Testimony to the House Agriculture and Rural Affairs Committee and the House Environmental Resources and Energy Committee Joint Informational Meeting on the Commonwealth's Chesapeake Bay Reboot Strategy

John Quigley, Secretary, Department of Environmental Protection Russell C. Redding, Secretary, Department of Agriculture

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Chairman Causer, Chairman Maher, Chairman Carroll, Chairman Vitali and distinguished members of the House Agriculture and Rural Affairs Committee and the House Environmental Resources and Energy Committee, thank you for the opportunity to present the details of our Pennsylvania-centric approach to restore local water quality in Pennsylvania, and by virtue of that, the Chesapeake Bay.

This plan is in response to requirements of the Federal Clean Water Act, court orders and U.S. Environmental Protection Agency (EPA) regulations that require Pennsylvania to reduce the annual discharge of nitrogen, phosphorous and sediment entering the Chesapeake Bay watershed in order to return Bay waters to state water quality standards by 2025. It is also informed by the EPA assessment of Pennsylvania's efforts and the success of our Watershed Implementation Plan (WIP) Phase 1 and 2.

As you may know, as a result of the federal consent decree in 2010, EPA established a Total Maximum Daily Load (TMDL) for the Bay. Implementation of this TMDL requires us to develop plans to meet specific target reductions in nitrogen, phosphorus and sediment loads in phases. Pennsylvania's Phase 2 WIP has interim targets for these reductions to be achieved in 2017.

Regardless of the 2017 and 2025 deadlines, we have an obligation to protect local water quality in Pennsylvania that arises from the Clean Streams Law – established well before the EPA established deadlines for Pennsylvania under the Total Maximum Daily Load.

It's about local water quality – no matter where you are located in our commonwealth. It's about doing the right thing. As a state, we realize there is more work to do; however, it is important to recognize the progress Pennsylvania has realized up to this point.

Over the past 30 years, Pennsylvania has invested more than \$4 billion, through various loan and grant programs, toward Chesapeake Bay restoration efforts. The results show that phosphorous has decreased by 25 percent; nitrogen by 6 percent, and sediment by nearly 15 percent. Further, Pennsylvania has significantly reduced the discharges of nutrients from point sources, such as wastewater treatment plants.

Despite our investments and efforts to date, Pennsylvania will not meet all of its 2015 and 2017 reduction targets. We are on track for meeting our phosphorous reduction goals, but we are not on track to meet nitrogen and sediment goals from agriculture and urban stormwater.

As a result of Pennsylvania not meeting its obligations under the consent decree, EPA took several actions last year. EPA withheld more than \$3 million in funding for DEP Bay-related work, and sent a team of inspectors into Lebanon County to begin inspecting agricultural operations. EPA also began consideration of progressive actions that increase EPA's role in inspections, permitting and compliance in the Bay watershed in Pennsylvania.

On the strength of the strategy we're discussing today, EPA has restored that \$3 million in program funding, provided that we diligently implement our strategy.

There are several reasons Pennsylvania had been falling short on water quality and Bay goals. First, resources have been inadequate to the scale of the challenge. Based on a 2013 Penn State Environmental and Natural Resources Institute study, it would take \$3.6 billion in capital costs to fully implement all nonpoint source Best Management Practices (BMPs) in Pennsylvania's Watershed Implementation Plan (WIP) in incremental levels between 2011 and 2025. On an annualized basis, that is \$378.3 million per year through 2025, including operation and maintenance costs.

For perspective, in FFY 2014, Pennsylvania spent \$146.6 million (combined state and federal funding) to address nitrogen, phosphorus and sediment reduction statewide. \$127.6 million (87%) was used for BMP deployment.

Second, the data used to measure current Chesapeake Bay pollution reduction efforts for agricultural and urban stormwater pollutant sources is fundamentally inadequate. The Chesapeake Bay model relies overwhelmingly on data on the installation of BMPs where a portion of the cost was shared by federal or state government. Non-cost-shared BMPs are not counted.

Third, inspection and compliance verification activities related to agricultural and urban stormwater sources have largely been missing. The Bay watershed in Pennsylvania is home to more than 33,600 farms. EPA recommends that DEP inspect 10 percent of those farms annually. In 2014, DEP conducted a total of 592 inspections, which equates to a 1.8 percent inspection rate.

The Bay watershed in Pennsylvania has 206 Municipal Separate Storm Sewer Systems (MS4) communities with an estimated 10,000 discharge sites. EPA recommends that DEP inspect 10 percent of the MS4 systems annually, and in 2014, DEP conducted 25 field inspections, achieving that 10 percent inspection rate for the first time. Significant compliance with MS4 permitting requirements in the Bay watershed is uncertain until the 10% inspection rate is consistent and annual.

So, Pennsylvania must change its approach for the Chesapeake Bay. The Departments of Agriculture, Environmental Protection, and Conservation and Natural Resources (DCNR) collaborated strongly in this reboot effort to coordinate plans, policies and resources.

Working with a number of external partners and stakeholders, we developed a Pennsylvaniacentric plan aimed at improving local water quality in this commonwealth – and with that, the Chesapeake Bay. It represents a reasonable, incremental and balanced approach to improving local water quality by reducing nitrogen and sediment loads in Pennsylvania waterways that will ultimately restore the water quality of the Chesapeake Bay. The strategy relies on a mix of technical and financial assistance, technology, improved data gathering and recordkeeping, improved program coordination and capacity and, when necessary, compliance and enforcement measures. The strategy also recognizes two key, co-equal goals for success: clean water and viable farms. Our farmers have long recognized the important link between healthy soils, sustainable farming practices, and the water quality of our waterways. When we have healthy, viable farms, we have healthy, viable watersheds. You can't have one without the other.

There are six elements to the plan:

- 1. Address pollutant reduction by: a) meeting the EPA goal of inspecting 10 percent of farms and MS4s in the watershed annually, b) ensuring development and use of manure management and agricultural erosion and sediment control plans, and c) enforcement when necessary for non-compliance.
- 2. Quantify undocumented BMPs in watersheds impaired by agriculture or stormwater and put more high-impact, low-cost BMPs on the ground.
- 3. Improve reporting, record-keeping and data systems to provide better documentation and obtain maximum credit toward Bay goals.
- 4. Identify legislative, programmatic or regulatory changes to provide the additional tools and resources necessary to meet federal pollution reduction goals by 2025.
- 5. Establish a DEP Chesapeake Bay Office to coordinate development, implementation and funding of Pennsylvania's Chesapeake Bay efforts.
- 6. Obtain additional resources for water quality improvement.

We'd like to touch on some key details of the six elements.

Our pollution reduction strategy is based on a new partnership with conservation districts, which work closely with farmers across the state. DEP will shift existing funding provided annually to conservation districts from conducting 100 educational visits per year to a minimum of 50 inspections per technician per year. The initial compliance inspection focus will be on ensuring that farmers have Manure Management Plans and Erosion and Sedimentation Plans – requirements that have been in law for over three decades.

Some of you may have heard concerns with the reboot strategy from some of the state's conservation districts. We have been working directly with the districts to ensure that they understand the approach we are putting forward, and we will be meeting with district managers to review and discuss new standard operating procedures. It is important to point out that the role being suggested for conservation districts is not fundamentally different than the role they currently play in other programs. Specifically, conservation district staff has played an important role in compliance inspections under the Chapter 83 Nutrient Management and Chapter 102 Erosion & Sedimentation regulatory programs for decades. In particular, the Nutrient Management program's annual compliance inspection of farms by a conservation district staff person, with follow up enforcement action (if necessary) by the State Conservation Commission, is a model for this strategy.

Our plans to locate, quantify and verify previously undocumented BMPs represent a new and unprecedented partnership with the agriculture industry and the academic community. We want Pennsylvania farmers to obtain maximum credit – both publicly and in the Bay model – for the good work they are doing to restore local water quality. A comprehensive, voluntary farm survey is in farmers' hands right now thanks to the administration's partnership with:

- Penn State University;
- Pennsylvania Farm Bureau;
- PennAg Industries;
- Professional Dairy Managers of Pennsylvania;
- Pennsylvania Association for Sustainable Agriculture;
- Pennsylvania Farmers Union; and
- Pennsylvania Association of Conservation Districts.

DEP will put new high-impact, low-cost BMP projects on the ground in watersheds that are currently impaired by agriculture or stormwater by shifting an additional 15 percent of available statewide water quality funding (a total of \$1,250,000) to Bay work. But we do need additional resources, and now that we have restored federal funding, we are pursuing additional funding at both the state and federal levels, and through public and private partnerships. We also need to improve our data gathering and reporting tools, and identify additional tools and resources necessary to meet federal pollution reduction goals by 2025. These may include legislative, programmatic and regulatory changes. DEP has restructured its water programs deputate to coordinate development, implementation, funding and accountability of the commonwealth's Chesapeake Bay efforts.

We believe this approach has multiple benefits. In particular, we expect it to:

- Prioritize existing resources to where they're needed most.
- Strengthen the commonwealth's ability to seek additional resources.
- Restructure existing partnerships and creates new ones, enhancing our ability to innovate.
- Address chronic data gaps, and give Pennsylvania farmers the credit they deserve for their efforts.
- Improve the commonwealth's focus on local water quality improvement and the Bay.

Local water quality in Pennsylvania is a shared responsibility, and we believe that collaboration, partnerships, commitment, and resources are the key to the success of the effort. If every farmer, community and citizen does their part, we will restore and safeguard local water quality in Pennsylvania, and help to restore the quality of the Chesapeake Bay.