work together to investigate the development of a single database to estimate nutrient applications to cropland that would drive both modeling efforts, building on the experiences of both. Alternatively, given the different temporal and spatial scales of the modeling, the NRCS and the CBP can work together to standardize assumptions across databases.

Timeframe: Begin 2012 and continue thereafter. Results may be used in CEAP on an ongoing basis and may be used for the CBP management decisions in 2017.

Develop comparable scales for reporting nutrient/sediment loads in CEAP & CBP Models

Commitment:

Currently the two models track and report loads on different geographic scales. Development of common reporting scales will allow a more effective comparison of model findings and increase watershed model data and technique sharing capabilities. As the technologies of the two models advance, opportunities to collaborate should be explored.

Timeframe: Begin 2012 and continue thereafter.

There are two further tasks that are already in progress to ensure that the CBP Watershed Model is informed by the latest scientific data:

Updating current conservation practice effectiveness estimates based on the latest science. The NRCS and the CBP will work with the Agriculture Workgroup to determine the most appropriate way to inform updates to conservation practice effectiveness estimates in the CBP Watershed Model, with a particular focus on characterizing spacial variability in practice effectiveness.

Timeframe: Ongoing

Crediting new conservation practices. The EPA will provide resources to help coordinate the effort to credit new conservation practices in the CBP Watershed Model, in accordance with the established protocols. The USDA will provide relevant data on effectiveness estimates of the new conservation practices to inform assessment by expert panels that evaluate practice effectiveness.

Timeframe: Ongoing

