Statement by
Ann Mills
Deputy Under Secretary, Natural Resources and Environment
US Department of Agriculture
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Chairman Holden, Ranking Member Goodlatte, and distinguished members of the Subcommittee, thank you for this opportunity to appear before you to discuss the U.S. Department of Agriculture's (USDA) conservation efforts in the Chesapeake Bay watershed. As Deputy Under Secretary for Natural Resources and Environment (NRE), I oversee the Natural Resources Conservation Service (NRCS), which plays a key role protecting and restoring the Chesapeake Bay watershed. I will talk first about the challenges ahead of us in the Bay before describing the progressive steps USDA is taking to meet those challenges.

But first let me stress this about our work to protect the Chesapeake Bay—USDA works with private landowners who live in the watershed. We work hard to reinforce the notion that the work we do throughout the Bay watershed, along all of its tributaries, is designed to improve local natural resource conditions, which in turn will have a positive impact on the Bay itself.

The Challenge

Agriculture and forest land accounts for 75 percent of the Chesapeake Bay watershed, which stretches over 44 million acres in six states and the District of Columbia. The Chesapeake Bay has the highest land-to-water ratio of any estuary in the U.S. As a result, land-based activities heavily influence the condition of the Bay. Over 80,000 farms, covering about 25 percent of the watershed, produce a diverse array of fresh vegetables, fruits, grain, dairy, beef, poultry, and much more. Although diminished, Chesapeake forests still account for 50 percent of the land cover and represent one of the most expansive hardwood forests in the world, providing diverse habitats and valuable ecosystem services.

These agricultural and forest lands also anchor rural communities and provide open space and other amenities important to the economic, cultural and social fabric of the Chesapeake Bay watershed. Because of their extent, the stewardship of these lands has a tremendous influence on the quality of natural resources in the watershed.

Today, agriculture and forestry in the Bay watershed are under increasing pressure from development. To put this in perspective, visualize a strip of land 1 mile wide running from Washington, DC to San Francisco, CA. That is almost 2 million acres and the amount of crop, pasture, and forest land that were converted in the Bay watershed to developed uses between 1982 and 2003. Currently, about 12 percent of the land in the Chesapeake Bay watershed is classified as developed, up from 8 percent in 1982.

Approximately 130,000 new residents move to the Chesapeake Bay watershed each year, accelerating the development of agricultural and other lands. Among the consequences of losing these agricultural and forested areas are diminishing access to fresh local foods; reduced capacity of soils and plants to capture carbon; reduction in groundwater recharge; and increased runoff from roads, roofs, and parking lots. According to the Chesapeake Bay Blue Ribbon Panel Finance Panel, a one-acre parking lot produces about 16 times the volume of runoff that comes from a one-acre meadow. This runoff from paved surfaces also carries oil, exhaust residue, lawn chemicals and other pollutants.

While agriculture is an important component of the landscape and economy, it also is a source of nutrients and sediment that adversely affect water quality in the Bay and its tributary waters. Agriculture has made significant strides in reducing these impacts through a longstanding conservation partnership effort. According to the Chesapeake Bay Program, since 1985, agriculture has reached nearly 50 percent of the goals established for nitrogen, phosphorus, and sediment reduction.

Despite these gains, the challenge ahead is substantial. One thing, however, is clear – losing farms and forests is not in the best interest of the Chesapeake Bay ecosystem. Stakeholders from diverse backgrounds—from the Chesapeake Bay Foundation to the National Fish and Wildlife Foundation to State regulatory agencies—support agriculture as a preferred land use in the Chesapeake Bay watershed. Under the Obama Administration, and with the help of additional funding provided through the 2008 Farm Bill, USDA has accelerated its conservation efforts in the Bay watershed. USDA advocates a landscape scale approach that recognizes natural resource conservation issues and solutions do not stop and start at land ownership boundaries. A successful Bay conservation effort must engage local, State, and national partners. Integrated solutions must address intertwined issues of rural prosperity, strong agricultural and forest product markets, new revenue streams for ecosystem services, and healthy communities in order to deliver sustainable solutions to protect the natural heritage that makes the Chesapeake Bay watershed a national treasure.

Conservation in the Bay Watershed

Concern about Chesapeake Bay water quality and its living resources date back to the 1930s. Congress' longstanding commitment to protection of the Bay is very clear, and was recently emphasized with the establishment of the Chesapeake Bay Watershed Program in the Food, Conservation, and Energy Act of 2008 (2008 Farm Bill). The Obama Administration took an unprecedented step on May 12, 2009 with the release of an Executive Order [Chesapeake Bay Protection and Restoration] that commits to solutions to restore and protect the Chesapeake Bay.

USDA has been a long-standing partner in the effort to protect and restore the Bay watershed. Our employees across the Bay watershed work daily with farmers, forestland owners, other private land managers, and communities to identify and address natural resource conservation problems. This commitment is substantial – between 2004 and 2008, USDA invested nearly $800 million in conservation, rural development, and research activities related to restoring and protecting the Chesapeake Bay watershed.

It is important to note that protection of the Chesapeake Bay, and conservation on agricultural lands in the Bay watershed, is a wide-ranging effort that includes federal, local, and state partners and stakeholders. USDA, in particular, works in close partnership with local Conservation Districts and State Departments of Agriculture (often co-located with USDA) to help producers improve the condition of their natural resources. Local land trusts and States in the Bay watershed have successful farmland preservation programs. Non-governmental organizations such as the Chesapeake Bay Foundation and Environmental Defense have in recent years provided funding for on-the-ground conservation efforts with producers. The federal investment on the part of USDA is noteworthy, but the restoration of the Bay and widespread improvement in agricultural conservation will not be possible without significant investment and commitment from our diverse set of conservation partners.

Through its diverse portfolio of conservation programs, USDA assists individuals and communities in planning and implementing conservation solutions to reduce the losses of nutrients and sediment, conserve wetlands, protect critical farm and forest acres, and improve related natural resource conditions across the watershed. Below are just a few examples of the amount of conservation applied from 2004 to 2008:

Top 5 Conservation Practices Applied on Agricultural Land in the Chesapeake Bay Watershed, FY 2004 - 2008

Conservation Practice Name	Average Annual Application	Total
	--- acres ---	
Conservation Crop Rotation	145,559	727,796
Nutrient Management	116,381	581,906
Pest Management	82,488	412,441
Residue and Tillage Management	106,128	530,639
Upland Wildlife Habitat Management	48,933	244,663

Chesapeake Bay Watershed Program

In 2009, USDA began implementation of the Chesapeake Bay Watershed Program authorized in the 2008 Farm Bill. In developing the initiative, USDA worked to balance the program objectives of (1) improving water quality and quantity, and (2) restoring, enhancing, and preserving soil, air, and related resources in the Chesapeake Bay watershed. The Farm Bill language also directed USDA to give special consideration to four River basins (Susquehanna, Potomac, Shenandoah, and Patuxent).

This new authority offered an unparalleled opportunity to leverage new information and technology to focus on accelerating conservation and improving the condition of the watershed. USDA collaborated with USGS, EPA, and others to identify watersheds expected to have the greatest influence on Bay water quality, based on natural resource condition and vulnerabilities, land use in different regions of the watershed, existing conservation practices, and their relationship to key Bay

pollutants – nitrogen, phosphorus, and sediment. The partnership drew upon a variety of analytical tools, databases, and local knowledge. As a result of that effort, about 500 small watersheds (12 digit HUC watersheds) were identified. Eighty-seven percent of these watersheds fall within the four special consideration river basins mentioned in the Farm Bill.

Below is a table displaying CBWP financial assistance obligations for fiscal year 2009.

Fiscal Year 2009 CBWP State-by-State Obligations

State	**CBWP Obligations**
Delaware	$969,065
Maryland	$4,150,068
New York	$1,107,942
Pennsylvania	$5,429,703
Virginia	$5,642,956
West Virginia	$1,148,621
Totals	**$18,448,353**

58.3 percent of CBWP funds were obligated in the identified priority watersheds using EQIP program authorities. In addition, to further emphasize water quality practices through the CBWP, NRCS State Offices in the Bay watershed identified 24 practices that impact water quality. Looking at the historical implementation of these 24 practices through EQIP between 2004 and 2008, 45,602 practices were installed in the Bay watershed. Historically in the Bay watershed, 51 percent of those practices were applied in the now-identified priority watersheds. Through the CBWP in fiscal year 2009, we were able to increase the application rate of the 24 practices in priority watersheds to 75 percent. This translates into practices with the greatest impact on water quality being implemented in locations that contribute the largest amounts of nutrients and sediment to the Bay. Next year we hope to further increase this rate.

We will soon announce the availability of CBWP funding for fiscal year 2010. The 2008 Farm Bill authorizes $43 million for CBWP in 2010. We will be re-evaluating the priority watersheds and practice list based on what we learned through the first year of implementation. We are also hoping to use innovative approaches to improve producer outreach efforts.

Conservation Innovation Grants in the Bay Watershed

Conservation Innovation Grants was authorized in the 2002 Farm Bill under EQIP. Through this program, funding is used to stimulate the development and adoption of innovative conservation approaches and technologies. Since 2005, a portion of CIG funding has been dedicated to projects in the Chesapeake Bay watershed. In fiscal year 2009, over $2 million was provided to six projects through the Chesapeake Bay component.

Two recent awards focusing on developing water quality credit trading markets are examples of the type of innovative approaches funding through CIG. The Development and Implementation of a Water Quality Bank and Trade Program for the Potomac River Watershed is a three-phase project to develop and implement a water quality credit trading program in the WV area of the Potomac River

Watershed. This project is being developed by the West Virginia University Research Corporation. In Maryland, the Maryland Department of Agriculture is piloting a Point source to Non-Point Source Nutrient Trading in the Upper Chesapeake Bay Maryland. Deliverables from these projects will hopefully enhance opportunities for intrastate and interstate water quality trading in the Chesapeake Bay watershed.

Conservation Effects Assessment Project

In addition to delivering a wide array of conservation programs in the Chesapeake Bay watershed, USDA is also leading the Conservation Effects Assessment Project (CEAP) that will be an important tool for strengthening the science base in the Bay watershed. CEAP began in 2003 as a multi-agency effort to quantify the environmental benefits of conservation practices and systems.

The first CEAP cropland report (Upper Mississippi River Basin (UMRB)) is being completed currently, while the CEAP Chesapeake Bay watershed assessment is underway. Analysts have identified some UMRB results that ***are expected*** to apply equally in the Chesapeake Bay, namely the importance of: 1) focusing conservation on the most vulnerable acres to provide the quickest response; 2) conservation systems that address runoff, edge-of-field mitigation, and carefully manage inputs; and 3) managing the intensity of land use for some of the most vulnerable acres.

We expect other important elements to emerge in the forthcoming Chesapeake Bay watershed assessment. For example, additional conservation practices not included in the UMRB simulations will be examined, such as drainage water management to promote denitrification or construction of wetlands near interfaces with streams and cultivated cropland. Given the concentration of animal agriculture in certain parts of the Bay watershed, there will be special emphasis on conservation needs related to manure management. Lastly, the influence of proximity to streams will be an important factor in assessing potential vulnerabilities in the Chesapeake Bay watershed.

Expected to be completed in 2010, the CEAP Chesapeake Bay report will be able to provide estimates of the progress in reducing the delivery of agricultural contaminants, identify remaining under-treated cropland acres, and estimate the environmental results from treating those acres. There also will be an opportunity to coordinate between the Bay Model and the CEAP Model to improve the identification of priority landscapes as well as the estimates of environmental effects of conservation applied.

Chesapeake Bay Executive Order

The May 12th Executive Order (EO) 13508 called on the Federal government to take significant action to restore and protect the Chesapeake Bay watershed. Agencies were directed to develop recommendations for accomplishing important steps to protect and restore the Bay. USDA, in collaboration with other federal and agencies, outlined an aggressive and focused voluntary conservation strategy under Section 203 of the EO, titled "Chesapeake Farms and Forests for the 21st Century." This draft strategy contains six major elements for focusing resources and developing new approaches to protect and restore the Chesapeake Bay and its tributary waters.

1. Focusing on the highest priorities first

This strategy will focus first on the watersheds and acres that have the greatest conservation need – where our shared work will address the most pressing challenges and deliver the biggest impact for improving local water quality. Conservation applied on any acre delivers an environmental benefit, but to date conservation applied in the Chesapeake Bay watershed has not reached dimensions needed to achieve the broader goals for improving the aquatic health of the Bay and its tributary waters. Applying lessons learned, we are using science-based tools and input from local experts to determine where to invest program and human resources in order to deliver the greatest environmental benefit.

2. Integrate Federal, State, and local programs

A substantial number of Federal and State programs are delivered in the Chesapeake Bay watershed with objectives related to restoring and protecting the Bay. With so many entities involved, it is critical to coordinate and integrate programs on the ground to ensure that they are working toward common objectives, maximizing synergistic opportunities, and preventing potential duplication of efforts. Among the many benefits of increasing integration of programs on the ground is the potential to simplify program delivery for potential participants – developing the virtual "one-stop-shop" for individuals and communities that will need to participate in conservation efforts in order to accomplish Chesapeake Bay watershed restoration and protection objectives. Coordinating programs across all of with the Bay Partners, including the authorities under the Farm Bill, State and Private Forestry, the Clean Water Act, as well as Department of the Interior programs such as Partners for Wildlife, offers the best opportunity for success.

3. Accelerate conservation adoption

Nearly 75 percent of the Chesapeake Bay watershed is in the hands of agricultural and forest landowners and managers. Economic and non-economic incentives play an important role in encouraging these landowners to make the day-to-day stewardship decisions that shape conservation in the Chesapeake Bay. Between 2004 and 2008, through USDA conservation programs alone, nutrient management was applied on 600 thousand acres; while an important achievement, we must accelerate conservation adoption if we are to achieve objectives for restoring the health of the Bay. Existing incentive approaches will be improved on to increase their effectiveness by better coordinating programs and streamlining processes to simplify program participation.

4. Accelerate development of new conservation technologies.

USDA's research mission through the Agricultural Research Service (ARS) and the National Institute for Food and Agriculture (NIFA) is engaged in a substantial partnership effort with public and private sector interests to identify needed research and focus Federal researchers and grant programs on developing solutions. We will be focusing funding and increasing public-private research partnerships to spur innovation in research and accelerate development of new conservation technologies. New technologies that increase revenue opportunities for farmers and their communities will also increase rural wealth and sustain the restoration of the Bay.

5. Foster and support ecosystem markets.

Chesapeake Bay protection and restoration could also involve private markets in order to reach the level and scope of progress needed. Markets for carbon sequestration, water quality, wetlands, wildlife habitat, and species protection have great potential to complement existing federally

supported conservation efforts and drive private investment to improve the health of the Chesapeake Bay. These markets could connect the critical ecosystem services provided by farms, forests, and ranches to beneficiaries who are willing, or required, to pay for their stewardship – such as urban water utilities, industry, and land developers who need to mitigate unavoidable negative impacts to the watershed. While farmers and foresters use conservation methods to improve the quality of the watershed's natural resources, they could also be building new revenue streams for themselves and their rural communities. Potential income from ecosystem markets could provide new incentives for landowners to engage in restoration and conservation activities on their land.

6. Implement a sound system of accountability.

A sound system of accountability is critical to monitoring progress toward the goals for the Bay. That system of accountability has many parts starting with ensuring that objectives are clearly defined and achievable, and that adequate resources are dedicated to make restoring and protecting the Bay possible. An adaptive management approach is fundamental to an effective accountability system, including monitoring how well programs are working, evaluating and refining priorities, and incorporating new science and strategies to improve results. Adaptive management for the Chesapeake Bay watershed will be data intensive, and will depend on effective collaboration across the broad Bay partnership.

USDA also will work to implement the Healthy Waters, Thriving Agriculture Initiative included under the response to the EO. We will be consulting with both Federal and non-Federal partners to align financial and technical resources to accelerate our on-farm conservation work in the Bay watershed. For example, we will be identifying watersheds and Centerpiece projects where the greatest opportunity for demonstrating conservation benefits exist and working with EPA and other partners to leverage their voluntary conservation funding to accelerate action in these areas.

Conclusion

The shores of the Chesapeake Bay could likely be covered with past proclamations and restoration goals that have gone unfulfilled and deadlines that have been missed. At USDA, we know that, despite our progress in agricultural conservation over the past few decades, we have more work to do. Additional resources in the 2008 Farm Bill will help us reach more customers. The Administration's Executive Order provides USDA with new tools and strategies to accelerate our efforts in the Chesapeake Bay watershed. We look forward to this challenge and the opportunities ahead. Thank you again for the opportunity to testify before you today and I am happy to answer any questions you may have.