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LEGISLATIVE HEARING ON GREAT WATER BODY LEGISLATION: S. 1816 AND S. 1311

HEARING

BEFORE THE

SUBCOMMITTEE ON WATER AND WILDLIFE

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

NOVEMBER 9, 2009

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C O N T E N T S

LEGISLATIVE HEARING ON GREAT WATER BODY LEGISLATION: S. 1816 AND S. 1311

MONDAY, NOVEMBER 9, 2009

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON WATER AND WILDLIFE,
Washington, DC.

The subcommittee met, pursuant to notice, at 3 p.m. in room 406, Dirksen Senate Office Building, Hon. Benjamin L. Cardin (chairman of the subcommittee) presiding.

Present: Senators Cardin and Crapo.

OPENING STATEMENT OF HON. BENJAMIN L. CARDIN, U.S. SENATOR FROM THE STATE OF MARYLAND

Senator CARDIN. Good afternoon, everyone. Welcome to the Subcommittee on Water and Wildlife of the Environment and Public Works Committee.

I particularly want to thank Senator Crapo for his cooperation in scheduling a Monday hearing. It is not easy to schedule a hearing on Monday, and I appreciate his cooperation. At the time, we were unclear as to the ability of having hearings in the EPW Committee this time of the year, and we knew Monday was a time that would be available. And Senator Crapo cooperated with us, and I thank him very much for it.

We really do have the opportunity today to talk about two of the most important bodies of water in our country, the Chesapeake Bay and the Gulf of Mexico. The Chesapeake Bay is the largest estuary in North America; 17 million people live in the Chesapeake Bay watershed, and it includes six States and the District of Columbia; 3,600 species of plants, animals and fish; 500 million pounds of seafood every year. It goes on and on and on. And I keep talking about the Bay because it is critically important to this region's history, to its culture, to its economy, and to its future.

The Gulf of Mexico is the ninth largest body of water in the world; five U.S. States, six Mexican states and Cuba all are impacted by the Gulf of Mexico; 1,631 miles of coastline in the United States; 61 million people live in the region; $20 billion in tourism industry every year; $29 billion in agricultural production. Clearly, it is a very important body of water for the economy of our Nation.

Both bodies of water are in trouble. Sediment in nutrients such as nitrogen and phosphorus are flowing into both bodies of water. The overgrowth of algae creates oxygen starved dead zones. In the Chesapeake Bay, there are 7,000 square miles of dead zone. In the

Gulf of Mexico, the dead zones equal the size of the State of New Jersey.

It impacts the ability of the Bay and the Gulf to be productive bodies of water. In the Bay, we have seen the endangerment of the blue crab, which is so symbolic of our State, an icon of our seafood industry. And we know that we are in trouble because of these dead zones, which are creating a problem for juvenile crabs and the crab production. That is just one example. I could list many, many more.

In the Gulf of Mexico, we know that wetlands are being destroyed at an alarming rate. Between 1998 and 2004, over 400,000 acres of wetlands were destroyed. When the EPW Committee went to New Orleans, we had a chance to see firsthand the importance in the Gulf of Mexico of the wetlands. It acts as what they were called speed bumpers for storms that come in, and the loss of the wetlands puts the shoreline at much, much greater risk.

Now, the sources of the problems comes from agriculture, from stormwater runoff, from wastewater treatment facility plants, and airborne. The Chesapeake Bay Program is a critically important part of trying to deal with a strategy to abate the increased pollution and to restore the Bay's quality. We have already had two oversight hearings. This is our third hearing on the Chesapeake Bay. The program itself was established by law 20 years ago in the Clean Water Act. President Obama as recently as May 12, 2009, declared the Chesapeake Bay a national treasure and ordered Federal agencies and departments to prepare and submit annual action plans.

S. 1816, the Chesapeake Bay Water and Ecosystem Restoration Act, builds on that Executive Order establishing 2025 as the restoration deadline date. It is cosponsored by Senator Carper on our committee, and I am pleased also that Senators Mikulski and Kaufman have joined in this effort.

It provides $1.5 billion in authorization to control urban and suburban stormwater runoff. Why that is important is that we have already provided substantial increased funds for agricultural activities in the farm bill and for the wastewater treatment facility plants in the President's budget, as well as the American Recovery and Reinvestment Act.

The bill provides specific help for farmers and foresters, and 10 percent of the implementation grants are reserved for the States of Delaware, New York and West Virginia, acknowledging the importance of these States as it relates to the supplies of fresh water.

The Gulf of Mexico Program was established in 1988 by the EPA as a non-regulatory office. There is no statutory authority for the Gulf of Mexico Program. Bills have been introduced in the past 15 years, I have been told, but this is the first hearing on the legislative support for the Gulf of Mexico Program.

I point out that these are two major bodies of water, but there are other bodies of water that this committee is interested in. Puget Sound, Senator Cantwell has recently introduced legislation, and we certainly will be looking at Puget Sound from the point of view of the appropriate legislative authority for congressional action or for Federal action in this area. The Great Lakes, the largest bodies of fresh water in the world, clearly a great interest to this

committee. Lake Tahoe, that borders California and Nevada, another body of water that this committee will take a look at.

But today we will focus on the Chesapeake Bay and the Gulf of Mexico. We have our work cut out for us, and we have two panels of witnesses, Government experts, as well as people who have been working in this area for a long time, and we look forward to their testimonies.

With that, let me turn it over to Senator Crapo.

[The prepared statement of Senator Cardin follows:]

STATEMENT OF HON. BENJAMIN L. CARDIN,
U.S. SENATOR FROM THE STATE OF MARYLAND

I want to thank our witnesses for coming before the Water and Wildlife subcommittee today to discuss the need to re-authorize the Chesapeake Bay Program and finally formally authorize the Gulf of Mexico Program.

This subcommittee has held two oversight hearings on the Chesapeake Bay Program, where we heard from elected representatives, private citizens, and agency officials on the health of the Bay and the status of restoration efforts.

Today's hearing will focus on expert views on legislation to help restore two great water bodies: the Chesapeake Bay and the Gulf of Mexico. We will hear from two panels of witnesses who will share their insight on how inter-agency and Federal-State partnerships in the Chesapeake Bay Program and Gulf of Mexico Program can help us restore and protect these important water bodies.

The Chesapeake Bay and Gulf of Mexico are two of our Nation's most treasured water bodies. The Bay is home to 17 million people as well as our Nation's capital. It is the largest estuary in North America and has been internationally recognized as a region of ecological significance. The Gulf of Mexico is the ninth-largest body of water in the world and contains half of the coastal wetlands in the United States. It links five of our States to Mexico, Cuba, and the Caribbean Sea.

Both the Bay and the Gulf are rich with resources that provide the backbone for our regions' economies. They are home to commercial fisheries and support recreation and tourism. They are also both rich in biodiversity, supporting thousands of species of fish, wildlife, and plants.

But they are also seriously threatened by pollutants, especially nutrients and sediments.

Two of the biggest dead zones in U.S. waters are in the Gulf of Mexico and Chesapeake Bay. The dead zone in the Gulf is the size of New Jersey. In the summer of 2003, the area of low oxygen in the Chesapeake stretched for over 100 miles.

Unfortunately, dozens of the United States' best known bays are starved for oxygen, ranging from Tampa Bay in Florida to San Francisco Bay in California and even up into the Puget Sound in Washington State.

In Maryland, we have seen how pollution endangers the iconic Chesapeake blue crab. With the notable exception of last year, we have seen 10 years of unprecedented low blue crab populations. The shrinking crab population means smaller harvests for our watermen, an already beleaguered industry in these difficult economic times.

In the Gulf, the rapid loss of coastal wetlands is especially troubling, since these wetlands serve as the first line of defense against devastating storms.

Today we focus on legislative efforts to strengthen and formalize two programs that have been working to bring together Federal agencies, States, and international partners in Mexico to restore and protect these water bodies.

The Chesapeake Bay Program was established under the Clean Water Act as a formal program office in the EPA more than 20 years ago. The Gulf of Mexico program has been operating for roughly the same time, but only as an administratively organized effort, not a formally authorized program. Over the past 20 years, these two programs have made significant progress and laid the foundation for the legislation we're discussing today.

S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act, provides the strong, new tools that States need to restore the Bay. It provides $1.5 billion in grants to control urban and suburban stormwater runoff: the only increasing pollution source in the Bay. It also helps farmers and foresters access farm bill funds so they can implement conservation practices to improve water quality.

And for the first time, it recognizes the importance of the headwater States by setting aside 10 percent of State implementation grants for Delaware, New York, and West Virginia.

We will also hear witness views on S. 1311, the Gulf of Mexico Restoration and Protection Act.

As I noted, the Gulf program has never had formal authorization in the Clean Water Act. In 1991, the first bill to establish the Gulf program was introduced by Senator Phil Gramm of Texas. Over the course of the next 15 years, authorization bills have been introduced six times, but no congressional action ensued. And again this year, Senator Wicker has introduced the Gulf authorization bill.

My staff informs me that although this legislation has been introduced numerous times over the last 15 years, today will mark the first time that any of the Gulf of Mexico authorization bills have been the subject of a Senate hearing. That is an unfortunate string of inaction that ends today.

The great water bodies of this Nation deserve our attention. This subcommittee has devoted considerable time to the Chesapeake Bay, and starting today to the Gulf of Mexico. We expect to turn our attention in the near future to the Puget Sound, where Senator Cantwell has recently introduced important restoration legislation. We will also return to the Great Lakes, the largest bodies of fresh water in the world, and to Lake Tahoe, the blue gem that straddles the California-Nevada border.

But today we focus on the Chesapeake and the Gulf of Mexico. We look forward to hearing from our witnesses and their views on the bills before us today.

OPENING STATEMENT OF HON. MIKE CRAPO, U.S. SENATOR FROM THE STATE OF IDAHO

Senator CRAPO. Thank you very much, Mr. Chairman.

Before I make my remarks, I would like to ask unanimous consent that Senator Inhofe's statement be included in the record.

Senator CARDIN. Without objection.

[The prepared statement of Senator Inhofe follows:]

STATEMENT OF HON. JAMES M. INHOFE,
U.S. SENATOR FROM THE STATE OF OKLAHOMA

I appreciate the opportunity to discuss these great water body bills today. I am extremely concerned about the implications that these bills may have on States, local land use decisions, and EPA's authority. I am particularly troubled by the approach taken in S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act.

In my statement submitted for the record for the last Chesapeake Bay hearing, on August 3rd, I said that "taking care of a resource like the Chesapeake Bay requires the buy-in of all interested stakeholders, from businesses, to fishermen, to land users and developers upstream, be actively involved and engaged. A top-down, heavy handed Federal approach will not lead to the kind of real world changes that are necessary to ensure the health of the Bay." I am disappointed that the bill before us today features exactly that top-down, heavy handed Federal approach I warned about.

This bill requires that States provide EPA with adequate smart growth plans. As I have stated in the past, the Federal Government should not tell States how to proceed on development; furthermore, as a strong Federalist, I think it is dangerous to have Washington make decisions that should be up to local communities. Allowing the EPA to approve decisions about taxes, jobs, and local land use is simply unacceptable.

I have heard from a number of groups who will be affected by these bills. I request that the statements of the Maryland State Builders Association; William Walker, Ph.D., Executive Director, Mississippi Department of Marine Resources; the Virginia Agribusiness Council; Virginia Grain Producers Association; Maryland Grain Producers Association; New York Corn Growers Association; National Corn Growers Association; and National Association of Wheat Growers, the National Cattleman's Beef Association, and a letter received from nearly 50 agricultural organizations within the watershed be inserted into the record and that the record remain open for 2 weeks to allow the committee to gather a full and complete record on the impacts of these bills as we move forward.

Unfortunately, I see this bill as another part of a hostile agenda aimed squarely at rural America and removing States and local officials as decisionmakers and instead placing them as merely following the dictates of Washington. Whether it's new energy taxes from cap-and-trade legislation or more unfunded environmental mandates, it's clear that this bill is yet one more raw deal for rural America.

Let me be clear, I have indicated to Senator Cardin my support for a reauthorization of the current Chesapeake Bay program, and I would like to work with Senator Cardin to make that happen. However, I cannot be supportive of a massive Federal expansion of EPA's authority, which poses serious consequences for agriculture and local development and which could pave the way for this approach in other great water bodies, like the Great Lakes and the Gulf of Mexico.

[The referenced material follows:]

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HOME BUILDERS ASSOCIATION OF WESTERN MARYLAND

MARYLAND NATIONAL CAPITAL BUILDING INDUSTRY ASSOCIATION

November 6, 2009

The Honorable Senator Benjamin L. Cardin
509 Senate Hart Building
Washington, D.C. 20510

Dear Senator Cardin:

Thank you for the opportunity to comment on S. 1816-The Chesapeake Clean Water and Ecosystem Restoration Act of 2009. We greatly appreciate the time that your staff took to meet with us and discuss the provisions of the bill in detail.

We continue to have concerns with the following provisions:

- The statutory deadline for establishment of the Chesapeake Bay-wide TMDL;
- the strict criteria outlined for the TMDL;
- the provision of authority to the EPA to withhold federal funding and force an EPA drafted plan on the state for implementation that could require more than 100% offsets for new sources if a Bay state fails to submit a plan or meet commitments;
- the trading provisions do not allow sediment trading;
- the provision allowing EPA new authority to set requirements for site planning, design construction and maintenance of developments; and
- the provision limiting stormwater discharge grants only to states that adopt the federal development guidelines.

Again, thank you for your consideration of our views on this legislation. We look forward to working with you and your staff as this legislation progresses.

Sincerely

Katie Maloney
Maryland State Builders Association

cc: Mike Burke
Sarah Greenberger
The Honorable Senator Mike Crapo

TESTIMONY OF
WILLIAM WALKER, Ph.D., EXECUTIVE DIRECTOR,
MISSISSIPPI DEPARTMENT OF MARINE RESOURCES
PROVIDED TO
SUBCOMMITTEE ON WATER AND WILDLIFE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
U.S. SENATE

November 9, 2009

Mr. Chairman and Members of the Subcommittee, I am Bill Walker, Executive Director of the Mississippi Department of Marine Resources and Chair of the Gulf of Mexico Alliance. Thank you very much for the opportunity to provide this testimony for your consideration. I am pleased to offer support for Senate Bill 1311 from my agency and State as well as the Alliance of the 5 Gulf of Mexico States.

The Gulf of Mexico is a true national treasure providing fisheries, recreational and energy resources for much of the nation. Collectively, the Gulf of Mexico represents the 6th largest economy in the world with a trade value of $5.9 trillion and is arguably the world's most productive fishery. This treasure is threatened with excessive nutrient loads, the loss of storm protection that coastal wetlands provide and the challenges of making our coastal areas more resilient. The sustainability of the Gulf's environment is vital to the economy and security of this nation. The Gulf faces tremendous challenges, and even greater opportunities. The five states that directly border the Gulf are working together like no other region of the country to more effectively use, conserve, and protect our public resources.

The Gulf of Mexico Program was formed in 1988 by the Environmental Protection Agency (EPA) as a non-regulatory, inclusive partnership with its mission, "**to facilitate collaborative actions to protect, maintain, and restore the health and productivity of the Gulf of Mexico in ways consistent with the economic well-being of the Region.**" The partnership includes representation from state and local governments, the citizenry in each of the five Gulf States; the private sector (business and industry); federal agencies responsible for research, monitoring, environmental protection, and natural resource management; and the academic community. The GMP's guiding principles are:

- Support environmental protection consistent with economic well being;
- Voluntary non-regulatory solutions
- State leadership on actions working with partners and the public
- Federal leadership on:
    - Research
    - Science
    - Funding

The Program works with the scientific community, policymakers at the federal, state, and local levels; and the public to help preserve and protect the Gulf. It has made significant progress in identifying the environmental issues in Gulf ecosystems and in organizing a program to address those issues. The Gulf Program partnership provides a tool to leverage the resources of a number of federal, state, and local agencies as well as a variety of numerous public and private organizations. While the success of the GMP is dependent on the individual states' commitment and the resources the program has to work with, the program has provided its limited funding, technical and logistical resources throughout the Gulf Region.

The youngest of EPA's three original Great Water-body Programs, the Gulf Program receives only a fraction of the appropriations that go to the Great Lakes and Chesapeake Bay programs. Please understand that both the Chesapeake and the Great Lakes are truly deserving of the resources they receive and that we in the Gulf support their efforts to protect and restore their resource. We simply want to be able to protect and enhance the Gulf in a similar fashion. EPA's Gulf of Mexico Program, for 20 years, has used its limited funding for over 500 projects totaling more than $40,000,000 around the Gulf and the program has been integral to the recovery of the Gulf following the storms of 2005. In Mississippi alone, 100 projects totaling nearly $8,000,000 have been awarded. The Gulf Program has a proven track record of maximizing the resources provided by Congress.

Recognizing that most federal environmental programs are implemented by the states, the Gulf Program serves as a conduit for the states into both the regional offices and headquarters of EPA. The Gulf Program serves as a resource for important and often common-sense issues important to the region. Highly respected within the Environmental Protection Agency and other federal agencies, the Gulf Program has assisted the States many times as a partner and advocate.

In 2004, with leadership from the State of Florida, the Gulf of Mexico Governors' Alliance was formed. The Alliance for the first time brought all the Gulf State Governors and senior program managers from their state programs together to focus on common issues affecting the Gulf. The Gulf Program quickly stepped up and provided the necessary support for this effort to organize and structure a 36 month action plan that encouraged better collaboration among the states and federal partners, producing a more consistent and cost-effective mechanism to address Gulf-wide issues. That first Action Plan, released in March of 2006 concluded earlier this year with nearly 100% of its actions completed. The second, more aggressive Action Plan was released earlier this year and provides a blueprint for expanded collaboration to improve the Gulf's ecosystem and the quality of life for its residents and visitors. Thanks in large part to the Gulf Program, the Gulf Alliance is recognized nationally as a model for a more holistic approach to managing a large marine ecosystem.

The value of the program for Mississippi was best exemplified following Hurricane Katrina. Despite the personal hardships, the Gulf Program staff was quickly back at work helping Mississippi and Louisiana recover as quickly and efficiently as possible.

An immediate issue that needed to be addressed was how contaminated were coastal waters as a result of the storm. As multiple state, federal and local agencies dealt with debris and hazardous materials removal, the Gulf Program worked to organize one of the most comprehensive federal monitoring efforts ever conducted in the northern Gulf of Mexico. The results were reassuring and helpful as the State focused on the efforts to cleanup and restore the area.

As plans were being made for the restoration and rebuilding of the coast, the small, but highly skilled Gulf Program staff worked unselfishly with other federal, state, and local leaders. They provided technical assistance and guidance, facilitated meetings and coordinated regulatory flexibility and oversight utilizing local knowledge and relationships that staff from Washington or Atlanta simply don't have.

The Program has evolved and improved as challenges and opportunities change. **The two decades the Gulf Program staff has spent working side by side with coastal leaders has fostered a level of respect and trust that was simply not there in the early years of the program.** When Mississippi decided to develop a master-plan to put more than ½ billion dollars into new water, wastewater and storm-water infrastructure, the Gulf Program was there. As residents of the coast, the Program staff knew the issues and players and understood the regulations. Demonstrating EPA's support of this regional approach, each of the newly formed county utility authorities was given a grant of $50,000 to assist with start-up capital that was nearly impossible for the cash strapped counties to come up with. The Program worked throughout the process to assist MDEQ and the counties in any way they asked to make the effort a success.

The Gulf Program, recognizing that alternative lower cost wastewater treatment options were being used very successfully in other parts of the country, quickly arranged for the leaders in the field of decentralized wastewater to put on a two day conference in Biloxi. With 120 attendees, including representatives from all coastal county utility authorities as well as state regulators, the conference was a huge success and the Program has been asked to conduct a similar conferences designed specifically for the land developers. Attendees were able to learn from the national leaders in this technology and see a variety of case studies that demonstrate the value of such systems. The effort was a true win-win for the coast and its environment.

A similar example was the realization by the State that the cost for large mechanical wastewater treatment systems was dramatically limiting how far the resources secured for infrastructure rebuilding could go. MDEQ asked the Gulf Program to assist. Gulf Program staff quickly realized that techniques were being used in Louisiana where treated wastewater was used as an enhancement to natural wetlands. In this case the nutrients, organic matter and solids from the wastewater in the correct amounts can actually improve the productivity and viability of wetlands. GMP has worked with the environmental agencies from both states, both Regions 4 and 6 of EPA and conducted a workshop and tour on this technology in April 2007. As has been done on countless occasions, the staff of Gulf Program served as no-cost consultants to the State.

Examples of Gulf of Mexico Program Successes:

- Projects to reduce contamination and restore hundreds of acres of shellfish reefs
  - TNC 2006 Restoration of 21 Acres in the MS Sound & Biloxi Bay
  - Jackson County's Removal of Point Source to aid in Reclassifying Certain Shellfish Growing Waters
  - Jackson County's Demonstration Project to Replace Conventional Septic Tanks with Rock/Reed Filter Systems
- Produced the first comprehensive report of Gulf invasive species
- Wetlands Protection & Education
  - Educating Hancock County students
  - TNC's Mike's Island Restoration Plan
- Funded 160 projects to assess or improve water quality resulting in the delisting of 109 rivers and streams from EPA's list of polluted waters
  - Preliminary Design & Engineering for Kiln Water & Fire Protection
  - DMR's Sea Grass Mapping & Restoration in the MS Sound
  - DMR's Restoration of upland Longleaf Pine
  - MDEQ Beach Monitoring & Public Awareness Program
  - Hancock County's Wastewater District #1, Developing a Facilities Plan for the unincorporated portion of the County South of I-10
- Failing Septic Tanks and Wastewater Projects
  - Newton County's Soil & Water Evaluation of constructed wetlands to treat wastewater from concentrated animal feeding operation
  - Feasibility Study for the Wastewater Services for the Community of Brooklyn
- Aquaculture
  - USM's Use of Recirculating Surface Water and Biological Filtration for Aquaculture
- Designating six (6) Coastal Education Learning Centers, one in each Gulf State and in Veracruz, Mexico
- Recognized and presented 170 Gulf Guardian Awards to commemorate the people, agencies and projects doing their part to protect and improve the Gulf of Mexico
  - MS Power's Household Hazardous Waste Collection Day
  - St. John's Episcopal Church Youth, Bayou Clean-up after Hurricane Katrina
  - Jim Barksdale & the Governor's Commission on Recovery, Rebuilding & Renewal
  - DuPont & The West Harrison County Water & Sewer District for the DeLisle Wastewater Treatment Plant
  - Barbara Viskup, MS DEQ Biologist, for Assistance to Neighbors & Co-Workers in the Aftermath of Hurricane Katrina
  - DMR & USM for using 85 commercial fishermen to remove and recycle 12,000 derelict Crab Traps
  - MS Coastal Plains Land Trust for Watershed Outreach Program

The EPA Gulf of Mexico Program, time after time has demonstrated that it can quietly, often behind the scenes, work with a variety of partners to produce positive results that improve the coastal environment and the quality of life of its residents. It is a valued partner to the coastal resource management agencies and deserves our and your support. This partnership has a unique opportunity to move to a new level with the Gulf of Mexico Alliance. With leadership provided by the Executive Directors of Mississippi Departments of Environmental Quality and Marine Resources, strong support from other state and federal agencies, and the White House's Council on Environmental Quality, the Alliance has developed a regional ecosystem management strategy for the Gulf. Provided that we can better coordinate congressional support for the effort, the program can do an even better job of helping the Gulf States sustain, protect, and conserve its resources and make its communities more resilient and improve the quality of life for its citizens.

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November 9, 2009

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U.S. Senate Environment and Public Works Committee
410 Dirksen Senate Office Building
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Senator Mike Crapo
Ranking Member, Water and Wildlife Subcommittee
U.S. Senate Environment and Public Works Committee
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Senators Cardin and Crapo,

On behalf of the members of the Virginia Agribusiness Council, we respectfully submit the following comments in regards to S. 1816 and the efforts to expand and reauthorize the Chesapeake Bay Program. We ask that these comments be entered into Congressional record as part of the November 9, 2009 hearing on "Great Body Water Legislation" before the Senate Environment and Public Works Subcommittee on Water and Wildlife. The Virginia Agribusiness Council represents farmers, foresters, processors, manufacturers, and suppliers of agricultural and forestal products, as well as approximately 40 commodity associations.

Over the past week, our members have reviewed the provisions of S. 1816 and remain extremely concerned about the implications of the legislation. While our industry is committed to taking steps to improve water quality across the Commonwealth includnig the Chesapeake Bay, we are concerned that this legislation does not soundly or efficiently achieve goals for improving water quality. Agribusinesses across the Bay watershed have implemented best management practices, complied with permit requirements, and made innovative and environmentally friendly changes in their production systems over the past two decades. According to the Chesapeake Bay Program, as of 2008 approximately 50% of the goals for nitrogen, phosphorus, and sediment reductions from agriculture have been achieved. This progress will continue in the future with innovations in agricultural production, increased participation in best-management programs, and farmer education.

The provisions of this legislation are most troubling to us and threaten Virginia's number one industry of agriculture and forestry – a $79 billion economic engine. In effect, the legislation places a cap on the watershed's economic growth, impacting jobs, development, and food production. This bill will impose severe economic

hardship to our industry and further increase pressure for the Chesapeake Bay's most effective and efficient land use, production agriculture, to move out of the watershed. Inclusion into law of the specific caps for Total Maximum Daily Loads (TMDLs) for the Bay is premature, as is the accelerated timetable for TMDL development set forth in the legislation. Court-ordered TMDL development must be in place by May 2011, however this legislation sets a deadline of December 2010. Less than a week ago on November 4, 2009, EPA communicated to each Bay state and Washington DC expectations in setting TMDL implementation plans. This process has just barely gotten underway. Codification of deadlines, severe limits, and expanded EPA authority at this point is premature and troubling. Agribusinesses in Virginia will be participating in the development of the TMDL. However, we are unsure of the specific requirements for implementation and, most importantly, the true implications to agriculture and forestry at this time.

By setting a hard cap on the amount of nutrients and sediments in the Bay through codifying the TMDL we believe any economic activity will also be effectively capped under this legislation. Young farmers or those who would like to expand their existing businesses will be forced to do so at significant costs for purchasing offsets, if they are able to do so at all. We are unsure as to the fate of already permitted "point source" discharges from agriculture. Will animal and livestock operations be required to comply with costly permit requirements or retire out of business? Will they be authorized to expand their business capacity beyond their current animal numbers without purchasing the right to do so from another agricultural producer? Most importantly, what will be the fate of a viable, sustainable, and growing farm economy in the Bay region under these cap limits?

Our members are supportive of offset or trading programs as market-based solutions to environmental issues. However, in light of the heavily regulated environment that agriculture could be operating under, the ability to generate offsets from our industry is questionable at best. In Virginia, compliance with the TMDL may mean as much as 92% implementation of practices, leaving a mere 8% for offset generation to go beyond TMDL requirements. Under these circumstances, retirement or loss of agricultural land will be the only available offset for use by any expanded or new economic development. The loss of this land in profitable agricultural production leads to loss of food production in the Bay watershed. If instead, few offsets are available for purchase, it leads to loss of economic growth within the watershed. In either scenario, the outcome is concerning at best.

Technical assistance and cost-share funds to help agriculture implement the best management practices that will be required for Chesapeake Bay clean-up remain a priority for our membership. We appreciate the provisions in the legislation that set aside federal funds for these purposes, and continue to support efforts at the state and federal levels to increase cost-share and technical assistance for best management practices. However, there is no assurance that cost-share funding through the Farm

Bill, new funds authorized in this legislation for technical assistance, or state cost-share funding will continue to exist. As more regulatory measures are placed upon agriculture over the next ten to fifteen years, we cannot guarantee to producers that cost-share funding will be appropriated to offset the costs of compliance.

The legislation establishes an elevated level of Clean Water Act regulation on agriculture in the Bay watershed greater than is in place in any other area in the nation. This unprecedented expansion of EPA authority to take any action deemed necessary to meet Bay goals will result in severe economic hardship for Bay-region producers, who must compete not only with their counterparts across the country but also worldwide. Expanding EPA's authority over any pollution that affects water quality effectively eliminates existing Clean Water Act provisions, such as agricultural stormwater exemptions placed into federal law due to the specific nature of agricultural production.

Current data utilized to make decisions on Chesapeake Bay loading limits, regulations, and permits must be based on accurate, scientific data. The basis for many of these decisions rests with the Chesapeake Bay Model, however, this model does not currently contain accurate data as to all best management practices implemented by farmers. For example, the Model does not account for agricultural best management practices voluntarily (without cost-share assistance) implemented by farmers or for those who continue to utilize a practice after the "life-span" of the cost-share agreement has ended. While the legislation speaks to an accounting system for practices that have been implemented, this must be the first action to be undertaken.

Our members are committed to water quality, not only in the Bay, but in their local streams and rivers. In light of our commitment to these goals, we ask the Water and Wildlife Subcommittee to reauthorize the existing Chesapeake Bay Program without dramatically expanding federal authorities. Adequate time should be given to develop creative ways to economically achieve water quality goals, expand economic development, and refine the science and modeling in the Bay watershed. Thank you for this opportunity to comment and we look forward to continuing discussions with you regarding this critical issue.

Sincerely,

Donna Pugh Johnson
President

November 9, 2009

Senator Benjamin L. Cardin
Chairman, Subcommittee on Water and Wildlife
U.S. Senate Committee on Environment and Public Works
509 Hart Senate Office Building
Washington, DC 20510

Senator Mike Crapo
Ranking Member, Subcommittee on Water and Wildlife
U.S. Senate Committee on Environment and Public Works
239 Dirksen Senate Office Building
Washington, DC 20510

Senators Cardin and Crapo,

We write today in regards to S. 1816 and as part of the November 9, 2009 Water and Wildlife Subcommittee hearing, "Great Body Water Legislation." We ask that you carefully consider the broad implications of this legislation for production agriculture and the important role our industry will play in assuring water quality.

This legislation subjugates state and local actions to the approval of federal authority through the Environmental Protection Agency (EPA). Our producers and members are concerned about the requirements established by this legislation with little or no consideration to economic impact or future growth. By codifying the May 2009 Executive Order, S. 1816 would establish broad and undefined new authorities for the U.S. Environmental Protection Agency (EPA) and other federal agencies. Many of the reports required by the Executive Order are still being drafted and not yet publicly released. Language in this bill significantly expands EPA authority to include withholding state funds, withholding current and new permits, superseding state and local programs and other measures. We believe codifying the Executive Order cedes the legislative process to the executive branch and establishes questionable authority, particularly since the administration's proposals are still being developed.

This proposed legislation also codifies already court-ordered Total Maximum Daily Loads (TMDLs) while shortening the process for TMDL completion. The TMDL process, which includes 92 TMDL's throughout the watershed, is the most complicated TMDL process ever undertaken by EPA and is only given 8 months to complete according to S. 1816. In addition, the current nutrient trading or offset program would be rendered worthless. Because of the strenuous baseline cap established by EPA through the TMDLs, less than 10% of the agricultural acres in the watershed would be eligible to participate in offsets. Additionally, certain agriculture sectors will mostly likely need to buy offsets to update or expand their operations. Without adequate time and science to effectively evaluate the TMDL process, S. 1816 will impose burdensome regulations and penalties before procedures and practices for efficiently achieving desired water quality goals are defined.

Along with the Executive Order, the Chesapeake Bay Program announced two year milestones with which to track TMDL progress through 2025 -- the estimated duration of full Chesapeake Bay

restoration. Currently, milestones have only been drafted through December 31, 2011 which leaves approximately 14 years of unknown regulations that would be codified by S. 1816. In addition, this legislation carries strong penalties such as a 90 day period to correct any missed two year milestones. In the case of production agriculture, this penalty leaves no room for weather problems or delayed harvest which is a common challenge. This lack of flexibility demonstrates the absence of economic impact evaluation for the agricultural sector.

In addition, this language also exposes family famers to potential citizen action lawsuits both through the permit process and by establishing mandatory regulations. In respect to water quality, agriculture is the Chesapeake Bay watershed's most effective and efficient land use; however, farmers would bear such significant economic hardship from S. 1816 that many farms would be sold into less desirable, detrimental land uses. We believe this type of approach will not achieve desired water quality benefits because it seeks to penalize production agriculture -- the very industry that stands to provide the most benefit to the Bay. Agriculture is the watershed's top economic industry and the only non-point sector that has consistently made progress toward water quality goals over the past decade.

While efforts to improve the Chesapeake Bay are critically important, achieving water quality must be a cooperative partnership instead of cumbersome regulations. With extremely diverse agriculture inside the Bay watershed, no "one size fits all" approach will work. Flexibility and voluntary measures are key to successful water quality programs.

While many changes could be made to this legislation, we believe sufficient scientific information is not in place to support S. 1816. It has been acknowledged and proven that the Chesapeake Bay Model operates from incomplete information, and production agriculture has produced numerous examples of currently implemented farm conservation practices that have not been counted or included in the Chesapeake Bay Model's current process. Without complete information or current science, this current proposal is unwise for Bay health and economic growth.

There are some positive aspects included in S. 1816 such as data protection and technical assistance. However, these measures are pale in comparison to the unintended consequences and broad implications of this bill. We ask the Water and Wildlife Subcommittee to reauthorize the Chesapeake Bay Program without substantive changes in order devote adequate time and science to develop creative ways for economic recovery and growth to coexist with water quality goals and initiatives. We welcome any opportunity to continue working with the subcommittee to achieve improved water quality in the Chesapeake Bay and thriving farming operations throughout the region.

Sincerely,

Maryland Grain Producers Association
National Association of Wheat Growers
National Corn Growers Association
New York Corn Growers Association
Virginia Grain Producers Association

NATIONAL CATTLEMEN'S BEEF ASSOCIATION
1301 Pennsylvania Ave., NW, Suite #300 • Washington, DC 20004 • 202-347-0228 • Fax 202-638-0607

November 9, 2009

The Honorable Ben Cardin
Chairman
Water and Wildlife Subcommittee
Senate Committee on Environment
and Public Works
410 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Mike Crapo
Ranking Member
Water and Wildlife Subcommittee
Senate Committee on Environment
and Public Works
456 Dirksen Senate Office Building
Washington, DC 20510

Dear Chairman Cardin and Senator Crapo:

On behalf of the over 230,000 direct and affiliated members of the National Cattlemen's Beef Association (NCBA), I am writing to express our concern on the radical expansion of Federal authority contained in S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009. This is not a simple extension of the current Chesapeake Bay program, but rather a significant expansion of Environmental Protection Agency (EPA) authority over all facets of the economy, including agriculture, in the Chesapeake Bay region, and it sets a precedent that will impact other watersheds, and agriculture, across this country. Because of this, NCBA opposes S 1816.

Agriculture has long been an important part of the economy in this region of the country, and producers in the Bay states are already subject to some of the most restrictive environmental laws in the country. Agriculture has always been at the table to discuss ways to improve the water quality in the Bay, and many best management practices have been put in place. S. 1816 fails to take these measures into account thus illustrating it is legislation written without consideration of all of the facts and science.

One of our concerns is that it codifies the Bay total maximum daily load (TMDL) process and sets hard caps for nitrogen, phosphorus, and sediment in the Bay. The Bay TMDL process has just begun and must be done in a pragmatic and thorough way. Setting an artificial date of completion for December 2010 will cause the process to be accelerated which typically results in regulations based on less than accurate information. The hard caps on nitrogen and phosphorus will have a huge impact on agriculture as it will prevent the expansion or current farms or the establishment of new farms without obtaining more permits and "offsets" through a Bay "cap and trade" program. This bill's increased pressure on agriculture means that it will be even harder to provide jobs and food for the region and the country.

This bill also expands EPA's authority to promulgate regulations and issue permits needed to control "pollution" to meet water quality goals, not withstanding other Clean Water Act (CWA)

provisions. CWA's definition of "pollution" is broad and means any man-made or man-induced alteration of water, thus giving EPA the authority to regulate any activity that affects water quality including agricultural storm water and air deposition. This is yet another attempt at expanding CWA authority over agriculture.

Cattle producers in the Chesapeake Bay region, and across the nation, are critical stewards of the air, land, and water because we rely on them to produce the high quality beef needed to feed our nation and the world. We are willing to work with all parties to improve water and air quality, but we believe this legislation only forces regulations on us rather than recognizing our ability to be a part of the solution. In addition, you have no representation from agriculture testifying at your hearing on Monday, November 9th. Therefore, NCBA opposes S. 1816 and requests that your legislation be reintroduced as a simple reauthorization of the existing Chesapeake Bay program and allow agriculture, industry, and the Bay states the opportunity to continue the process they have already started to address water quality.

We ask that our letter be made a part of the record for your subcommittee hearing on Monday, November 9th, 2009 entitled "Legislative Hearing on Great Water Body Legislation: S. 1816 and S. 1311."

Sincerely,

Gary Voogt
President

November 9, 2009

Senator Benjamin L. Cardin
Chairman, Water and Wildlife Subcommittee
U.S. Senate Environment and Public Works Committee
410 Dirksen Senate Office Building
Washington, DC 20510

Senator Mike Crapo
Ranking Member, Water and Wildlife Subcommittee
U.S. Senate Environment and Public Works Committee
456 Dirksen Senate Office Building
Washington, DC 20510

Senators Cardin and Crapo,

We write today in regards to S. 1816 and the efforts to expand and reauthorize the Chesapeake Bay Program. We ask that these comments be entered into Congressional record as part of the November 9, 2009 hearing on "Great Body Water Legislation" before the Senate Environment and Public Works Subcommittee on Water and Wildlife.

Across the Chesapeake Bay watershed and nation, our agricultural producers and organization members are very concerned about the implications of S. 1816 and believe it does not soundly or efficiently achieve the goal of improved water quality in the Chesapeake Bay. In effect, the legislation places a cap on the watershed's economic growth – impacting jobs, development, and food production. This bill will impose severe economic hardship to our industry and further increase pressure to the Chesapeake Bay's most effective and efficient land use, production agriculture, to move out of the watershed.

Through codifying executive and regulatory authorities, S. 1816 will hamper innovative solutions in areas such as nutrient trading, economic growth, farm adaptive management and overall water quality restoration. Without adequate time and science to effectively work through processes such as the drafting of the Chesapeake Bay Total Maximum Daily Load (TMDL), S. 1816 will impose burdensome regulations and penalties before defining procedures and practices that are proven to efficiently achieve desired water quality goals. This accelerated course of action is expensive and damaging to the watershed's economy, viability of our agriculture sector, and overall water quality objectives.

We ask the Water and Wildlife Subcommittee to reauthorize the existing Chesapeake Bay Program without dramatically expanding federal authorities. We believe adequate time should be given to develop creative ways for economic recovery and growth to partner with water quality goals, as well as to refine the science and modeling in the watershed. Our organizations look forward to continuing discussions with you regarding this critical issue and thank you for the opportunity to comment.

Sincerely,

Agri-Mark, Inc.
American Farm Bureau Federation
Association of Virginia Potato &Vegetable Growers
Central Virginia Nursery & Landscape Association
Cooperative Milk Producers Association
Dairy Farmers of America, Northeast Council
Dairylea Cooperative Inc.
Delaware Maryland Agribusiness Association
Delmarva Poultry Industry, Inc.
Maryland Association of Soil Conservation Districts
Maryland Cattlemen's Association
Maryland Farm Bureau Federation
Maryland Grain Producers Association
Maryland Pork Producers Association
Maryland & Virginia Milk Producers Cooperative Association
National Association of Wheat Growers
National Cattlemen's Beef Association
National Chicken Council
National Corn Growers Association
National Council of Farmer Cooperatives
National Milk Producers Federation
National Pork Producers Council
National Turkey Federation
New York Corn Growers Association
PennAg Industries Association
Pennsylvania Cattlemen's Association
Pennsylvania Center for Beef Excellence
Pennsylvania Farm Bureau
Pennsylvania Pork Producers Association
South East Dairy Farmers Association
Southwest Virginia Agricultural Association
St. Albans Cooperative Creamery
The Fertilizer Institute
United Egg Producers
United States Poultry and Egg Association
Upstate-Niagara Cooperative
Virginia Agribusiness Council
Virginia Cattlemen's Association
Virginia Christmas Tree Growers Association
Virginia Cotton Growers Association
Virginia Crop Production Association
Virginia Farm Bureau Federation
Virginia Forage & Grasslands Council

Virginia Forest Products Association
Virginia Golf Course Superintendents Association
Virginia Grain Producers Association
Virginia Green Industry Council
Virginia Horse Council
Virginia Nursery & Landscape Association
Virginia Peanut Growers Association
Virginia Pork Industry Association
Virginia Poultry Federation
Virginia Sheep Producers Association
Virginia Soybean Association
Virginia State Dairymen's Association
Virginia State Horticultural Society
Virginia Turfgrass Council
Virginia Wineries Association
West Virginia Poultry Association

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November 9, 2009

Senator Benjamin L. Cardin
Chairman, Water and Wildlife
Subcommittee
U.S. Senate Environment and Public Works
Committee
410 Dirksen Senate Office Building
Washington, DC 20510

Senator Mike Crapo
Ranking Member, Water and Wildlife
Subcommittee
U.S. Senate Environment and Public Works
Committee
456 Dirksen Senate Office Building
Washington, DC 20510

Senators Cardin and Crapo:

The American Farm Bureau Federation appreciates the opportunity to offer the following comments on S. 1816 the *"Chesapeake Clean Water and Ecosystem Restoration Act of 2009."* We ask that these comments be entered into record as part of the November 9, 2009 hearing on "Great Body Water Legislation" before the Senate Environment and Public Works Subcommittee on Water and Wildlife.

Under the bill, EPA is required to establish a basin-wide Chesapeake Bay Total Maximum Daily Load (TMDL) for 92 tidal tributaries. The TMDL will mandate wasteload allocations and load allocations for nitrogen, phosphorus and sediment at levels necessary to implement applicable water quality standards. Under the bill, states will initially use new authorities provided in S.1816 to implement the TMDL. If a state fails, EPA must mandate implementation. Finally if both the state and EPA fails to achieve the TMDL, or if citizens are not satisfied with the implementation by a state or by EPA, the bill provides for citizen suits.

S.1816 does not stop there. It creates new authorities for states ***"to issue CWA permits for any pollution source determined to be necessary to achieve the nitrogen, phosphorus and sediment reduction in the implementation plan."*** This is sweeping new authority that is enforceable by EPA and citizen suits. Even more troubling is authority for federal implementation. S.1816 gives EPA the authority to ***promulgate any regulations or issue any permits as EPA determines is necessary*** to control pollution and meet the goals defined in the implementation plan. Separately and/or coupled together, both of these provisions are an extraordinary expansion of federal authority. It is so vast in its reach that EPA would effectively control land use and local economic growth and development. In fact, S.1816 could even require regulations that result in a reduction in economic activity throughout the watershed to achieve the Chesapeake Bay Standard.

While we support efforts to improve water quality in the Chesapeake Bay, we oppose S.1816 because we believe that it will force wide spread retirement of agricultural lands and shrink agricultural production in the watershed significantly.

Sincerely,

Bob Stallman
President

Maryland Farm Bureau, Inc.
8930 Liberty Road • Randallstown, MD 21133 • (410) 922-3426

November 9, 2009

Senator Benjamin Cardin
Chairman, Water and Wildlife Subcommittee
410 Dirksen Senate Office Building
Washington, D.C. 20510

Senator Mike Crapo
Ranking Member, Water and Wildlife Subcommittee
456 Dirksen Senate Office Building
Washington, D.C. 20510

Re: S. 1816, The Chesapeake Clean Water and Ecosystem Restoration Act

Dear Senators Cardin and Crapo:

On behalf of 32,000 Farm Bureau families across the state of Maryland, I would like to thank you for the ongoing dialogue between your office and our organization concerning the Chesapeake Bay restoration effort. As you know, Maryland farmers have been longstanding partners in the effort to protect the Bay. In fact, our farmers lead the nation in the use of conservation best management practices and have committed more personal funds to this effort than any sector in the watershed.

Over the last two weeks we have had the opportunity to review your legislation, S. 1816, The Chesapeake Clean Water and Ecosystem Restoration Act. It is with sincere concern that I inform you that the bill as drafted threatens the very existence of family farms in Maryland.

S. 1816 sets an unlevel playing field for farms in the Chesapeake Bay region by establishing a higher level of EPA Clean Water Act regulation than is required of farmers in the rest of the country. Maryland farmers are competing against producers in other states and around the world, with minimal opportunity to add additional costs into the price we are paid for our products. Your bill gives EPA unprecedented authority to take any and all action the agency deems necessary to reach Bay restoration goals. This includes requiring all livestock operations, regardless of size, and possibly any producer that fertilizes a field to operate under a Clean Water Act permit. This will be cost prohibitive for small and medium size farm operations, particularly since the bill authorizes citizen suits against all permittees.

Your bill also puts into law specific caps for the Total Maximum Daily Load for the Chesapeake Bay and gives EPA ultimate authority to implement the program. EPA may promulgate any regulation and issue any permit necessary, notwithstanding any other provision of the Clean Water Act – effectively repealing the stormwater exemption for farms in the watershed. Unfortunately, Maryland farmers still have very little information on the TMDL, what it means at the farm level and how they are expected to measure the non-point sources attributed to their farms. If the Tributary Strategy program is any indication, Maryland farms could be required to install every conservation practice available on every acre of farmland,

regardless of the economic or agronomic value. We believe your bill is premature in this area and should not mandate a program and establish onerous penalties before we have a chance to consider the actual farm implications.

We applaud the general goal of the bill to engage all nutrient contributors in all six watershed states – particularly those in the urban and suburban areas that are sliding backwards in the effort to reduce nitrogen, phosphorus and sediment pollution. However, we oppose penalty provisions that allow EPA to force only permitted businesses to make further reductions in the event that the rest of society misses the mark every two years.

As we read it, EPA would have authority to order all permitted entities to reduce discharges - meaning livestock and poultry operations could be told to reduce herd sizes. Through the permit, EPA could dictate farming practices such as fertilization, harvest and cover crop planting dates. The agency would also have the authority to deny permits – meaning new or young farmers may be denied the opportunity to farm in Maryland.

We appreciate the provisions in your bill to set aside federal funds for technical support in NRCS and Soil Conservation District offices to help farmers develop conservation plans and install BMPs. We continue to believe that the best way to protect the Chesapeake Bay from a farm perspective is to encourage farmers to use the BMPs that fit their specific operations and economic circumstances. Technical assistance by planners in local offices is critical to implementing BMPs.

Unfortunately, there can be no assurance that new funding authorized in your bill will be appropriated annually, even though the expensive mandates will continue to exist. It appears that most of the new funding authorized is targeted to local governments. While we agree that stormwater management and waste water treatment upgrades are necessary and will require federal assistance, we are concerned that if Congress fails to make the annual appropriation, farmers will bear the brunt of nutrient reduction when local governments cannot afford the investment.

Finally, your bill mandates an offset program that proponents believe will facilitate the purchase of BMPs on farms in exchange for development activities in other areas of the state. Under the bill, any development or redevelopment activity in the watershed must restore the land to the pre-development hydrology. This applies to the building of schools, hospitals and roads as well as homes and businesses. If the restoration cannot be accomplished on site, an offset must be purchased and a nutrient reducing BMP must be installed elsewhere in the state. Proponents believe that the offsets will be supplied by farmers.

The problem with this concept is that there will be no offsets available on Maryland farms. The bill mandates that offsets may only be sold after a farm reaches its individual nutrient reduction obligation. Under the TMDL program mandated in the bill, the expectation is that every farm will have to install every BMP available on every acre just to reach the goal. Experts in this area agree that there will be no offsets left to sell on farms. Unfortunately, most farms will not be able to install the plethora of costly BMPs needed to meet the TMDL without financial assistance. We believe the offset provision will leave local governments and developers with no other option than to purchase whole farms and take them out of production in order to achieve the offset. The alternative is all economic development in the watershed must end.

We know that efforts to improve the condition of the Chesapeake Bay must be a priority as the watershed states move towards the 2025 goals. This will be a substantial challenge in light of exploding population expectations in the region. We know that all citizens in Maryland treasure the Chesapeake Bay. We also know that Marylanders want family farms to remain economically viable in order to provide fresh, locally produced farm products. Unfortunately, S. 1816 takes the decision making authority on critical lifestyle issues away from state and local governments and the citizens they represent and gives the federal Environmental Protection Agency ultimate control over our communities.

For the sake of our family farmers and the hope for a future generation of producers in Maryland, we request that you not to pass S. 1816 in its current form.

Sincerely,

W. MICHAEL PHIPPS
President

NAIOP
COMMERCIAL REAL ESTATE DEVELOPMENT ASSOCIATION
MARYLAND CHAPTER

November 16, 2009

The Honorable Benjamin S. Cardin
509 Hart Senate Office Building
Washington, D.C. 20510

Subject: S. 1816 – Chesapeake Clean Water and Ecosystem Restoration Act of 2009

Dear Senator Cardin:

The National Association of Industrial and Office Properties - Maryland (NAIOP) represents companies involved in all aspects of commercial, light-industrial, office and mixed-use real estate development. NAIOP believes that restoration of the Chesapeake Bay is a shared responsibility borne by all residents of the watershed and those who contribute pollutant loading to its waters. Our member companies are strongly committed to participating in the restoration efforts underway in Maryland. The industry has a demonstrated record of bringing buildings to market that feature high performance, energy saving construction methods and environmentally sensitive land development practices including advanced stormwater management techniques. In Maryland our member companies are building to a water quality standard known as, "woods in good condition" a design standard that results in stormwater discharge from new developments that has the same characteristics as runoff from a healthy forest.

General Comments

Establishment of the Chesapeake Bay TMDL promises to be a complicated and costly experience for everyone living in the watershed. The key to success, in our opinion, is maintaining flexibility and allowing regulated entities and populations to meet an obligation that is proportionate to their relative responsibility for pollutant loading and to do so through the most cost effective methods possible. Since the TMDL is to be implemented using adaptive management techniques, it is particularly troubling that S. 1816 codifies a specific on-site stormwater performance standard for owners of urban land requiring them to return even redevelopment property to the predevelopment hydrology, *"to the maximum extent technically feasible"* a standard that allows no consideration of the cost or relative environmental benefits associated with compliance. (Section 117 J - Actions by States, 3 – Stormwater Permits) This and other sections of the bill reduce the likelihood that urbanized areas in the watershed will be regulated in a proportionate fashion or that urban land owners will be permitted to cut pollutant loadings through the most cost effective means. The bill correctly allows other regulated entities in the watershed to comply via state implemented regulatory process using adaptive management techniques.

U.S. Mail: P.O. Box 16280, Baltimore, Maryland 21210-2053 **Direct:** 410.977.2053 **Email:** naiop.md.tom@verizon.net

Our member companies recognize the benefits and progress derived from the coordinated and collaborative approach to Bay clean up the Chesapeake Bay Program Office has achieved since it was established. Implementing the TMDL poses difficult scientific and political challenges that are best suited to the program office structure. NAIOP recognizes that continued progress toward bay cleanup goals requires reauthorization of the Chesapeake Bay Program Office and our member companies would welcome the opportunity to work with you and your staff toward that end. Unfortunately, the industry has serious concerns about the additional scope of S. 1816. Our members are concerned that S. 1816:

1. expands EPA authority beyond what is currently provided for in the Clean Water Act in contradiction of state and local efforts to reduce pollutant loading;
2. unnecessarily codifies specific regulatory actions and deadlines that will reduce public participation in the TMDL and contradict state implementation plans;
3. increases the probability of litigation by expanding the scope of government and private actions subject to citizen suits;
4. obligates regulated entities, state and local governments to incur additional costs without providing adequate funding;
5. mandates EPA development of regulations and model ordinances on land development site planning, design and construction and inappropriately ties eligibility for grant funding to local government adoption of EPA guidance;
6. does not require that EPA or the states ensure that TMDL mandates are proportionate and cost effective;
7. neglects to include sediment in a nutrient trading program and;
8. underestimates the cost and negative growth management ramifications of strictly applying zero discharge stormwater mandates to development and redevelopment sites.

Section 2. Findings

While we do not want to dedicate too much time with the uncodified portion of the bill, the findings repeat a number of commonly made statements that need to be placed in better context.

Finding 12 - Urban Contribution to Bay Pollution – According to EPA, urban and suburban lands contribute between 10% and 30% (depending on the respective pollutant) of pollution entering the Chesapeake Bay. In 2009 the Chesapeake Bay Program Office revised downward its estimate of the percentage of bay pollutants previously attributed to urban and suburban sources. It is often repeated that urban and suburban development is the only major source of pollution in the watershed that is increasing. We are not aware that the Chesapeake Bay Program Office has deconstructed the urban – suburban portion of the pollution loading data to explain why this sector is making such poor progress toward attainment of water quality goals. In some jurisdictions 90%

of development occurred before the advent of modern stormwater management techniques. The relative contribution of new construction and the effect of reclassifying acreages from other categories into the urban category do not appear in the most commonly sited sources. Chesapeake Bay Program Office data also indicates that legacy sediments and pollution from septic systems is included in the urban numbers. In order to specifically identify the causes and effectively apply pollution reduction strategies to urban lands the relative contribution of lands build without stormwater management and those build with modern stormwater management controls should be separated.

Findings 13 and 14 – Impervious Surface Growth Misleading Indicator – Impervious surface data is often used as a proxy for predicting water quality impairments. The statistics quoted are commonly derived from satellite imagery and a regression analysis that is designed to account for tree cover; a methodology that is still undergoing validation by its authors. More important, the data do not account for the presence of stormwater management devices that reduce the effect of impervious surfaces on stormwater runoff making the gross rate of impervious surface a misleading indicator of water quality degradation. Maryland's current stormwater regulations require additional stormwater management protections on a sliding scale that increases with the amount of impervious surface on the development site insuring that all development sites perform to a standard equivalent to "woods in good condition." It is also important to point out that almost all of Maryland's designated growth areas are on schedule to reach build out during the next 15 to 20 years drawing into question whether extrapolating past growth in impervious surface is a useful way to accurately predict the amount of future impervious surface or water quality.

Findings 18 and 19 – The Unrecognized Cost of Low Impact Development (LID) Techniques – Managing stormwater using low impact development techniques can be less expensive than conventional facilities in some cases - usually in very low density development. Cost comparison studies usually neglect to account for the loss of additional buildable land that must be dedicated to LID. Low impact development techniques undermine the ability to achieve density in urban settings, reducing yield and deflecting growth away from Smart Growth areas. Reducing stormwater runoff through infiltration and pervious surfaces is also negatively affected by geological limitations in areas where clay soils or rock is prevalent.

Section 3. Section 117 - Chesapeake Bay Program

(a) Definitions, 18 TMDL (b) Inclusions – This provision allows the TMDL to include pollutant allocations or caps that are regulated in units greater than "daily" loads. The provision will make the TMDL more enforceable and should permit more flexible "average daily loads" and other measurements to be used as long as the approaches still achieve required water quality standards.

(d), (e) and (h,(2)) Technical Assistance, Implementation, Monitoring and Stewardship Grants – Although there seems to have been some care taken when drafting this section to guide the use of

grants, it seems clear that the available grant money is not sufficient to fund a broad list of eligible activities. Furthermore, Maryland's Implementation Plans, for example, include activities that reduce pollution loading a various rates and at various levels of cost effectiveness. Grants under these sections should be prioritized by awarding them on a competitive basis and evaluated based on the direct dollar for dollar pollution reduction resulting from the proposal.

(f) Federal Facilities Coordination – This section requires that a *"Federal agency that owns or occupies real property in the Chesapeake Bay watershed"* ensure that the property and actions taken with respect to the property comply with a number of adopted bay action plans at the state and federal levels as well as any subsequently development plans. NAIOP members are both building for and leasing property to federal agencies. While the federal government may set standards for federally owned property and buildings commissioned by federal agencies, we are concerned that broadly written and as yet undefined obligations will be placed on construction projects that are in planning or under construction. As owners of property that is leased to federal agencies, operational changes or physical improvements to buildings or grounds to meet the requirements of federal tenants whose time of occupancy is uncertain and may be limited, strikes our members as impractical.

(i) (1) (A) TMDL Establishment - This section sets a statutory deadline of December 31, 2010 for EPA to establish a bay-wide TMDL. Although this deadline is consistent with target dates being used by the Chesapeake Bay Program codification of the deadline will remove flexibility of even a matter of weeks in the implementation process. The effort to meet this internal deadline has already contributed to EPA action that will reduce the public comment period from 90 to 60 days. Development of the TMDL is an enormous challenge for EPA and its state partners. State and local government, regulated entities and the general public need adequate time to review and respond to the TMDL. This provision seems to increase the likelihood that any further slippage in the TMDL calendar must necessarily come out of the already limited public review and comment period. Furthermore, court orders and consent decrees are in place that compel final action on the TMDL. The statutory deadline should either be removed from the bill or another date selected.

(i) (1) (B) (ii) - Binding Load Allocations for Atmospheric Deposition – This section requires binding and enforceable load allocations for a number of pollution sources including atmospheric deposition. 30% of pollution loading to the bay is attributed to atmospheric deposition from various sources yet absent a broad interpretation of the new authority in (j) (2) (A) Actions by States - Issuance of Permits, the legislation applies to the Chesapeake Bay watershed but not the Chesapeake Bay airshed, a geographic area that has been defined by the Chesapeake Bay Program Office. Without adequate controls at the source, air borne pollutants could remain unchecked and regulated entities within the watershed will be forced to incur additional costs to remove these pollutants.

(i) (1) (B) (iv) - No Net Increase in Pollutant Loads from Growth – This prohibits any net increase in pollutant loading from new or increased impervious surface even if the source is not contributing to a violation of the applicable clean water standard for the local tributary. This is currently EPA's preferred regulatory approach for development, however meeting the requirement will likely push the limits of technology, prove to be extremely expensive and could undermine local growth control strategies by deflecting development away from growth areas. Inclusion of this language limits flexibility in implementation of the TMDL because any subsequent change in how future population growth is accommodated would require an act of congress.

(i) (2) – Reopening of Existing Permits – These subsections require that beginning in January 2011 any new or reissued NPDES construction stormwater permit include pollution discharge limits consistent with TMDL wasteload allocations. For development projects this means that the permitted activity cannot increase net loading of nitrogen, phosphorus or sediment. This language will require mature, phased developments that were engineered to previous generations of stormwater and sediment control regulations to suddenly achieve zero discharge or potentially even achieve in a net reduction in discharge in order to receive NPDES discharge permit coverage and continue construction even under permits that were approved prior to establishment of the TMDL.

The industry understands that newly designed developments must adhere to stricter performance standards but for older, phased projects whose stormwater technologies and land plans were designed and approved prior to the TMDL this language presents requirements that may be unachievable. The subsection further exposes permits that are allowed to continue beyond five years to a direct EPA review, a hearing and appeal process that introduces uncertainty and delay to the permitting process. Although our experience is that reissuing NOI coverage under a general permit is not reissuing a permit, this language suggests that extension of coverage for an approved plan under the NPDES Construction General Permit will be subject to direct EPA review and exposed to a hearing and objections that could lead to delay and additional performance criteria being imposed on projects that are under construction.

(j) (1) (A) (iii) – Codified 2003 Pollution Limitations – This subsection codifies use of pollution cap loads identified in EPA 903-03-007, dated 2003 as the TMDL pollution limits. Codifying the content of the TMDL with a reference to the 2003 loading limits would force the use of outdated information regardless of the development of new scientific information by the Chesapeake Bay Program Office. It is our understanding that recent modeling runs by the office let to significant changes in the current TMDL limitations. If the TMDL is to be implemented using science based decision making this language must be removed from the bill.

(j) (1) (A) (iv) (VII) – Codified Implementation Requirements for New Growth – This subsection codifies content of watershed implementation plans including the requirement in VII that all loadings from new growth be addressed through offsets or other actions, essentially codifying that all future growth in the watershed must be zero discharge or achieve a reduction in pollutant loading. This is currently the approach favored by the bay program partners however the approach

is untested and will likely push the limits of technology and prove to be extremely expensive. Inclusion of this language limits flexibility in implementation because any subsequent change in the consensus approach an amendments to the watershed plans could not be approved by the EPA Administrator but would instead require an act of congress.

(j) (3) (A) and (B) – Higher Stormwater Discharge Standards for Some Urbanized Sites – This subsection requires that the bay states institute a higher stormwater discharge permit performance standard for new development, redevelopment and existing facilities and authorizes the EPA administrator to issue regulations to define the standard, identify affected properties and set the amount of mitigation. Properties that fall into this new regulatory category must, *"maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate volume and duration of flow"* The failure to meet predevelopment hydrology will require, *"compensation in the form of in-kind mitigation."*

This subsection raises a number of serious concerns. In Maryland predevelopment hydrology is now always assumed to be, "woods in good condition." Existing and redevelopment sites will rarely be able to restore the predevelopment hydrology even at enormous, disproportionate cost to the property owner. Even if site conditions make it possible to reach predevelopment hydrology the property owner will, in many cases, be forced to drastically reduce density in order to meet the standard, an outcome that will undermine growth management public policy goals. Furthermore, by setting the standard of review at, *"maximum extent technically feasible"* the bill mandates that property owners install practices to limits of technology regardless of the cost or the incremental environmental benefit achieved.

The language mandates compliance regardless of whether the steps are necessary to meet water quality standards. On the other end of the spectrum the language here raises the very real possibility that property owners will be forced to spend exorbitant amounts striving to clean up stormwater that is then discharged into a highly degraded urban watershed when more environmental benefit could be achieved at much lower costs in other locations. The bill specifically requires *"compensation"* at higher than a 1:1 ratio for mitigation that takes place outside the jurisdiction. Bay pollution strategies are now basin-wide because it is recognized that pollution loading occurs without regard to political subdivision and dollar for dollar it is far less expensive to install farm controls than it is to install urban controls. What reason would any property subject to this proposed regulatory standard have for participating in a trading program?

Several jurisdictions in the watershed collect a stormwater utility fee to fund urban stormwater management improvements many others are considering instituting new fees as their MS4 permits are revised and they are becoming aware of the full cost of the TMDL. Are properties in these jurisdictions to pay the local fee and also comply with the new discharge permit limitations?

The subsection also requires that temperature of stormwater runoff be regulated. It is well documented in the literature that non-structural best management practices of the type Maryland developers are required to use are not able to prevent increase in temperature. Only sizable and expensive filtering systems can affect significant temperature changes. These approaches necessarily change the duration and flow of stormwater discharge further drawing into question whether the full scope of the standard can be met.

(j) (5) (C) – Disproportionate Mitigation Requirements – State implementation plans that are found not to be in compliance may be directly administered by the EPA. This subsection states that in such cases, EPA shall require that new or expanded NPDES discharges, *"acquire offsets that exceed by 100 percent an amount that would otherwise be required..."* This requirement for disproportionate offsets would presumably apply in addition to the stormwater performance standard for urban land in (j) (3) (A) and (B) and would apply regardless of whether a new discharge represents a net increase or decrease of pollutant loading or regardless of whether the offsets are necessary in order to meet water quality standards in the tributary. The section also ignores the possibility that non compliance is the result of pollutant loadings from sources other than those regulated under section 402. Setting a statutory requirement of this kind raises the possibility that section 402 permittees will be forced to carry a disproportionate share of bay cleanup.

(k) (6) Sediment Omitted from Nitrogen and Phosphorus Trading Program – NAIOP supports the establishment of a trading program. Trading credits may be the only way that pollution reductions can be achieved on a cost effective basis or that geographic land use differences can be accommodated within the TMDL. It is important to note that this language does not include sediment in the trading program. Inclusion of sediment is essential if all three of the TMDL pollutants are to be effectively managed. The language also does not create a clearing house or exchange to hold and distribute credits. This presents the possibility that parties to a trade will have to locate each other and negotiate individual trades potentially reducing the effectiveness of the program.

(k) (7) and (8) - EPA Low-Impact Development Ordinances and Regulatory Guidance – EPA is authorized and required by this subsection to develop model land development regulations, construction standards and model ordinances to implement low-impact development techniques. Although references are made to EPA *"guidance"* once written by EPA, these documents are apparently to be used to implement the stormwater discharge standards for new, existing and redevelopment set out in (j) (3) (B). Stormwater assistance grants are further tied to local government adoption of these EPA development related documents. Decisions about development regulations and standards should be left to state and local jurisdictions. These government entities have the necessary local knowledge and development regulation experience. Federal level development regulations and practices would not materially advance compliance with the pollutant reduction milestones already agreed to by the bay states.

(o) (2) (B) – Expansion of CWA Citizen Suits to Implementation Plan Content – This provision authorizes citizen suits against states for failure to act or to correct a missed 2 year commitment made in a watershed implementation plan. Because the watershed Implementation plan will cover a broad range of subjects this provision seems to expand the right of citizen suits to activities outside of the current Clean Water Act scope. This provision is particularly troubling because this year the Maryland General Assembly completed an extremely difficult legislative change to standing to appeal environmental permits.

(q) Inadequate Authorization of Appropriations - In its 202a Executive Order draft report EPA estimates that installing stormwater management retrofits just in the portion of the watershed that is subject to MS4 permits (i.e. not all urbanized lands) will cost $7.6 billion per year. The total amount of funding associated with S.1618 has been quoted at $1.5 billion over 10 years. The potential shortfall between the mandates included in S, 1618 and the available funding appears significant. Policy makers and the public should be provided with detailed analysis comparing the cost to comply with the amount of money appropriated.

On behalf of the commercial real estate industry I thank you for the opportunity to comment and for your consideration of our views.

Sincerely;

Tom Ballentine
Vice President for Policy
National Association of Industrial and Office Properties - Maryland

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November 17, 2009

The Honorable James Inhofe
U.S. Senate
453 Russell Senate Building
Washington, DC 20002

Dear Senator Inhofe:

We are writing to you today concerning S. 1816 and the efforts to expand and reauthorize the Chesapeake Bay Program. We ask that these comments be entered into the Congressional record as part of the November 9, 2009 hearing on "Great Body Water Legislation" before the Senate Environment and Public Works committee on Water and Wildlife.

We are very concerned about the implications of S. 1816 and believe that is does not soundly or efficiently achieve the goal of improved water quality in the Chesapeake Bay. The legislation, S. 1816, places a cap on the watershed's economic growth which in essence will impact jobs and most of all food production. This bill will impose severe economic hardship to our industry and increase pressure to the Chesapeake Bay's most effective and efficient land use, production agriculture, to move out of the watershed.

Through codifying executive and regulatory authorities, S. 1816 will hamper innovative solutions in areas such as nutrient trading, economic growth, farm adaptive management and overall water quality restoration. Without adequate time and science to effectively work through processes such as the drafting of the Chesapeake Bay Total Maximum Daily Load, TMDL, S. 1816 will impose burdensome regulation and penalties before defining procedures and practices that are proven to efficiently achieve desired water quality goals. This accelerated course of action is expensive and damaging to the watershed's economy, viability of our agriculture sector, and overall water quality objectives.

We ask the Water and Wildlife Subcommittee to reauthorize the existing Chesapeake Bay Program without expanding Federal Authorities. We believe adequate time should be given to develop creative ways for the economic recovery and growth to partner with water quality goals, as well as to define the science and modeling in the watershed.

Yours truly,

Edgar W. Duskin
Executive Vice President

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POB 7000, Dawson, GA 39842
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November 17, 2009

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U.S. Senate
516 Hart Senate Building
Washington, DC 20002

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Yours truly,

Edgar W. Duskin
Executive Vice President

Senator CRAPO. Thank you. Senator Inhofe would have been here today, but he is attending the services of one of his constituents who was unfortunately killed at Fort Hood. And so he asks for his regrets to be provided here for his not being able to attend.

And Mr. Chairman, I want to thank you for holding this hearing today. It is two very important issues, as you have well explained. I very much appreciate the attention that you are giving to both the Chesapeake Clean Water and Ecosystem Restoration Act and to the Gulf of Mexico Restoration and Protection Act.

I want to compliment you for your hard work on these issues and on this legislation, and frankly, on your strong focus on making sure that we achieve restoration in the Chesapeake Bay watershed.

There are some concerns, of course, and some issues that we have with regard to the legislation, and we will get into that a little bit probably here with some of the witnesses to work through some of these issues, but you really deserve the credit for making sure that we move forward in this very, very important area.

I also want to add my thanks to the witnesses for being here. It is good to see Mr. Fox here. He reminded me just a few minutes ago that the last time he was here, I was sitting in the Chairman's seat, and was the issue arsenic back then? So it is interesting how things go around.

And we appreciate the work that all of you have done, working over the weekend and doing the necessary preparation for this hearing.

I am going to withhold any further comments, Mr. Chairman, until we get to the witnesses, so we can proceed as soon as possible with their testimony. And once again, I thank you for holding this hearing.

Senator CARDIN. Well, thank you very much. I really appreciate it, Senator Crapo.

Our first panel of witnesses are governmental witnesses. J. Charles "Chuck" Fox. Chuck Fox serves as EPA's Senior Adviser to the Chesapeake Bay Program. He has dedicated many years to protecting the environment and natural resources in Maryland and in the Chesapeake Bay. Before coming to the Chesapeake Bay Program, Mr. Fox served as an Assistant Administrator of EPA's Office of Water and as Secretary of the Maryland Department of Natural Resources.

Bryon Griffith is the Director of the Gulf of Mexico Program and co-chairs the Gulf of Mexico Alliance Federal Work Group. He has served in the EPA for 30 years and at the Gulf of Mexico Program since 1991. As Director of the Gulf of Mexico Program, Mr. Griffith works with State and Federal authorities as well as partners in Mexico to restore and protect the Gulf. He will be speaking today about his experiences working in this regional partnership and what opportunities there are for Congress to improve it.

We appreciate both you gentlemen being here today, and we will start with Mr. Fox.

STATEMENT OF J. CHARLES FOX, SPECIAL ASSISTANT TO THE ADMINISTRATOR, CHESAPEAKE BAY PROGRAM, U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. FOX. Thank you, Mr. Chairman.

Senator Crapo, it is good to see you again.

At the outset, we would like to commend you, Mr. Chairman, for developing legislation to strengthen and reauthorize the Chesapeake Bay Program. Over the past several months, you have successfully engaged leaders from throughout the watershed. You have incorporated many useful comments and ideas. S. 1816 is a thoughtful and highly constructive initiative to address the nutrient and sediment pollution problems in the Chesapeake Bay and its watershed. Thank you for your leadership.

The Administration strongly supports reauthorization of the Chesapeake Bay Program. We welcome the objectives and many of the specific elements of S. 1816. We look forward to our continued work with you and other Members of Congress to improve the program's efficiency and effectiveness.

The 26-year history of the Chesapeake Cleanup Program suggests that we will simply not be successful without new tools at our disposal. President Obama's Executive Order on the Chesapeake Bay defined a new era of Federal leadership, one that is characterized by new levels of accountability, performance, partnership and innovation. Earlier today, we released a draft strategy for the Chesapeake, beginning a formal 60-day public comment period on a series of proposed initiatives that were sparked by the Executive Order.

Many of our proposed actions to improve water quality are wholly consistent with key elements of S. 1816. For example, our draft strategy also states a goal of implementing all pollution control measures by 2025 that are sufficient to achieve water quality standards. Specific provisions in S. 1816 to expand the Stormwater Permit Program for urban and suburban runoff, to provide more accountability for agricultural pollution control, and to establish offset requirements for new and increased nutrient discharges are also highly consistent with the Executive Order.

Last week, EPA articulated its expectations for the development of watershed implementation plans consistent with the pollution limits articulated in the emerging TMDL. Our expectations for these plans and the schedules for their implementation are also consistent with S. 1816. Importantly, like 1816, we also have defined a series of consequences which we may take in the event that progress is not sufficient to meet our water quality goals.

The Administration's draft strategy also calls for new Federal rulemakings to reduce pollution from concentrated animal feeding operations, urban and suburban stormwater, and new or expanding sources of nutrient or sediment pollution. With these rulemakings, EPA will strengthen and clarify Federal requirements to reduce major sources of runoff pollution.

In the interim, EPA will issue detailed guidance documents to assist the States in establishing appropriate new pollution control programs that are consistent with the limits in the TMDL.

Mr. Chairman, in 1983, you presided over the Maryland House of Delegates as its Speaker when Governor Harry Hughes proposed a package of Bay initiatives. It was the beginning of the modern Chesapeake Bay Cleanup Program. At that time, everyone understood that saving the Bay was a long-term proposition. However,

I don't think anyone imagined that water quality would have changed so little 26 years later.

Of course, we have made progress, and as you have made clear on many occasions we would be much further away from our goals if we had not taken actions that we had. We share your view that today is the time for new leadership and bold action. My two young children are in the audience today. It is my hope and that of so many people and communities in the watershed that we can secure a new, more healthy Chesapeake Bay for their future.

Thank you again for this opportunity.

[The prepared statement of Mr. Fox follows:]

TESTIMONY OF J. CHARLES FOX
SENIOR ADVISOR TO ADMINISTRATOR LISA P. JACKSON
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON WATER AND WILDLIFE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
U.S. SENATE

November 9, 2009

Chairman Cardin and Members of the Subcommittee, I am J. Charles Fox, Senior Advisor to Administrator Lisa P. Jackson at the U.S. Environmental Protection Agency (EPA). Thank you for the invitation to speak today on S. 1816 which reauthorizes and strengthens the Chesapeake Bay Program. We appreciate greatly the leadership of this Subcommittee on the Chesapeake and we look forward to continuing to work closely with you in the weeks and months ahead.

President Obama's Executive Order on the Chesapeake Bay defines a new era of federal leadership, one that is characterized by new levels of accountability, performance, partnership and innovation. In this regard, we welcome the objectives and many elements of S. 1816, particularly those which closely parallel the Executive Order. The twenty-six year history of the modern Chesapeake Bay cleanup program suggests that we will need new tools to be successful in achieving our ambitious goals for the Bay and the watershed.

The Importance of the Watershed and the Bay

The Chesapeake Bay watershed encompasses 64,000 square miles, parts of six States and the District of Columbia. Nearly 17 million people live in the watershed. The land mass of the Bay watershed is sixteen times the size of the Bay, a ratio higher than any other estuary in the world. This means that our actions on the land have a profound impact on our local streams, rivers and, ultimately the Bay.

The Chesapeake Bay is the largest estuary in North America and is ecologically, economically and culturally critical to the region and the country. It is home to more than 3,600 species of fish, plants and animals. For more than 300 years, the Bay and its

tributaries have sustained the region's economy and defined its traditions and culture. The economic value of the Bay is estimated at more than $1 trillion[1] and two of the five largest Atlantic ports (Baltimore and Norfolk) are located in the Bay.

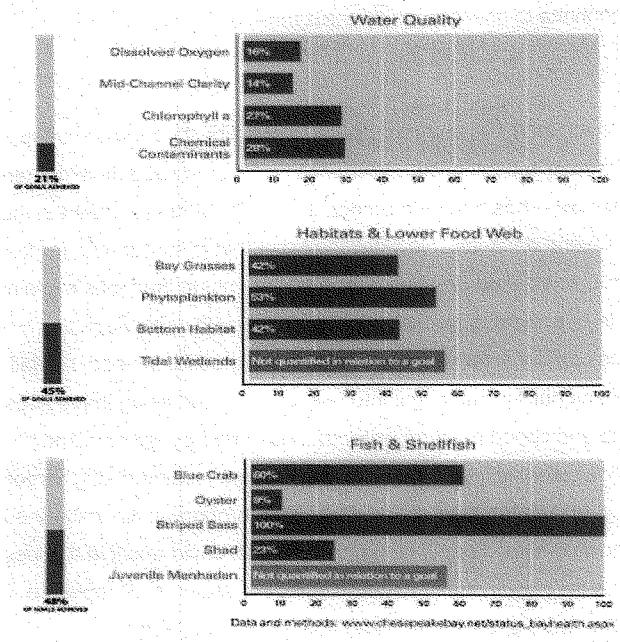
The Health of the Bay

In March 2009, the Chesapeake Bay Program issued its annual Health and Restoration Assessment of the Chesapeake Bay and Watershed, also referred to as the "Bay Barometer."

The Bay Barometer affirms what we all know. Despite the impressive restoration work done by the array of partners, the health of the Bay and watershed remains severely degraded. The data included in this report are sobering. Virtually all of the 13 measures which comprise Bay health show conditions that fall short of restoration goals (water quality, habitats and lower food web and fish and shellfish) (see Figure 1). There have been positive improvements in the population of striped bass, which is generally attributed to the actions by Maryland, Virginia and other east coast states to limit harvest pressure years ago.

[1] *Saving a National Treasure: Financing the Cleanup of the Chesapeake Bay*, A Report to the Chesapeake Bay Executive Council, Chesapeake Bay Blue Ribbon Finance Panel, October 27, 2004

Figure 1. Chesapeake Bay Measures of Health Progress (2008)



In general, the Bay Program partners have made some important – but not sufficient -- progress to reduce nutrient pollution from agriculture and wastewater treatment plants. EPA estimates that restoration of the Bay will require a thirty percent reduction in nutrients from current pollution levels and an eight percent reduction in sediment. Accomplishing these reductions over the coming years while population growth and related development continue is an extraordinarily difficult challenge.

Agriculture is the single largest source of nutrient and sediment pollution to the Bay, with about half of that load directly related to animal manure.

Pollution from urban and suburban stormwater has also an increasingly large impact on the Bay's water quality. The negative trend in nutrient and sediment pollution from stormwater is directly linked to the rise in population and land use

patterns in the watershed. Since 1950, the number of residents has doubled. Experts predict that population will continue to rise through the next three decades, topping 19 million in 2020.

Impervious surfaces, such as roads and rooftops, increased by 41% from 1990 to 2000 compared to an 8% increase in population. Low density, disconnected development -- commonly referred to as sprawl -- has been the predominant form of development in the Bay watershed for the past several decades. New development that is spread-out, far from existing communities, schools, wastewater treatment facilities, shopping, and jobs explains the disparity between the rate of population growth and the increase in impervious surfaces. Impervious surfaces do not allow water to filter into the ground. Instead, rainfall runs off, picking up pollution and quickly carrying it into waterways. Increasing impervious surface increases the volume and speed of storm water carried in nearby streams and rivers, causing bed and bank erosion, increased rates of nutrient and sediment discharges downstream and into the Bay, and destruction of aquatic habitat throughout the watershed. Projections through 2030 show continued population growth, which could result in the loss of natural areas if we continue the development patterns of recent decades. People are coming to the Chesapeake Bay watershed. Where and how these people are accommodated will have a profound influence on the health of the Bay.

Executive Order 13508

On May 12, 2009, President Obama presented all citizens who cherish the Chesapeake with an historic opportunity when he signed an Executive Order on Chesapeake Bay Protection and Restoration, directing a new era of federal leadership to restore the Bay. The Executive Order acknowledged that the efforts of the past 25 years to reduce pollution and clean up the Bay and its tributaries have yielded some progress. However, it concluded that the poor health of the Chesapeake remains one of our nation's most significant environmental challenges. Indeed, Administrator Jackson has emphasized repeatedly that communities in the Chesapeake Bay watershed expect and deserve rivers and streams that are healthy and thriving.

The Executive Order created a Federal Leadership Committee, chaired by EPA, to strengthen the role of the federal government in the Bay restoration and align the capabilities of EPA, and the Departments of the Interior, Commerce, Agricultural, Defense, Homeland Security, and Transportation. The Order directed federal agencies to prepare seven draft reports to support a joint federal strategy. These topical reports, on issues ranging from water quality to public access, were released in preliminary draft form on September 10, 2009.

The Executive Order directed the Federal Leadership Committee to prepare and release a Draft Strategy for Protecting and Restoring the Chesapeake Bay. That Draft Strategy was released today. It contains a comprehensive suite of federal initiatives that collectively support three objectives:

1. Restoring clean water,
2. Conserving treasured places and restoring habitats, fish and wildlife, and
3. Adapting for Climate Change.

To achieve these objectives, there are three mechanisms that pervade our approach:

1. Empowering local efforts by governments, citizens, and conservation districts;
2. Promoting science-based decision making, and
3. Establishing a new era of federal leadership.

The Draft Strategy focuses on a number of recommendations that include:

- Expanding regulatory and voluntary programs to improve runoff pollution control from urban, suburban and agricultural lands, through new national regulations, new work with the states and the District of Columbia, and enhanced assistance to farmers.
- Targeting federal resources to enhance the efficiency and effectiveness of investments to protect the Chesapeake Bay and the watershed.
- Strengthening storm water management practices as soon as possible at federal facilities and on federal lands within the Chesapeake Bay watershed,

consistent with the requirements of the Energy Independence and Security Act of 2007.

- Adapting to the impacts of climate change on water quality and living resources.
- Expanding public access to waters and open spaces of the Bay and its tributaries.
- Strengthening monitoring and decision support for ecosystem management.
- Restoring habitat and living resources.

The Draft Strategy is available online at: http://executiveorder.chesapeakebay.net

Actions to Restore Water Quality

The Executive Order challenged EPA to identify potential changes to programs, policies and regulations that would be sufficient to achieve water quality standards. Like S. 1816, the Strategy states the goal of implementing, by 2025, all pollution control measures needed to restore water quality and attain water quality. As explained in the draft Strategy, EPA is proposing three key steps to accomplish these pollution reductions:

1. Create **a new accountability program** to guide federal and state water quality efforts;
2. Initiate **new federal rulemakings** as needed and other actions under the Clean Water Act (CWA) and other authorities; and,
3. Establish **an enhanced partnership with USDA** to implement a "Healthy Bay – Thriving Agriculture" Initiative.

New Accountability Program

The proposed new accountability framework builds on the requirements of Sections 117(g) and 303(d) of the Clean Water Act to establish new expectations to guide state and federal efforts for reducing nutrient and sediment pollution.

On November 4, 2009, EPA sent a letter to the six watershed states and the District of Columbia providing the Agency's expectations for the development of Watershed Implementation Plans (WIPs). These plans, which are similar to those the States would be

required to submit to EPA under S. 1816, are a key element of this new era of ecosystem restoration, greater transparency and accountability, and improved performance.

WIPs will express the specific intentions and commitments of the States, and through the States, the local partners, for achieving the Bay TMDL nitrogen, phosphorus and sediment load reductions necessary to meet Bay water quality standards. EPA expects Phase One plans to be submitted by November 2010 and include a description of the authorities, actions and control measures that will be implemented to achieve point and nonpoint source target loads and TMDL allocations. Phase Two plans, due November 1, 2011, will further divide loads at a finer scale and among smaller geographic areas.

EPA expects the States and the District to have controls in place for 60% of the necessary load reductions by 2017 as an interim milestone to meeting the 2025 goal. These plans will be further measured through a series of two-year milestones detailing near term actions to evaluate progress. The expectations we have communicated to the States are extremely similar to the requirements contained in S. 1816.

EPA's new accountability program, modeled on the Clean Air Act, also includes actions we my take in the event that jurisdictions do not commit to establish and implement effective restoration programs or do not achieve interim milestones. These so-called "consequences," which will be defined more precisely in the next month, could include:

- Revising the draft or final pollutant reduction allocations in the Bay TMDL that EPA will establish in December 2010 to assign more stringent pollutant reduction responsibilities to pollution sources where pollution reductions are more reliable;
- Objecting to state-issued CWA National Pollutant Discharge Elimination System (NPDES) permits that fail to incorporate limitations derived from and in compliance with the pollutant allocations in the TMDL;
- Acting to limit or prohibit new or expanded discharges of nutrients and sediments unless appropriate offsets are made;
- Withholding, conditioning, or reallocating federal grant funds; and,
- Taking other actions as appropriate.

EPA's new accountability program also includes expanding its compliance and enforcement activities in the watershed by focusing on four key sectors: concentrated animal feeding operations, stormwater discharges, wastewater treatment plants and Clean Air Act regulated mobile and industrial sources of nitrogen deposition.

New Federal Rulemakings

The new draft Strategy calls for new clean water rulemakings to reduce pollution from concentrated animal feeding operations (CAFOs), stormwater, and new or expanding discharges of nutrients and sediment. EPA also expects to take action to substantially reduce air deposition of nitrogen to the Bay watershed. With these rulemakings, EPA would significantly strengthen or clarify federal requirements that would further limit nutrient and sediment discharges to the Bay.

New federal rulemakings require significant investments of time and energy. In the interim, EPA will prepare detailed guidance documents to assist the states in establishing appropriate new pollution control programs that are consistent with the load reductions that we anticipate will be necessary to achieve water quality standards. EPA's rulemakings and guidance are expected to include elements for:

- Concentrated animal feeding operations (CAFOs): EPA expects to consider mechanisms to expand the jurisdiction of federal and state CAFO programs in the watershed and strengthen minimum permit requirements, particularly those designed to address the land application of animal manure.

- Stormwater: EPA expects to consider mechanisms to expand the jurisdiction of federal and state MS4 programs in the watershed and strengthen minimum permit requirements. EPA will consider the projected increases in pollution from this sector when developing standards [2]

- New and expanding discharges of nitrogen, phosphorus and sediment: EPA expects to consider mechanisms to ensure that new pollution discharges have

[2] More information: http://www.epa.gov/npdes/stormwater/rulemaking

appropriate, enforceable offsets to reduce overall pollution loads to the watershed. Such actions are necessary given historical patterns of growth throughout the region.

Enhanced Partnership between USDA and EPA

Recognizing that well-managed forest and farm lands are the preferred land uses for water quality in the Bay, EPA and USDA have committed to developing and implementing a "Healthy Bay-Thriving Agriculture Initiative" that may include:

- An intensive and strategic effort to expand the use of key conservation practices in the high priority watersheds in the Bay;
- Coordination with other federal and state partners on the development of next generation nutrient management planning tools;
- Establishment of centerpiece projects in each of the Bay states to demonstrate benefits of significant and innovative conservation approaches to addressing key issues in the region; and
- Implementation of a targeted, collaborative initiative using USDA and EPA funds to support development of critically needed tools and technologies that can create new market and revenue streams that support the adoption of conservation measures.

S. 1816, Chesapeake Bay Program Reauthorization

First and foremost, we would like to commend you, Mr. Chairman and other members of the Subcommittee for developing this legislation to amend the Clean Water Act to strengthen and reauthorize the Chesapeake Bay Program. You have engaged leaders from throughout the watershed in a meaningful and thoughtful manner. You have incorporated many useful comments and ideas. S. 1816 is an important and highly constructive initiative to address the nutrient and sediment pollution problems plaguing the Bay. EPA strongly supports reauthorization of the Chesapeake Bay Program and welcomes the opportunity to continue to work with the Committee to make restoration and protection of the Bay happen more effectively and efficiently.

Many aspects of S. 1816 align with the Draft Federal Strategy and the more detailed reports developed pursuant to the Executive Order. For example, both the Executive Order and S. 1816 promote accountability and transparency through a series of initiatives designed to improve pollution control. Specific provisions in S.1816 to expand the stormwater permit program for urban and suburban runoff, provide more accountability for agricultural pollution control, and establish offset requirements for new and increased nutrient discharges are highly consistent with the Executive Order and the direction EPA is headed in its programs.

S. 1816's focus on interstate trading of nitrogen and phosphorous allowances also aligns very well with the Draft Strategy's proposal to increase support for the development of innovative technologies and economic markets for nutrient reductions and ecosystem services. We appreciate, too, the bill's acknowledgement of the important roles of state and local governments, as it is a view that we share.

S. 1816 has also recognized the vital importance of on-the-ground progress reporting through monitoring. The Draft Strategy proposes expanded monitoring that will address current gaps and broaden our reach to upstream waters throughout the watershed. At the same time, S.1816 recognizes the impacts of storm water run-off from developed areas and the additional effort needed to address these impacts in the face of increasing growth.

As noted earlier, the fundamental challenge for the Bay's water quality is reducing wet weather pollution from urban, suburban and agricultural lands. In fact, urban and suburban wet weather pollution to the Chesapeake is increasing, while agricultural pollution is not declining nearly enough as needed to restore the Bay. Presently, we have a range of tools that we are implementing to tackle these problems, and through our work to implement the Executive Order we have found potential ways to increase the number and effectiveness of the tools available to us.

We look forward to continuing to work with the Subcommittee and other Members of Congress to explore these issues in the months ahead. A reauthorization of the

Chesapeake Bay Program presents all of us with a unique opportunity to redefine our future and we greatly appreciate the Subcommittee's leadership in this regard.

Closing

Across the Chesapeake Bay watershed, there have been important actions over the past 25 years - by farmers to implement nutrient management practices and install buffer strips and fences; by homeowners to reduce energy consumption and runoff pollution; by localities to upgrade wastewater treatment plants and to reduce stormwater pollution; by developers to implement sediment and erosion control plans and implement smart growth practices; by states to expand land conservation and strengthen their water quality protection programs. These good efforts, however, are simply not sufficient.

The unavoidable conclusion is that the Chesapeake Bay ecosystem remains severely degraded, despite the concerted efforts of many people for more than 25 years. Although we face daunting challenges, in all my conservations with government officials and citizens around the Bay, I have heard a strong sense of optimism for the future. Scientists have learned much about the Bay and that knowledge is being used by managers to help plan and evaluate new policies and practices. Our region's elected officials are engaged as never before. At EPA and partner federal agencies, we have clear direction from the President to provide the leadership necessary to protect and restore the Bay. Today, we have a wonderful opportunity to make a clean and healthy Chesapeake Bay a reality.

Thank you again Chairman Cardin, and Members of the Subcommittee, for the opportunity to appear before you this afternoon.

EPA Responses to S. 1816 Questions for the Record from the November 9, 2009 hearing entitled
"Legislative Hearing on Great Water Body Legislation: S. 1816 and S. 1311" before the Senate Committee on Environmental and Public Works
Subcommittee on Water and Wildlife

Senator Benjamin L. Cardin

1. Will EPA be required to implement a Bay-wide TMDL without S. 1816? How does this bill support the EPA's ongoing efforts in implementing the court-ordered Baywide TMDL and President Obama's Executive Order?

With or without enactment of S. 1816, EPA is required to establish the Chesapeake Bay TMDL and EPA and the States are required to implement it. Clean Water Act Section 303(d) and EPA regulations at 40 CFR Part 130.7 require EPA or the state(s) to establish TMDLs for all waters that have been identified by the State or EPA as water quality-limited and still requiring TMDLs. The Chesapeake Bay and many of its tidal tributaries have been identified under Part 130.7 as water quality-limited and requiring TMDLs. Furthermore, under a Consent Decree in Virginia[1] and the District of Columbia[2], the Chesapeake Bay TMDL must be established by EPA no later than May 1, 2011. EPA, working with our state partners, has agreed to establish the Bay-wide TMDL by December 31, 2010, in advance of the Consent Decree deadline. And, in its November 24, 2009 *Revised Report Fulfilling Section 202(a) of Executive Order 13508,* EPA committed to establishing the Bay TMDL by December 2010.

What assistance to support implementation of the Bay-wide TMDL and the Executive Order is included in S. 1816 that would not otherwise exist?

S. 1816 contains numerous provisions that are both similar to and supportive of EPA's ongoing efforts on the Chesapeake Bay TMDL and under Executive Order 13508, using current Clean Water Act authorities. These provisions include:

- Establishment of the Bay TMDL by December 31, 2010
- States development of Watershed Implementation Plans
- States development and implementation of two-year milestones
- Substantial State implementation of controls by 2017 and full implementation by 2025.
- States full implementation of plans by 2025
- Issuance of NPDES permits with limits for nitrogen, phosphorus, or sediment consistent with the Bay TMDL wasteload allocations
- Creation and maintenance of a conservation management practices database, with concurrence of the USDA
- Federal Implementation Actions for states that fail to achieve specified planning or implementation commitments

[1] *American Canoe Ass'n, Inc., et al. v. EPA, et al., No. 98-979-A (E.D. Va. 1999)*
[2] *Kingman Park Civic Associations, et.al. vs. USEPA Case No. 1:*98CV00758 dated June 13, 2000 and its amendment dated Feb, 12, 2008 (same case no.) granting an extension of the Consent Decree to fit the Bay TMDL schedule).

The bill also contains provisions that go beyond those actions being considered by EPA under its current Clean Water Act authorities. These include:

- Authority for Bay States to require CWA Section 402 permits for any pollution source
- Authorization for appropriations of grants for monitoring and implementation, including $1.5 billion for municipalities to implement stormwater controls
- Requirement for states to submit all NPDES permits authorizing discharges of nutrients or sediment to EPA within 60 days after expiration, and authority for EPA to object to and intervene in the continuance of such permits.
- Prohibition or restrictions on the use of phosphorus in cleaning agents
- Requirement for EPA establishment of an interstate trading program for nitrogen and phosphorous.

2. S. 1816 requires development and redevelopment projects exceeding an impervious footprint threshold, to be determined by the Administrator, to take steps to maintain the predevelopment hydrology of the site. Does the Agency believe that there is a strong policy rationale for having different thresholds for undeveloped and developed sites? What are the important factors to consider in setting those thresholds?

EPA recently addressed the issue of maintaining predevelopment hydrology at both development and redevelopment projects in our recently published "Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act (EISA)."[3] We published the guidance under the authority of Executive Order 13514.

Section 438 of EISA explicitly requires that the sponsor of "any **development or redevelopment** project involving a Federal facility with a footprint that exceeds 5,000 square feet shall ... maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property . . . ." In the guidance we present nine real-life scenarios, each of which describe, and depict in photographs, existing already-developed properties and the practices that could be applied to achieve the predevelopment hydrology. Although these redevelopment projects had already been significantly built out in the past, all but one could be designed to cost-effectively achieve the "predevelopment hydrology" standard of Section 438.

Based on our experience, developing the Section 438 guidance, EPA believes a strong case can be made for applying the same **threshold** to trigger predevelopment hydrology requirements for both development and redevelopment scenarios since feasible and cost effective practices are available for redevelopment projects that retain stormwater onsite. This is the approach Congress chose in Section 438 by applying the 5,000 square-foot threshold in both cases. Given the vast amount of development that has already occurred in the Chesapeake Bay watershed, accompanied by a significant increase of impervious surfaces and the impairment of many waterbodies, EPA does not believe it will be possible to fully restore water quality in those developed portions of the watershed (and reduce the impact of development on the Bay), unless

[3] http://www.epa.gov/owow/nps/lid/section438/

predevelopment hydrology is restored in those areas. The level of the threshold and whether it is appropriate and necessary for it to be the same for both undeveloped and developed areas will likely be among the stormwater issues EPA explores further in the rulemaking described in "a." below.

However, EPA recognizes that it is very challenging for some redevelopment projects in compactly developed areas to maintain predevelopment hydrology on site. In some cases, existing site factors such as limited land availability for infiltration, underground utilities, and highly compacted soil conditions may preclude or reduce the effectiveness of some of the most effective green infrastructure and low impact development techniques, making it technically infeasible to achieve pre-development hydrology on the development site. In such cases, EPA notes that S. 1816 requires compensatory mitigation when impacts are unavoidable. These site factors should be considered when developing stormwater retention policy or legislation.

a. How will this rulemaking compare or relate to other EPA rulemakings or regulations, like the General Permit for Stormwater Discharges from Construction Activities, or the rulemakings proposed in conjunction with the Executive Order 13508?

EPA has announced plans to conduct a national storm water rulemaking[4] that will include provisions to control stormwater discharges from newly developed and redeveloped sites, including specific provisions to protect the Chesapeake Bay. The provision in S.1816 that would require EPA to establish a predevelopment hydrology standard for the Chesapeake Bay watershed is consistent with EPA's announced rulemaking plans and would be incorporated into our current plans if it were enacted.

3. S. 1816 also requires that where a developer is not able to maintain the predevelopment hydrology of the site they must provide in-kind mitigation of the unavoidable impacts, and it gives the Administrator flexibility in determining the appropriate ratios for that mitigation. What factors does the Agency think are important to consider in setting those ratios? Should those factors be explicitly referenced in the legislative language?

EPA has not conducted an analysis of in-kind mitigation for unavoidable impacts from development. Therefore, EPA cannot provide a recommendation as to the factors that generally are important to be considered in establishing a requirement in this regard. However, EPA wishes to emphasize the general importance of preserving local hydrology. It is critical that any local waterbodies that are affected by the development project be protected from hydrologic change. Thus, for example, it would be critical to ensure that any mitigation project take place in the immediate sub-watershed of any significant development or redevelopment activity so as to ensure the maintenance of pre-development hydrology of nearby streams and their sub-watershed.

Although EPA has not previously analyzed mitigation in the context of preserving pre-development hydrology, EPA has a lot of experience in compensatory mitigation and last year published (and the U.S. Army Corps of Engineers also adopted) Section 404 wetland/stream

[4] http://www.epa.gov/npdes/stormwater/rulemaking

mitigation regulations (published in both 40 CFR 230.91-8 and 33 CFR part 332).[5] These rules establish comprehensive requirements for all wetland/stream mitigation projects to help ensure that they are effective. One of the more notable requirements of the new rule is all mitigation projects must include a mitigation plan, approved prior to permit issuance and/or implementation of authorized impacts. If the committee chooses to establish any in-kind mitigation requirement for unavoidable impacts, they might want to consider establishing, or authorize EPA to establish, a set of mitigation plan requirements, akin to the framework in the wetlands mitigation rule, that would be appropriate to ensure preservation of predevelopment hydrology.

[5] http://www.epa.gov/wetlandsmitigation/

Senator James M. Inhofe

1. Storm water runoff and agricultural pollution are, in EPA's opinion, the largest sources of pollution in the Bay. When family farmers, who are struggling, go out of business, those farms are rarely returned to forest land. Instead, those farms are developed into shopping malls and houses, an expansion of impervious surfaces. Can you assure this Committee that as you move forward with the Executive Order and whatever Bay Program bill that we move, that you will do everything you can to assist farmers in meeting goals and do your best not to make the precarious financial situation they find themselves in worse?

Yes, protecting and preserving the Chesapeake Bay cannot be accomplished without protecting and conserving farm land in the watershed. EPA truly believes that we can have both clean waters and thriving agriculture. In fact, we believe that sustaining environmentally sound agriculture is essential to sustaining ecosystems in the Bay.

Farming is an integral part of the Bay watershed's economy and cultural heritage and is of vital importance to the long term health of the Bay. We recognize the complex set of pressures facing farmers in the watershed. Congress has been generous in providing increased conservation funding to help farmers in the watershed. This federal funding, coupled with state agricultural cost share programs and EPA funding that goes to the states will provide significant financial and technical assistance to the farming community to help them preserve their important role in the watershed while meeting the goals of the Executive Order.

Through the *Healthy Waters-Thriving Agriculture Initiative*, EPA and USDA have identified four main areas where we can work together to preserve farming in the watershed: aligning our resources in priority watersheds, establishing centerpiece projects to demonstrate benefits of conservation approaches, defining the next generation of conservation tools needed to meet water quality standards, and aligning resources to fund technological advancements.[6]

2. Are you concerned that a statutory TMDL would prevent you from making the adjustments necessary to meet clean water goals when additional, up to date science becomes available?

EPA believes, as discussed at the hearing, that the TMDL provision in S.1816 should allow EPA to modify the TMDL, if necessary, after it is initially established. We believe the provision in S. 1816 was drafted with this intent; however, this intent is not expressly articulated in the bill. The basis for revising the TMDL could include changes to the applicable water quality standards, new modeling or monitoring data that indicate a change to the TMDL is warranted, changes in the assumptions upon which the TMDL is based (e.g., changes to the estimated loading capacity), or where implementing the TMDL, as written, is not achieving the reductions needed to meet water quality standards. In such cases, changes to the TMDL may be appropriate and we believe the Committee intended for this to be the case.

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[6] See p. 29 of http://executiveorder.chesapeakebay.net/file.axd?file=2009%2f11%2fChesapeake+Bay+Executive+Order+Draft+Strategy.pdf

3. I am concerned about EPA's assertion that withholding Clean Water Act funds as punishment for meeting nutrient reduction goals will ensure that states will meet their goals more quickly. States are already facing enormous shortfalls of capital for doing major projects, from highways to drinking water and waste water treatment expansions. EPA estimates that there will be close to a trillion dollars in future need for clean water and drinking water infrastructure in the next 20 years - and that does not take into account the new, more stringent water requirements from EPA. How will taking away the money that states need to build infrastructure to meet the goals of the Clean Water Act or help them meet the goals for the Chesapeake Bay?

EPA does not envision withholding infrastructure funds from Chesapeake Bay states.

As described in a December 29, 2009, letter from EPA Region 3 Administrator Shawn M. Garvin to L. Preston Bryant, Virginia Secretary of Natural Resources, in his capacity as Chair of the Chesapeake Executive Council's Principals' Staff Committee[7], EPA maintains various grant programs which are designed to assist the States and the District in carrying out their Bay watershed and water quality management objectives. Conditioning and redirecting EPA grants could be applied in a targeted way to fill gaps in program capacity and delivery.

This action may be employed if a State or the District has committed to incorporate the elements of the Watershed Implementation Plan or milestones into grant workplans and does not adequately perform the activities identified in those EPA approved workplans. EPA intends to work with the States and the District to negotiate grant workplans to include State or District goals that are consistent with the Watershed Implementation Plans and the two-year milestones, and to target funds to places where they will have the greatest benefit in reducing nutrient and sediment pollution.

4. Additionally, I am concerned that when EPA takes state's delegated programs away from them, the environmental conditions usually do not dramatically improve. EPA is simply too far removed from the local population to effectively manage pollution. Does EPA anticipate removing additional state authority as it strives to reduce pollution in the Chesapeake Bay, or will it respect the congressionally mandated partnership between EPA and States established in the Clean Water Act?

We fully support the Clean Water Act's goal that States be authorized and supported to run effective NPDES programs. EPA will be offering roughly $11.2 million in additional funding through Chesapeake Bay Section 117 grants this year to help build and maintain that capacity both for point and nonpoint source control programs. Also, we are committed to allowing states flexibility to fashion their own nutrient and sediment pollution reduction programs within the overall context of a watershed-wide TMDL and accountability framework.

5. EPA appears to be increasingly skeptical that voluntary programs can meet pollution reduction goals. EPA has not asked for any increase in 319 program funding and the program did not receive any ARRA money. I am concerned that this cut in funding will only result in less money for projects that will help farmers voluntarily reduce polluted

[7] http://www.epa.gov/region03/chesapeake/bay_letter_1209.pdf

runoff. Farmers are great stewards of the nation's lands and they are under enormous financial pressure. I believe we need to continue these programs that provide farmers with the resources they need to work with their states on water quality problems. Congress did not give the EPA regulatory authority over non-point sources of pollution and, in particular, over family farmers. I am concerned that EPA is moving away from voluntary programs, and looking instead to create a burdensome regulatory program.

a. Do you agree that voluntary programs are an important and effective way to help reduce pollutants?

Yes. EPA believes that voluntary programs can be an effective way to help reduce nonpoint source pollution. Indeed, EPA has published on its website 172 (to date) Section 319 Success Stories which describe voluntary implementation efforts that succeeded in achieving water quality restoration and state water quality standards. Several of these successes were achieved in Oklahoma.[8] State nonpoint source programs have also routinely cooperated with Federal, State and local governments, non-profit associations, and landowners to achieve this success. EPA and USDA in particular are working closely to improve our cooperative efforts in achieving mutual goals in the Chesapeake Bay watershed and elsewhere.

Despite the success we have achieved over the years, nonpoint source pollution continues to remain the most significant source of water quality impairments.

A key tool that EPA is promoting to help States with nonpoint source pollution is the development and implementation of watershed-based plans, which help communities identify and address their water quality issues on a holistic basis that is tailored to local conditions and needs. For example, Oklahoma has developed a very good watershed plan for Lake Eucha/Spavinaw that can be expected to provide an excellent framework for successful voluntary action. EPA looks forward to continuing to work closely with our State partners to assure that their efforts are as successful as possible. Similarly, in the Chesapeake Bay, the States, conservation districts, and other partners have developed many detailed watershed plans[9] that provide an excellent foundation for cooperative efforts to restore water quality.

b. Does EPA plan on requesting additional 319 money in the future to assist farmers and other communities with nonpoint source pollution?

Please refer to the President's Budget once it is released for EPA's request.

c. Is EPA trying to expand its regulatory authority over nonpoint source pollution?

As you point out, the Clean Water Act does not provide authority for EPA to regulate nonpoint sources. However, when Congress established the nonpoint source program in 1987, Congress provided in Section 319(b)(2)(B) that State nonpoint source programs:

[8] http://epa.gov/nps/success
[9] http://epa.gov/reg3wapd/nps/watershed_plans

> "shall include . . . An identification of programs (including, as appropriate, nonregulatory or regulatory programs for enforcement, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects) to achieve implementation of the best management practices by [nonpoint sources]."

Consistent with this language, many states have chosen to include regulatory components in their nonpoint source programs, including, in certain cases, regulations that are applicable to agricultural nonpoint sources. Examples include Wisconsin, Washington, North Carolina, California, and Florida. In most such cases, regulatory authorities are used to provide an additional tool in the State's implementation toolbox while the State continues to rely strongly on voluntary approaches. In no case, however, does EPA require any State to use regulatory approaches to implement its Section 319 program.

6. Farmers in Virginia have been converting to no-till and other soil conservation practices throughout the state (90% of the farms east of I-95 and more than 50% of farms to the west now practice no-till and these numbers continue to grow) without the federal government regulating them to do so. The majority of farmers are beginning to see the environmental and personal benefits of these practices as well as an increase in their overall profits. Keeping in mind the success of expanding BMPs in Virginia, how will you be giving credit to farmers and businessmen who are doing the right thing?

EPA applauds the efforts of those farmers who have invested in conservation practices. The Agency fully supports ensuring that all agricultural conservation actions are accounted for and that the resulting nutrient and sediment reductions are credited in the Chesapeake Bay Watershed Model as progress towards the Bay TMDL. The Chesapeake Bay state agencies report agricultural conservation practice implementation to the EPA Region 3's Chesapeake Bay Program Office annually for use in the Chesapeake Bay Watershed Model. The states have told us that they have not fully accounted for all the agricultural conservation implemented in the watershed. We anticipate that the state agricultural agencies and USDA will continue to improve their tracking systems and will report all verified agricultural conservation practices in the watershed, including: practices funded by state cost share programs, practices funded through Farm Bill funding, and practices that farmers implement without state or federal cost share (for example, practices funded through grant programs and practices fully funded by producers).

We applaud the Natural Resources Conservation Service's leadership over the past six months in working with the states and the agricultural community to improve conservation tracking, including those practices that farmers pay for by themselves without any federal and state conservation program assistance. EPA will continue to work with federal, state, and agricultural partners to ensure that these practices get credited in the model. EPA also will continue to provide funding to states for database management, fund development of the National Environmental Information Exchange Network in Bay states to transmit data to the model, and develop protocols and standards for data to be accepted into the model.

7. You mention that EPA wants to continue to foster the relationship with states and local government. How specifically are you doing that?

EPA officials meet regularly with state and local officials and will continue to do so in order to coordinate our efforts to protect and restore the Chesapeake Bay. The Chesapeake Bay Program's new organizational structure is designed to foster improved relationships with the states and local governments. State and local government representatives are key members of its Chesapeake Executive Council, Principals' Staff Committee, Management Board, Local Government Advisory Committee, Citizen Advisory Committee, and Goal Implementation Teams. In addition, the CBP works closely with the Chesapeake Bay Commission, a tri-state legislative assembly representing Maryland, Virginia and Pennsylvania.

Between October 2009 and January 2010, EPA reached out to state and local government officials and the public through a series of 17 public meetings on the Bay TMDL, seven public forums on the Executive Order draft strategy and dozens of targeted stakeholder meetings on these two major initiatives, many of which included state and local government representatives. A number of the Executive Order meetings were broadcast via the internet and are available for viewing on the CBP web site, while the presentations from the TMDL public meetings are available on EPA's Bay TMDL web site. In addition, Bay Program officials provided briefings to the Metropolitan Washington Council on Governments, the Bay Program's Local Government Advisory Committee, and other state and local bodies. We estimate that over 3,000 people attended the TMDL meetings alone.

As part of TMDL implementation, EPA is supporting states by fostering local watershed implementation pilots to demonstrate how local partners can have a role in determining local watershed-based implementation approaches. EPA has also funded two "circuit rider" programs to provide technical support and outreach to local governments. This effort is being managed by the Bay Program's Local Government Advisory Committee.

8. Recently Salisbury, MD spent $84 million to upgrade its wastewater treatment plant, but officials say nitrogen discharge still has not dropped to levels required under Maryland's state permit. Does it concern you that there may be technological limits to what is an achievable reduction in nutrient levels?

Please see the answer to 9.a and 9.b below.

9. Additionally, the Salisbury plant was discharging 21 milligrams per liter into the river. The state requires not more than 6 milligrams per liter be discharged. The $84 million upgrade only got the plant down to 15 milligrams per liter. In the Executive Order and S. 1816 there is no mention of cost effective choices.

a. Are you concerned that for $84 million a Maryland point-source was only able to reduce nitrogen discharges by 6 milligrams per liter?

The $84 million involved not only nutrient controls, but a plant expansion of 6.8 to 8.5 million gallons per day (MGD). For the $49 million denitrification controls, Salisbury selected an approach that, though less expensive, was unproven. Treatment plants that have utilized traditional BNR and ENR approaches have been able to limit their discharges to well below 4 mg/liter and meet the technology based limits that have been established by the State of

Maryland. It is our understanding that Salisbury is in discussion with the contractor/vendor to fulfill its contractual commitment so that the plant can comply with its permit.

b. How will EPA help municipalities who cannot afford these costly upgrades?

Since passage of the Clean Water Act, EPA has provided significant funding for municipal wastewater treatment projects, initially under the Construction Grants Program, and since 1987, through the Clean Water State Revolving Fund (CWSRF). Through the CWSRF program, each state maintains revolving loan funds to provide independent and permanent sources of low-cost financing for a wide range of water quality infrastructure projects. Funds to establish or capitalize the CWSRF programs are provided through EPA grants and state matching funds (equal to 20% of the EPA grant). Since 1987, EPA has provided nearly $33 billion through 2010 to help capitalize these state-run revolving loan programs. In combination with state monies, bond proceeds, and recycled loan payments, the CWSRFs have been able to "leverage" the federal investment and state matching funds into over $ 77 billion to fund wastewater and water quality projects. As of 2009, for every federal dollar contributed, $2.53 has been provided in assistance. This return is expected to increase as loan repayments are used to fund new projects. Increased funding capacity is important because of rising needs, including nutrient controls. These programs ensure that funding will be available for projects that improve and maintain water quality well into the future.

Recently the CWSRF has received a considerable increase to help municipalities through the $4 billion appropriated by the American Recovery and Reinvestment Act of 2009 and the $2.1 billion in EPA's FY10 Appropriation (Public Law No. 111-88).

Senator David Vitter

1. What, if any, challenges are you currently facing with implementing the Chesapeake Bay Program?

The physical and scientific challenges facing the bay are wide ranging. Development has replaced forests and wetlands that previously filtered pollution and provided wildlife habitat. Urban and suburban development has led to a proliferation of impervious surfaces such as roads, parking lots, and rooftops. Waterbodies are polluted primarily by nitrogen and phosphorus from agricultural land, from both active agriculture as well as historical practices that have left legacy nutrients in agricultural landscapes from years of feed and food productions. The current and historical use of chemical fertilizers, together with the generation of large quantities of livestock waste, are contributing to an overabundance of nutrients in the watershed. Cities and towns, wastewater plants, and airborne contaminants are also major contributors of nutrients to the Bay. The impact of these forces is magnified because the Bay is shallow and has the largest land-to-water ratio of any coastal body of water in the world. In addition, climate change adaptation needs to be considered and planned for to address the possibility of: rising sea levels, warming of the air and water, and an increase in storm frequency and intensity.

The programmatic challenges to implementing the Chesapeake Bay Program are nearly as wide ranging as its physical challenges. The modern Chesapeake Bay Program was launched in 1983 as a voluntary partnership between the states and federal government to achieve ambitious goals for the protection and restoration of the Chesapeake Bay and its tributaries. Although a range of tools exists to help implement the Bay Program, the range of existing tools and authorities may not be enough to get the job done.

In a July 2008 report, the EPA Office of Inspector General noted, "EPA does not have the resources, tools, or authorities" to fully address the many challenges of restoring the Bay. Specifically, the report identified several key challenges: uncontrolled land development, limited implementation of agricultural conservation practices, limited control over air emissions, and consistent and sustained funding sources to meet all the Bay's needs.

EPA believes it must substantially improve the performance and accountability of pollution control programs throughout the watershed. Through its work to implement President Obama's Executive Order 13508, the Program is identifying actions and changes to be made to regulations, programs, and policies to implement these actions. Examples of actions that could further protect the Bay are:

- Initiate new rulemaking for concentrated animal feeding operations (CAFOs) to expand coverage and strengthen permit limits in the Chesapeake Bay watershed.
- Initiate national post-construction stormwater rulemaking and consider more stringent elements applicable to Chesapeake Bay watershed.
- Develop and implement a number of regulations and programs to reduce nitrogen from a variety of stationary and mobile sources of air deposition.
- Finalize a Bay Watershed TMDL and Water Implementation Plans (WIPs) to identify pollution reduction targets by geographic location and source sector.

With these rulemakings and actions, EPA would significantly strengthen or clarify federal requirements that would further limit nutrient and sediment discharges to the Bay. In addition, although the Chesapeake Bay effort already benefits from some of the world's best science, there is a need to improve research and monitoring, and foster the development of innovative technologies. A vital need also exists for expanded public education and citizen stewardship, so residents fully understand their impact on the environment and are engaged in making a difference.

2. In what ways has the Chesapeake Bay Program expanded over its lifetime to impact other permitting authorities under the Clean Water Act or other programs under EPA jurisdiction?

Since its formation in the 1980s, the Bay Program has had numerous accomplishments in environmental restoration, science and modeling, and establishing numeric indicators to track progress toward environmental goals. The Bay Program's past and current activities are designed to protect and restore the Chesapeake Bay watershed rather than affect national policy development. It is, therefore, difficult to assess the Program's comprehensive impact on other permitting authorities under the Clean Water Act or other programs under EPA's jurisdiction. However, several examples of progress made in the Bay include:

- In 2005, Chesapeake Bay jurisdictions began to implement a common NPDES permitting process for all significant wastewater treatment facilities. The permits limit the amount of nitrogen and phosphorus that the Bay watershed's 483 significant wastewater treatment plants can discharge. To meet the nutrient limits, most of these facilities are being upgraded with nutrient reduction technology, including biological nutrient removal (BNR) and enhanced nutrient removal (ENR). The new system unites both upstream and downstream states in the enforcement of the new water quality standards and allocations, including implementation of watershed permitting and nutrient trading.

- Some states, including Pennsylvania and Virginia, have created nutrient trading programs that encourage wastewater treatment plants to design upgrades with greater nutrient reductions, then sell nutrient credits to other facilities. Well-designed nutrient trading programs can be beneficial because they provide cost-effective solutions for some treatment facilities that need to meet stricter nutrient limits.

- New water quality standards for the Bay and its tidal tributaries protect living resources. The new standards (adopted across four jurisdictions with concurrence by all seven jurisdictions) are both more attainable and more valid scientifically, incorporating innovative features such as habitat zoning and adoption of area-specific submerged aquatic vegetation acreage targets.

- Nutrient and sediment allocations for all impaired segments of the watershed will be adopted through the first Bay-wide TMDL due by December 2010. This reflects the unprecedented consensus of all six basin states, the District of Columbia and the EPA. In addition, tributary-specific pollution reduction and habitat restoration plans detail restoration goals, treatment technologies and best management practices that must be employed to meet the new allocations.

Senator CARDIN. Well, thank you. I take it you mentioned your two children thinking that we would go a little softer on you on the questions?

[Laughter.]

Mr. FOX. That was my strategy at my confirmation hearing. I don't think it will work today.

[Laughter.]

Senator CARDIN. Mr. Griffith.

STATEMENT OF BRYON GRIFFITH, DIRECTOR, GULF OF MEXICO PROGRAM, U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. GRIFFITH. Thank you, Mr. Chairman and members of the committee. Good afternoon, and thank you very much for the opportunity to discuss S. 1311, the Gulf of Mexico Protection Act.

The Gulf of Mexico Program is a regional initiative of EPA. It is located in coastal Mississippi on the Federal campus of the NASA Stennis Space Center, strategically on the center northern region of the Gulf Coast.

I would like to just briefly describe a few of the important aspects of Senate Bill 1311 and the underlying program efforts that we would put forth to its implementation for you this afternoon.

The Gulf of Mexico is the ninth largest body of water in the world and borders five Gulf States: Texas, Louisiana, Mississippi, Alabama, and Florida. Its coastal areas contain 30 percent of the wetlands of the continental United States and are home to enormous diversity of natural resources spanning semi-arid to subtropical ecologies.

The region's coastal economy is inextricably tied to its natural resources. In 2006, the Gulf Coast GDP was $2.2 trillion, supporting over 20 million jobs with over 620,000 of those tied to tourism and recreation alone. The Gulf produces 52 percent of U.S. crude oil and 54 percent of domestic natural gas production. Its waters produce 1.2 billion pounds of fish and shellfish annually, and it is also home to 6 of the top 10 leading shipping ports of the United States.

However, our coastal wetlands and barrier islands are disappearing at an alarming rate, as was mentioned earlier, due to both the unintended impacts of meeting demands for enhanced shipping, flood control, energy development and climate change. Ranged over 150 rivers spanning 31 States spawns the second largest zone of hypoxia in the world. Considering that the Nation's population is estimated to increase by 130 million by 2050 and the Gulf Coast counties alone will account for a 10 percent increase, the demands of food and energy and trade will challenge the ecosystem's resilience at an unprecedented scale.

The Gulf Program was originally created in 1988. In the 21 years since the program began, we have had numerous successes in serving as the Federal, State and local programs' integrator. A sampling of these successes include the recovery of numerous impaired water bodies across the five-State region, the restoration and protection of over 30,000 acres of coastal habitat, and the implementation of the first ever early warning detection system for harmful algal blooms, with a focus on red tides.

These red tide detection technologies are actually being put to use this very week as a large outbreak of red tides has basically taken on and challenged Vera Cruz and Tamaulipas, two of our Mexican states to the south.

A cornerstone of the Gulf Program's relationship is the Gulf of Mexico Alliance and the support we provide it, a collaborative effort among Texas, Louisiana, Mississippi, Alabama and Florida to protect its ecosystems and its underlying economy. Since the formation of the Governors' Alliance in 2004, our program has served as the foundation for the partnership's technical and financial assistance. We also co-lead the collaboration of the 13-member Federal Working Group with NOAA and the Department of the Interior.

In June 2009, the Alliance released its second action plan after accomplishing virtually 100 percent of the objectives of its first plan. The program's excellent support for the Alliance and participating Federal agencies resulted in the Joint Ocean Commission recognizing this collaborative as a model for ocean governance alliances nationally.

We note that the Administration has embarked upon an effort through the establishment of the Interagency Ocean Policy Task Force to create a national policy for the oceans and coast and the Great Lakes, which is to be complemented with a recommended framework for coastal and marine special planning.

EPA's Gulf of Mexico Program embodies the science-based approach envisioned in the Task Force's interim report as well as holistic coordination and collaboration with regional entities.

The Gulf of Mexico Program has been very effective in supporting the growth activities of the Gulf of Mexico Alliance and improving wetlands conditions and water qualities in targeted areas. However, the region is experiencing changes faster and on a larger scale than any U.S. coastal region.

A nearly enclosed, shallow, subtropical sea, the Gulf's ecosystem is vulnerable to very small changes in temperature, salinity and sea level rise. Coastal wetlands are being lost in coastal Louisiana alone at a rate of 25 to 30 square miles per year. Barrier islands are disappearing with the passage of each coastal storm, leaving communities more vulnerable to much smaller storms such as Hurricane Ida, a late season tropical storm that will reach landfall in the northern Gulf this evening.

The Gulf Coast's natural barriers, our shock absorbers if you will, are degrading to the point where even a relatively small storm such as this will deliver increasingly costly economic damages and more widespread public health risks.

These rapidly evolving physical changes in the ocean and atmosphere, coupled with the increasing pressures on our coastal environment, make it difficult to imagine tackling these issues with yesterday's technologies and practices. The challenge facing the Gulf Program is to evolve at an appropriate pace to successfully support the Gulf States' capacity to respond to the changing environment.

To succeed, the program will have to continue to achieve high and effective leveraging of the projects and activities implemented across the region to support action plan two. EPA strongly supports the restoration and protection goals of Senate Bill 1311, which sup-

ports our work leveraging partners and resources to enhance and sustain this valuable treasure.

Thank you again for the opportunity to be here, and I look forward to your questions.

[The prepared statement of Mr. Griffith follows:]

TESTIMONY OF
BRYON GRIFFITH
DIRECTOR, GULF OF MEXICO PROGRAM
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON WATER AND WILDLIFE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
U.S. SENATE

November 9, 2009

Mr. Chairman and Members of the Subcommittee, good afternoon and thank you very much for this opportunity to discuss S.1311, the Gulf of Mexico Restoration and Protection Act. I am Bryon Griffith, Director of the Gulf of Mexico Program, U.S. Environmental Protection Agency (EPA). The Gulf of Mexico Program is a regional geographic initiative of the EPA located in coastal Mississippi, on the Federal campus of the NASA Stennis Space Center, strategically centered on the Northern Gulf Coast.

I would like to address several issues with the Subcommittee today. First, I'd like to briefly describe why the Gulf of Mexico is at risk and the important role of EPA's Gulf of Mexico Program (Gulf Program or Program); second, talk about the Program itself; third, highlight the excellent working relationship that the Program has with the Gulf of Mexico Governors' Alliance, and finally, describe the pressing needs and challenges facing us in the Gulf coastal region.

The Northern Gulf of Mexico – Ecosystem at Risk

The Gulf of Mexico is the ninth largest water body in the world, and to the north borders five states -- Texas, Louisiana, Mississippi, Alabama and Florida. It teems with sea life,

from shrimp to unexplored deep-water corals living thousands of feet below the surface. The size of the Gulf, along with its unique ecological diversity, has led to the creation of many state and national parks and habitat and wildlife preserves. Its coastal areas contain 30% of the wetlands in the continental United States, and are home to diverse natural resources, including nesting waterfowl, sea turtles, fisheries and shellfisheries. These resources are supported by the abundant bays, estuaries, tidal flats, barrier islands, hard- and softwood forests, and mangrove forests.

Much of the coastal economy is tied to its natural resources. In 2006, the Gulf coast's GDP (Gross Domestic Product) was $2.2 trillion, its economy critically supporting over 20 million jobs, with 620,000 jobs or more tied to tourism and recreation alone. The Gulf is critically important nationally as well as regionally, producing 52% of the U.S. crude oil and 54% of its natural gas. Its waters produce 1.2 billion pounds of fish and shellfish annually, and it is also home to six of the top ten leading shipping ports in the U.S.

However, coastal wetlands and barrier islands are disappearing due to actions taken throughout the Mississippi River Basin to enhance shipping, control flooding, expand commercial interests and oil and gas development, and because of storms, subsidence and other natural factors. The Gulf hypoxic zone is one of the largest in the world, and has created an area on average the size of Connecticut that often cannot support marine life because of low oxygen levels in the bottom waters. With the population of the Gulf coastal areas predicted to increase by 10% from 2006 to 2015, the Gulf of Mexico and its ecosystems will experience further impacts from coastal development, industrial and

commercial pressures, and continued transport of nutrients down the Mississippi River from agriculture and other point sources upstream. To add to the challenges, there is also the possibility of more frequent and severe tropical storms and hurricanes.

EPA's Gulf of Mexico Program

EPA's Gulf of Mexico Program was created in 1988 and over the years has focused on strong partnerships and targeted strategic action. In the twenty-one years since the Program began, we have issued over $42 million in grants for projects ranging from the development of state nutrient reduction strategies, to environmental education and outreach for underserved students. For example, with funding from the Gulf Program, the State of Mississippi is developing a draft nutrient reduction strategy for the Mississippi Delta – the primary area for row-crop agriculture. This strategy includes pilot projects with specific nutrient reduction targets, monitoring, and estimates of ecological and economic benefits. In addition, the Gulf Program has helped protect over 30,000 acres of coastal habitat, and has contributed to development of he first-ever early-warning detection system for harmful algal blooms (HABs), or red tide, a condition exacerbated by excess nutrients that poses a risk to both human and marine health. We have helped improve the quality of a number of coastal freshwater systems to the point where they are no longer designated as "impaired waters." We have also addressed the need for consistent, readily-available data, integrating Federal and State habitat information in support of States' decision-making. These are just a few of the many successful actions that the Gulf Program has contributed to over the years.

Collaboration with the Gulf of Mexico Alliance

A cornerstone of the Gulf Program's efforts is its relationship with the Gulf of Mexico Alliance – a collaborative effort among Texas, Louisiana, Mississippi, Alabama and Florida to protect the Gulf of Mexico and its ecosystems. Since the formation of the Alliance in 2004 by the Governors of the five Gulf States, EPA's Gulf Program has served as the foundation for the partnership's technical and financial assistance. We also co-lead the collaboration of the 13 member Federal Working Group with NOAA and the Department of Interior. In June, 2009, the Gulf Alliance issued its **Action Plan II**, which outlines ninety-seven specific activities in six priority areas designed to achieve real improvements in water quality and ecosystem protection. Expert staff from the Gulf Program serve as co-leads of the priority areas, and at the same time manage grants that address the activities outlined in **Action Plan II.** The success of the Alliance in achieving virtually 100% of the objectives of its first **Action Plan**, along with the excellent working relationship among the Alliance, EPA's Gulf of Mexico Program, and other Federal agencies, resulted in the Joint Ocean Commission recognizing the collaboration as a "model for ocean governance alliances nationally." We note that the administration has embarked upon an effort, through the establishment of the interagency Ocean Policy Task Force, to create a national policy for the ocean, coasts, and the Great Lakes, which is to be complemented with a recommended framework for coastal and marine spatial planning. EPA's Gulf of Mexico program embodies the science-based approach envisioned in the Task Force's Interim Report as well as holistic coordination and collaboration with regional entities.

The Challenges of Protecting and Restoring the Gulf of Mexico

The Gulf of Mexico Program has been very effective in supporting the growth and activities of the Gulf of Mexico Alliance, and in improving wetlands condition and water quality in targeted areas. However, the region is experiencing changes faster and on a larger scale than any other U.S. coastal region. A nearly enclosed shallow sub-tropical sea, the Gulf ecosystem is vulnerable to small changes in temperature, salinity and sea-level rise. Wetlands, along with their wildlife habitat, are being lost in coastal Louisiana alone at the rate of 25-30 square miles per year. Barrier islands are disappearing with the passage of each coastal storm. These rapidly evolving physical changes, coupled with the impacts of excess nutrients transported down more than 150 rivers spanning the thirty-one states draining to the Mississippi River Basin make it difficult to imagine tackling these problems tomorrow with yesterday's technologies and practices. The challenge facing the Gulf Program is to evolve at an appropriate pace to successfully support the Gulf States' capacity to respond. To succeed, the Program will have to continue to achieve extremely high and effective leveraging of the projects and activities implementing the Region's **Action Plan II.**

EPA strongly supports the restoration and protection goals of Senate Bill 1311, which supports our work leveraging partners and resources to enhance this valuable coastal resource. While we have concerns about the authorization levels, we look forward to working with you to find the best way forward to protect the Gulf of Mexico.

Thank you again, Mr. Chairman and Members of the Subcommittee, for this opportunity to speak with you today, and I welcome any questions you may have.

EPA Responses to S. 1311 Questions for the Record from the November 9, 2009 hearing, entitled "Legislative Hearing on Great Water Body Legislation: S. 1816 and S. 1311" before the Senate Committee on Environmental and Public Works Subcommittee on Water and Wildlife

Senator Benjamin L. Cardin

Question #1: Which states are contributing significant nutrient pollution to the Gulf of Mexico? Are those states likely, in your judgment, to take account of downstream effects, like hypoxia in the Gulf, when they establish their own water quality standards?

Answer: According to model-based estimates generated by the USGS, approximately two-thirds of the total nitrogen flux delivered to the Gulf of Mexico come from seven of the 31 Mississippi River-Atchafalaya Basin (MARB) states: Illinois; Iowa; Indiana; Missouri; Arkansas; Kentucky; and Tennessee. More detailed information based on USGS SPARROW water quality modeling data, is attached. (Attachment A)

Both the Clean Water Act in Section 303(c)(2)(A) and EPA's implementing regulations at 40 CFR part 131 require, among other provisions, that state water quality standards include the designated use or uses of the water body and criteria that protect those uses. Water quality criteria must protect the designated uses of the immediate water body to which the criteria apply and also must ensure the protection of downstream waters and uses. EPA regulations at 40 CFR 131.10(b) reflect the importance of water quality standards protecting downstream waters by requiring that upstream water quality standards "provide for the attainment and maintenance of the water quality standards of downstream waters."

The ability of upstream States to take into account downstream effects when they develop and adopt nutrient water quality standards has been hampered by the lack of numeric nutrient standards in downstream States and the very real scientific challenges associated with accurately determining what phosphorus and nitrogen values are necessary at various upstream locations in order to ensure downstream protection. According to a recent Office of the Inspector General (OIG) Report "EPA Needs to Accelerate Adoption of Numeric Nutrient Water Quality Standards", States interviewed by EPA's OIG said that "they had not yet considered the impact of their nutrients on downstream waters". Moreover, this same Report concludes that "States have not been motivated to create these standards (*numeric nutrient standards*) because implementing them is costly and often unpopular with various constituencies" (see copy of enclosed report for more information). Thus, it is fair to say that those states that are likely contributing significant nutrient pollution to the Gulf of Mexico are not likely in the near term to be adopting numeric nutrient criteria that take account of downstream effects, like hypoxia in the Gulf, without a significant change in their existing Water Quality Standards development process.

Despite the challenges associated with deriving appropriate and protective numeric nutrient criteria, it is important to recognize that the states participating in the Hypoxia Task Force have committed to developing nutrient reduction strategies that achieve a reduction in the average areal size of the hypoxic zone to less than 5,000 square kilometers by the year 2015. A copy of the Hypoxia Action Plan 2008, which highlights those commitments, along with ten additional goals, is attached. (Attachment B)

Question #2: Are current water quality standards for the Mississippi River and the Gulf of Mexico sufficient to address nutrient pollution and the Gulf dead zone? Do states that contribute significant nutrient pollution to the Gulf have numeric nutrient standards for their tributaries and for the Mississippi itself?

Answer: There are currently no numeric nutrient water quality standards for phosphorus or nitrogen in the Mississippi River or in the Gulf of Mexico. Illinois; Iowa; Indiana; Missouri; Arkansas; Kentucky; and Tennessee do not currently have numeric nutrient water quality standards for their tributaries or for the portions of the Mississippi River that pass through or by these States. However, based on the work of the Mississippi River Gulf of Mexico Watershed Nutrient Task Force, participating Mississippi River basin states are in the process of developing nutrient management strategies designed to address Gulf hypoxia.

With regard to water quality standards for the Gulf of Mexico, Section 303(c) of the Clean Water Act authorizes water quality standards for navigable waters of the United States. The Clean Water Act defines "navigable waters" as waters of the United States, including the territorial seas, which extend three miles from the coast. EPA's long-standing interpretation of the statute, which has been upheld by the Federal courts, does not include the contiguous zone and the ocean in the definition of navigable waters under the Clean Water Act. As a result, neither states nor EPA have promulgated water quality standards under CWA Section 303(c) for the Gulf of Mexico beyond the territorial seas.

a. Does the EPA have sufficient authority to establish numeric nutrient standards to protect water quality in the Gulf?

Answer: Runoff from agriculture activities contributes a major portion of nutrients and sediments reaching the Gulf of Mexico. In October 2008, state and EPA water quality and drinking water directors and national program managers formed a State-EPA Nutrient Innovations Task Group (Task Group) to review past nutrient control efforts and evaluate the potential for creating a new combination of existing tools and innovative approaches for addressing nutrient pollution. The Task Group issued its report in August 2009, entitled "An Urgent Call to Action." This report indicates that about 70 percent of nitrogen and 80 percent of phosphorus reaching the Gulf of Mexico are associated with crop production, and livestock agricultural practices. Nationally, more than 1 billion tons of manure is produced each year and much of this is applied to farmland as fertilizer for crops. Moreover, EPA's authority under Section 303 of the Clean Water Act is to promulgate water quality standards for navigable waters which include the territorial sea of the Gulf of Mexico.

Under Section 303(c) of the Clean Water Act EPA has the authority to take actions to protect water quality in near shore portions of the Gulf of Mexico through establishing water quality standards in the territorial waters of the Gulf of Mexico. EPA also has the authority to ensure that upstream water quality standards protect downstream water quality standards which could include water quality standards for the Gulf of Mexico. EPA's regulations provide that a state must ensure that its water quality standards provide for attainment and maintenance of water quality standards of downstream waters. Under 303(c)(3) EPA has the authority to disapprove a state's new or revised numeric nutrient water quality criteria if EPA determines that the state criteria are not consistent with the Clean Water Act. If the state does not correct disapproved criteria, then EPA is authorized under 303(c)(4)(A) to propose and promulgate federal numeric nutrient water quality criteria. EPA also has the authority to make a Determination under 303(c)(4)(B) of the Clean Water Act that numeric nutrient water quality criteria are necessary in a state to meet the requirements of the Clean Water Act. Such a Determination then triggers a duty under the Clean Water Act for EPA to promptly propose federal standards and to promulgate these standards unless EPA determines before promulgation that the state has adopted standards in accordance with the Clean Water Act. EPA's authority under 303(c)(4)(B) can be used for upstream water bodies that flow into the territorial seas of the Gulf of Mexico as well as the territorial seas themselves. If Louisiana adopted numeric nutrient criteria for the near shore portions of the Gulf of Mexico (i.e., within the territorial seas which fall within state jurisdiction), such criteria could facilitate the process by upstream states of deriving numeric nutrient criteria that would be protective of these downstream criteria.

Question #3: What activities and industries are the major sources of nitrogen and phosphorus loading to the Gulf of Mexico? How much must these loadings be cut if we are to achieve the Hypoxia Action Plan's goal of reducing the dead zone to 5,000 square kilometers? Are pollution control officials and other decision-makers doing enough to limit nutrient pollution from point and non-point sources in the Mississippi River basin?

Answer: According to the U.S. Geological Survey, the major sources of nitrogen and phosphorus loadings to the Gulf are as follows:

Nitrogen:
- Corn and Soybean Crops -- 52%
- Atmospheric Deposition – 16%
- Crops other than Corn and Soybean – 14%
- Urban and population-related sources – 9%
- Pasture and range – 5%
- Natural land – 4%

Phosphorus:
- Pasture and Range – 37%
- Corn and Soybean Crops – 25%
- Crops other than Corn and Soybean – 28%
- Urban and population-related sources – 12%
- Natural land – 8%

The states participating in the Hypoxia Task Force have committed to developing nutrient reduction strategies that achieve a reduction in the average areal size of the hypoxic zone to less than 5,000 square kilometers by the year 2015. In its 2007 report on Hypoxia in the Northern Gulf of Mexico, the EPA Science Advisory Board (SAB) determined that the Hypoxia Task Force's goal of reducing the hypoxic zone to 5,000 square kilometers was a reasonable endpoint in an adaptive management context. The SAB Panel recommended a dual nutrient strategy targeting at least a 45% reduction in riverine total nitrogen load and at least a 45% reduction in riverine total phosphorus load, measured against the average load over the 1980-1996 time period.

Scientists have been documenting a hypoxic zone in the Gulf of Mexico for 25 years, since 1985. Since 2001, the hypoxic zone has averaged 16,500 square kilometers during its peak summer months. The EPA SAB concluded its 2007 Report that scientific understanding of the causes of hypoxia has grown "while actions to control hypoxia have lagged". It is fair to say that more needs to be done to limit nutrient pollution in the Mississippi River Basin if the United States desires to meet the goal of reducing the average areal size of the hypoxic zone to less than 5,000 square kilometers.

Question 4: What tools does EPA have under existing law to make significant reductions in nutrient pollution in the Mississippi/Gulf watershed and elsewhere? Which of these tools has EPA implemented? Are there additional tools EPA intends to utilize and, if so, how?

As discussed in the response to Question 2a, in October 2008, state and EPA water quality and drinking water directors and national program managers formed a State-EPA Nutrient Innovations Task Group (Task Group) to review past nutrient control efforts and evaluate the potential for creating a new combination of existing tools and innovative approaches for addressing nutrient pollution. Among other things, the Task Group found that the problem of nutrient pollution is nationally significant, expanding, and likely to substantially accelerate, and, that current tools such as numeric nutrient criteria, water quality assessments and listings, urban stormwater controls, wastewater treatment plant nutrient limits, and animal feedlot controls are underutilized and lack coordination.

The Task Group concluded that a coordinated and innovative synthesis of existing regulatory authorities and voluntary tools must be used across all sources and sectors of nutrient pollution. It made the following primary recommendations:

- There needs to be a "fuller utilization of existing tools; some tools are only partially utilized and others could be expanded in scope;"
- There needs to be a "national framework of accountability for nonpoint sources to make significant and essential difference, without which long term success is doubtful;"
- There needs to be a "broader reliance on incentives, trading, and corporate stewardship—but only within a multi-state framework of public transparency, common responsibility, and both point and non-point source accountability for meeting water quality and drinking water goals."

The State-EPA Nutrient Innovation Task Group has developed a report on this topic. (Attachment C) Chapter four of this report describes: a) existing tools, b) incentive-based and regulatory tools that are new and innovative under existing authorities, and c) examples of innovative tools applied to sources of nutrients based upon the source of the nutrient pollution.

Question #5: In your written testimony, you indicate that you have concerns about the authorization levels in S. 1311. What exactly are your concerns?

Our concern is a general one – that the authorization decisions for implementation of S.1311 should be considered within the context of the overall EPA budgeting process.

Senator James M. Inhofe

Question #1: I have heard some very complimentary things about how the Gulf of Mexico's program is currently administered. Please explain how this collaborative, voluntary, targeted program has been successful.

Answer: The Program's successes can be attributed most directly to the fact that our technical and financial resources are used to support the implementation of the partnership's States-led regional action plan structure (e.g. the Gulf of Mexico Alliance), and its strategy for improving environmental quality around the Gulf as described in the Alliance's **Action Plan II**, published in 2009. Our diverse, and highly leveraged, collaborative structure better assures that our cooperative efforts undertaken to tackle the complex issues threatening the Gulf's States and coastal communities' sustainability are done so within a consensus-based and accountable leadership framework. The Program takes exhaustive steps to work through the Gulf States' Alliance to make certain that our resources are applied to the region's active and ongoing priorities. In light of the progress and collaborative success of this effort, the remaining challenge is how to translate analysis, insights, and conclusions from this process into effective and accountable state-wide point and nonpoint source nutrient reduction strategies.

Question #2: Do you think that if the program expands it will be able to retain the same collaborative, science based approach?

Answer: Yes, I do believe the Program will retain the same collaborative approach. Specifically, as we interpret the legislation, S.1311 would codify the Program's existing collaborative management structure and support for science-based action. For example, the Alliance's **Action Plan II** commits to quantify and model the major sources, fate and transport of mercury to coastal waters, to determine the connection between harmful algal blooms and their effects on human and ecosystem health, and to improve data comparability across the Gulf by improving standardization of water quality data collection and reporting. These are just a few of many examples of scientific research included in the **Action Plan II**.

Question #3: Where have your grants been most successful?

Answer: Our grants have been most successful where the outcomes can be directly tied to either the advancement and/or completion of the Gulf States Governors' Alliance Action Plan, which represents the partnership's view of the those priority actions with the highest potential for success when undertaken collaboratively. At the close of this calendar year (2009) we will have helped the Gulf States Alliance accomplish 100% implementation (e.g. successfully completing all seventy-three actions listed) of their first Action Plan, which covers the years 2006-2009. A sample of what the Program's resources have helped achieve include:

- restoration, protection and/or enhancement of over 29,000 acres of coastal wetlands;
- recovery and delisting of over 130 impaired coastal waterbodies, including our support to the efforts to restore water quality and delist Lake Pontchartrain;

- successful award and implementation of over 550 cooperative science and restoration projects across the region;
- supporting the implementation of the integrated binational (U.S. and Mexico) early-warning detection systems for better coastal communities management of the impacts of Harmful Algal Blooms; and,
- supporting region-wide the science, technology development and expansion of wastewater treatment innovations to lower capital construction and operating costs while also restoring freshwater wetlands.

Question #4: Would you continue making these kinds of grants or are there other problems you would like to tackle with additional funds?

Answer: Yes, we would fully expect to use any additional funds provided to move more quickly and broadly into the priority areas that the collaborative partnership has identified in their most recent Action Plan. The Gulf States Alliance's new Action Plan II (2010-2014) was released in June 2009 and goes into effect in January, 2010. Consequently, we expect this blueprint to serve as our grants development guidance for the next 5 years. Note that the Action Plan process is dynamic, and able to adapt to emerging problems and priorities as they appear.

Question 5: What is your current relationship with the Gulf States?

Answer: EPA's Gulf of Mexico Program has a 21 year history of supporting the cooperative coastal environmental program development of the five Gulf States. Beginning with its inception in 2005, the Program transitioned, in partnership with NOAA's Coastal Services Center, to serve as the Gulf States Governors Alliance's primary technical and administrative partnership support office. To help coordinate management and guidance of the partnership effort in the Gulf, the Governors established a five member Management Team comprised of one executive appointment from each state. The current Coordinating Executive of the States' management team is Dr. Bill Walker, Director of the Mississippi Department of Marine Resources. The Gulf of Mexico Program facilitates virtually daily communication and process support for the States' Management Team and/or their appointments to each of the six priority teams established to carry out the partnership's Action Plan II. This approach, centered on shared accountability for implementing the regional Action Plan, has helped forge a strong team framework between the Program and all five states, based on mutual respect. In addition to the efforts of EPA's Gulf of Mexico Program, other offices within EPA such as the Office of Water, and the Regional Offices, operate support and oversight activities within the Gulf states.

Question 6: Are there ways to help better ensure State participation or that State goals are being met?

Answer: Since the formation of the Gulf Alliance in 2005, State participation and leadership in setting the Alliance's regional goals and objectives has been very effective. That is not to say that sustaining this level of participation is not an ongoing challenge given the current regional economic conditions. We are very sensitive to this, and work closely through each grants funding cycle to ensure that our projects remain in direct pursuit of the States' priority goals.

This approach allows us to most effectively compete for the limited availability and participation of essential State management and program staff.

As to the question of ensuring the accomplishment of States goals, we believe the regional Alliance's Action Plan implementation process is the most effective method of keeping the partnership on an accountable and measurable course. The Action Plan process was designed by the States and they provide substantial time and resources to the development of this planning structure. Consequently, the Program uses this Action Plan as both the "blueprint" for the joint work that is undertaken and, the "yardstick" for transparent monitoring and reporting of the timeliness, and effectiveness of the partnership's combined efforts.

Question #7: Would you be willing to submit comments and work with staff on the committee on how we can make improvements to S. 1311?

Answer: We would welcome any opportunity to provide the staff with technical assistance.

Question #8: S. 1311 builds the framework for a Gulf of Mexico Program very similar to the Chesapeake Bay Program that Congress last authorized in 2001 which is now being vastly expanded. Do you see a similar large scale expansion not only of funding but federal authority and regulation when S. 1311 is reauthorized in 5 years? Do you think limiting authority from more local agencies and giving it to groups like EPA in Washington would be a positive step?

Answer: The Chesapeake Bay and Gulf of Mexico watersheds share a common challenge, which is the critical need for a reduction in nutrient pollution, and though their hydrology and ecology may differ (e.g. Mississippi River channeling for flood control and navigation purposes), EPA will be looking with significant interest at the methods being employed within the Chesapeake Bay and the Gulf of Mexico ecosystems for relevant 'lessons learned' that will help better inform and guide the evolving adaptive management activities in each geographic area.

Senator David Vitter

Question #1: Do you see this program as having any impact or working in conjunction with current fisheries and ocean resource management proposals at NOAA? If so, please elaborate.

Answer: One of the unique aspects of how well the Program works with the Gulf States Alliance involves the fact that EPA shares the administrative lead responsibility with NOAA and DOI. Like many science and resource agencies, NOAA is made up of a number of programs that cover a wide gamut of technical services. Whenever the Gulf States Alliance action priorities warrant, as they have in areas such as advancing the States' joint capacities to detect and track red tides throughout the Gulf through advanced remote sensing technologies and systems, the shared accountability framework has allowed us to more effectively bridge and integrate these programs as needed. The ongoing involvement of NOAA's fisheries and resource management programs will be essential to meeting a number of the priorities outlined by the Governors' newest Action Plan II (i.e., coastal resource data integration and analysis, harmful algal bloom tracking systems support, nutrient programs management support, coastal community resilience technical support and tool development, and coastal habitat restoration support).

Question #2: If this legislation is enacted, what immediate impacts would you like to see the grant program have and accomplish?

Answer: As stated previously, the Program's grant activities are focused on implementing the partnership's regional Action Plan. If the legislation is enacted, we would immediately provide additional resources to the States and local partners to accelerate the implementation of the Action Plan in the order of priority established by the States.

Senator CARDIN. Well, once again, let me thank both of you for being here and your extraordinary work on behalf of our environment. Both of you have long track records of involvement throughout your professional careers and bringing together diverse interests for policies that work.

Mr. Fox, I couldn't agree with you more. As we said earlier, if we did not have the Chesapeake Bay Program, if we didn't make the efforts, the Bay would be in much worse shape today than it is. And while we are all disappointed we are not further along, but it was extraordinary accomplishments by legislation enacted both by the State of Virginia, the State of Maryland, controlling land use and tremendous sacrifices that were made by the people of our States, recognizing it was necessary in order to get the Bay plan moving forward.

So I applaud you for your leadership over the years, and it is going to take, I think, some additional efforts now to get us to the next plateau.

Now, the first question my staff asked me to ask each of you is whether you support the respective bills. I don't know if I want to trust my luck here. I thought that you statements were pretty strong, both of you, in support of the respective bills. But is there anything in these bills that you want to bring to our attention that could cause a problem with the Administration?

Mr. Fox, let me start with you, with S. 1816.

Mr. FOX. Mr. Chairman, I think as you appropriately noticed, our statement is appropriately supportive of your legislation. We do not officially have an Administration position on your bill at this point, and we could certainly talk with you more about whether or not that would be something valuable.

We have appreciated the opportunity to provide technical assistance, and we will continue to do so.

Senator CARDIN. And we will let you know. Again, if there are provisions in here that present particular challenges, please let us know about it, but as you pointed out, many of the provisions were negotiated with EPA very much involved in our discussions.

Mr. Griffith, as it relates to S. 1311, the Gulf of Mexico Restoration and Protection Act, would you like to further elaborate as to the Administration's position?

Mr. GRIFFITH. Mr. Chairman, as was pointed out in my testimony, EPA does strongly support the provisions of Senate Bill 1311. The structure indeed matches the structure and evolution of the program to date.

Senator CARDIN. Thank you.

Mr. Fox, the legislation builds on the work of the Executive Council, and you mentioned 2025 as the date in our testimony for the implementations to be completed. We picked that date because of the Executive Council. The original bill that we sent around for review had an earlier date, but we decided to go with 2025 because it appears like it is the date that the interested community believes is attainable. Do you have any further observations as to whether that is the appropriate date we should be shooting for?

Mr. FOX. Like you, Mr. Chairman, I think I have grown impatient over the years for action. But upon reflection of these dates, I think it is fair to say that there is widespread support for 2025

as the date by which we could achieve full implementation of the practices necessary to restore water quality.

I think it is important, too, to be mindful that these control measures will not be cheap, and in today's economy, given the realities facing many sectors of our economy, particularly the agricultural sector, the idea that an additional 5 years could be helpful seems to make a lot of sense. Time really is money, and 2025 is still a very ambitious goal.

Senator CARDIN. The legislation authorizes an Interstate Nutrient Trading Program to achieve reductions in nitrogens and phosphorus in the Bay. Any comment as to the advisability of us establishing this Interstate Trading Program?

Mr. FOX. If you had asked me about a month ago about the prospects for a trading program in the Chesapeake, my answer might be different than it is today. And that is because the most recent model and scientific information we have generated suggests that in fact there is perhaps more nutrients to trade. One of my fears about a trading program a month ago was in fact that there might not be enough nutrients to trade. Today, it appears differently.

And so, I think for all the reasons that you know and are articulated in the legislation, a trading program makes a lot of sense for the Chesapeake. I think we will be able to deliver better results, cheaper and faster, and we look forward to trying to work and implement something like that.

Senator CARDIN. Thank you.

Mr. Griffith, could you just share with us the challenges of working not only with multiple States, but working between Mexico and the United States as it relates to the Gulf of Mexico? What lessons have been learned over the last 20 years that could guide us to try to establish achievable goals for the Gulf?

Mr. GRIFFITH. Thank you, Mr. Chairman.

First and foremost, the thing that has guided principally the relationship and the rapid development of programs with Mexico is actually the shared resource, the shared water body itself, and the influence is largely, as in the northern Gulf, it is with Mexico. The influence is the river systems on the coastal ecology, both from the standpoint of hypoxic zones as well as the rapid—even in many cases more rapid degradation of the coral reef structures.

Our work on harmful algal blooms was some of the lowest hanging fruit for which we could actually test for ourselves the complexity and difficulty of working with Mexico, particularly with the broad range of technical, science and resource departments in that particular governance structure.

It has proven to be extremely successful, largely from the standpoint of a technology exchange program. Mexico is at a point where they have a voracious appetite for anything and everything the U.S. has that would complement their coastal environmental programs' infrastructure and support. So we know that the well is deep in that early experience with ocean observing to really jointly address the issues of ag non-point source practices and their impacts on the coastal ecology, as an example.

Senator CARDIN. Just to follow it up, it is tough to see a program that would have specific enforcement targets when you are dealing with two countries. Is that something that can be agreed to? Or

will it require a more formal relationship between Mexico and the United States?

Mr. GRIFFITH. I would certainly think that that would require a more formal relationship with Mexico and the United States, not the least of which is the complexity of the science to basically annotate the contributions and where they are actually coming from.

Senator CARDIN. So you basically believe that the way this legislation moves forward is what is appropriate at this time?

Mr. GRIFFITH. Yes, sir. It is a building block approach.

Senator CARDIN. Thank you.

Senator Crapo.

Senator CRAPO. Thank you very much, Mr. Chairman.

I will start with you, Mr. Griffith. You mentioned in your testimony the Presidential Interagency Ocean Policy Task Force. How do you foresee the Gulf of Mexico Program working with the new ocean policy that is contemplated there? And are there any improvements to S. 1311 that would help that transition move more smoothly?

Mr. GRIFFITH. That is a very tough question, Senator Crapo, in the sense that that development is ongoing. But specifically to answer your question, and I can speak at it through several eyes, one of which is the region's focus on actually establishing the Gulf of Mexico Program and the attempt to avoid duplication in an effort to really focus an aggregation of Federal environmental programs on the coastal priorities.

We are hopeful and very expectant that the Ocean Policy Task Force will take into account the Federal structure of the Gulf Program as they determine how exactly they are going to implement programs on the ground.

As far as the alliance that we support, which is largely the center of Senate Bill 1311, that Alliance, as was mentioned earlier as a national construct for effective regional governance, has actually been folded into the Ocean Policy Task Force's framework under the government's Advisory Council. And so the Gulf States Governors' Alliance will actually be one of the principal voices of advice and program direction to the Task Force.

Senator CRAPO. Thank you very much.

And Mr. Fox, I want to go through several items with you with regard to the Chesapeake Bay legislation. As I am sure you are aware, some concerns have been raised about whether the legislation is too heavy in terms of top-down control from Washington and has too heavy a hand in that regard.

The first question I wanted to talk to you about is the creation of a statutory TMDL. Some have said that that would literally freeze in place both science and policy and take away from the EPA the flexibility that it would need to make adjustments as necessary as further science and further understandings are developed.

Could you comment on that, please?

Mr. FOX. Some of that I believe, Mr. Crapo, is a fair comment about the way the legislation is presently drafted. I am not sure, though, that that was the intent of the drafters. The way the bill is in fact constructed presently there are two references to two different TMDLs, one of which actually was a pre-TMDL exercise

called the tributary strategies done several years ago, and it was constructed in the legislation as a backstop mechanism.

I am a firm believer in adaptive management and not locking in science today that we would ultimately want to evolve over time. In all of our conversations with the Chairman and his staff, I think there is support for that. So I personally think this is a fair criticism of the bill the way it is drafted, but it is not my sense that that was the intent of it, and I would imagine that the Chair would be interested in learning more about how to fix this particular part of the bill.

Senator CRAPO. All right. Thank you very much.

Another piece that I am interested in is the provision that the EPA could withhold Clean Water Act funds as punishment for a State failing to meet its nutrient reduction goals. In my mind, as we look at the infrastructure needs that our States are facing, whether it be in clean water or clean air or drinking water, the incredible amount of need that there is out there in the States for these kinds of issues, it seems to me to be the wrong move to be depriving States of these resources in the very context in which they are trying to work and move forward.

Could you comment on that as well?

Mr. FOX. It is also a fair point. Presently under current law, we have the authority to withhold section 319 non-point source funds, section 106 State grant funds, as well as section 117 Chesapeake Bay funds for various reasons, including nonperformance by the States. Of course, we are always reluctant to do this because you never want to cut off your nose to spite your face. This is all about improving clean water.

At the same time, I think what we have learned through 30 years of environmental statutes and management programs is it is really important to have consequences, and removing new Federal funds is an important consequence potentially for inaction. It is one that has been a hallmark of the Clean Air Act.

In this case, it is potentially withholding of Federal highway funds that have helped move States along and local governments along in improving air quality. And having some kind of consequence like this, to me, makes perfect sense. It is something that has been part of the Clean Water Act since its beginning.

Senator CRAPO. Thank you. I can just say, although not in the context of the Bay, I certainly often have a number of small communities or others in Idaho who face fines and penalties that literally deprive them of the ability to try to meet the objectives that they are expected to meet under Federal law.

I just had one other question, if I might, Mr. Chairman. And that is the issue of whether the EPA has the authority, and I believe it does in this legislation, to take the States' delegated programs and authorities from them if they fail to comply, and basically have the EPA step in and begin running the program.

I, for one, believe that we need to have the full involvement of our States and local communities in environmental protection and in the implementation of Federal environmental law and do not like to see the pathway expanded or an increased movement toward taking delegation and authorities back from the States and local communities to the Federal Government.

Could you comment on that issue as well?

Mr. FOX. Yes. Presently, all of the States in the country that have delegated programs, and I believe today they are all but maybe three or four, 46 of them have delegated programs. They all have them under a specific delegation agreement with EPA. EPA at any time can revoke that delegation agreement under current law so that we can assume a State program.

Nobody ever wants to do that. To my knowledge, it has never happened in the history of the Water Program. There have been threats that it should happen. EPA has been petitioned at various times to take back State programs. It generally leads to very constructive dialogues with the States about how to improve their program.

So I think it is an important lesson for me about the value of consequences is it sometimes creates a conversation and a dialogue that ultimately leads to the end point that everyone wants without having to ultimately invoke those actual consequences. We do it all the time with our permit objections, for example.

Senator CRAPO. Thank you very much.

Senator CARDIN. Senator Crapo, thank you for your questions. I think they are all extremely important, particularly on the Bay bill. Let me point out, we very much want the States to be able to act and to use the tools that are available. And we extend the tools that are available under this Act.

Governor Kaine and Governor O'Malley, the Governors of Virginia and Maryland, both support this legislation, knowing full well that there will be accountability, and there is always the danger, but that they feel so strongly that there needs to be an enforcement mechanism in the law to achieve the goals that are set out, and they also believe they need more flexibility that this statute would give them in order to achieve those goals.

But I think the points that you raise are extremely important. The first point, Mr. Fox, is absolutely correct. We want to make sure that science allows us to always have the best programs in place, so we intend to deal with that.

Let me thank our two witnesses very much for their testimony, and we look forward to continuing to work with both of you.

Mr. FOX. Thank you.

Mr. GRIFFITH. Thank you, sir.

Senator CARDIN. As the second panel comes forward, let me without objection introduce into the record letters of support for the record. We have received 28 letters in support of S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act. These letters come from governments, national and regional NGOs, and even private individuals. For example, we have a letter from Governor O'Malley of Maryland, Governor Kaine of Virginia, and Mayor Fenty of the District of Columbia; a letter from Ducks Unlimited; a letter from the Nature Conservancy; a letter from the New York Upper Susquehanna Coalition and letters from five Pennsylvania NGOs, including Citizens for Pennsylvania's Future.

So without objection, all those letters will be introduced into the record.

[The referenced letters follow:]

Maryland

Virginia

District of Columbia

October 16, 2009

The Honorable Benjamin L. Cardin
United States Senate
Washington, D.C. 20510

Dear Senator Cardin:

We greatly appreciate your long-standing commitment and support for the restoration of the Chesapeake Bay. On May 12 of this year, when the Bay Program Executive Council convened for its annual meeting, each of our jurisdictions committed to significantly increased levels of effort to restore the Bay. We agreed to measure our progress against two year milestones. This commitment represents, approximately, more than a doubling of existing efforts. In addition, the Council members adopted a new, aggressive, restoration end date of "No later than 2025" to have in place all the necessary restoration actions to fully restore the health of the Bay and tidal rivers. Setting a "no later than" date allows individual jurisdictions to achieve restoration actions even sooner if possible. Moreover, at the May Council meeting President Obama issued Executive Order 13508, committing numerous federal agencies to an unprecedented level of cooperation and effort to restore the Chesapeake Bay. Now, to compliment and further leverage these initiatives, your legislative proposal presents a historically significant opportunity for revitalizing the health of the Bay.

We endorse the need for enhanced accountability for restoration efforts - the central focus of your proposed legislation. In it, you have outlined an accountability process much like the one successfully used under the federal Clean Air Act in which states would develop plans to achieve necessary reductions in nutrients and sediment and the Environmental Protection Agency (EPA) would review those plans for sufficiency. Failure of a jurisdiction to fully implement or comply with its plan would result in consequences – repudiative actions by EPA. We support this approach, and our agencies look forward to working closely with the EPA to ascertain the details of how that process would be implemented.

The draft proposal also outlines requirements for the EPA to expand certain regulatory programs. We request that your legislation ultimately afford ample flexibility to develop state-level programs to achieve necessary pollution reduction levels. In keeping with EPA's requirements for "reasonable assurance," these state-level programs must be enforceable or otherwise binding and comply with appropriate performance standards set by EPA. We respectfully submit that

individual jurisdictions are better positioned to effectively design and implement workable programs.

Also included in the legislation is authorization for significantly increased funding to support the Bay restoration effort. We thank you for recognizing the daunting funding gap that exists to fully restore the Chesapeake Bay. For the Bay restoration effort to be successful, it is essential that funding for restoration activities be strengthened significantly. We submit that additional funding should be appropriated toward jurisdictional programs that are cost-effective and proven to produce positive restoration results. Also, to ensure the greatest return for the investment, it is essential that new funding be predominantly targeted to specific geographic areas where pollution reductions will yield the greatest environmental improvement.

Finally, there are a number of ambitious timelines included in the proposal, most prominently the proposed 2020 deadline for full implementation of restoration programs. As noted earlier in this letter, Executive Council members unanimously adopted a new restoration end date of "no later than 2025" when they met on May 12 of this year in Mount Vernon. While we remain optimistic that all restoration efforts can be implemented prior to that date, we respectfully request that the legislation mirror this mutually agreed upon completion date.

This legislation has the potential to significantly enhance the Bay Partnership's efforts to fully restore the health of the Chesapeake Bay. Our Bay is a natural resource of national significance and provides recreational, economic and cultural benefits to our entire region. Thank you for your leadership in helping us to restore this national treasure and to preserve it for future generations.

Sincerely,

Governor Martin O'Malley Governor Timothy M. Kaine Mayor Adrian M. Fenty

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(410) 224-6620 Fax (410) 224-2077
www.ducks.org

November 6, 2009

Senator Ben Cardin
Chairman
Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Cardin,

Thank you for your leadership in drafting legislation to protect and restore the Chesapeake Bay ecosystem. S.1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009, will address many of the pressing sources of pollution entering our waterways while providing increased opportunities for restoration of key habitats.

Ducks Unlimited's (DU) mission is to conserve, restore, and manage wetlands and associated habitats for North America's waterfowl, knowing these actions will benefit people and other wildlife. Due to the narrow focus of our mission, DU is not in a position to endorse the entire bill, but we strongly support the sections of the legislation outlined below because of their potential to benefit waterfowl habitat in the watershed. Our singular mission makes DU the world's largest and most effective wetland and waterfowl conservation organization. An international non-profit organization with more than 780,000 members, DU has conserved more than 12 million acres of waterfowl habitat in North America since its founding in 1937. There are more than 74,000 DU members in the six states that make up the Bay watershed, and we have conserved more than 170,000 acres in these states. We are eager to continue this great work in the Bay watershed.

Using recently completed research and strategic planning initiatives, Ducks Unlimited has identified the need to conserve the following wetland and associated habitat:

- 10,000 acres in Maryland in the Potomac River, Lower Susquehanna River, and Upper Chesapeake Bay watersheds over the next ten years;
- 5,000 acres in Virginia in the Potomac River watershed and lower Chesapeake Bay over the next ten years;
- 9,000 acres in Pennsylvania in the Potomac River, Lower Susquehanna River, and Upper Chesapeake Bay watersheds over the next ten years; and
- 1,000 acres in Delaware's Upper Chesapeake Bay watershed over the next five years.

S. 1816 provides a tremendous opportunity to fund these local restoration projects, which will provide valuable habitat for wildlife and filter the harmful pollutants that are choking

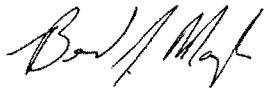
the life out of the Bay. This legislation will increase waterfowl habitat in the Bay and help eliminate the nutria that destroy this valuable habitat in places such as Blackwater National Wildlife Refuge. DU stands ready to work with you and the Subcommittee to ensure the Chesapeake Bay is protected so future generations can enjoy what both Presidents Reagan and Obama have called a "national treasure."

Ducks Unlimited strongly supports the sections of S. 1816 that increase funding authorizations for potential habitat restoration to nearly $100 million, specifically the Chesapeake Bay Stewardship Grants, Implementation Grants, and Chesapeake Nutria Eradication Program. We also look forward to working with our federal and state partners as they develop the two year progress reports required by S. 1816 to ensure wetland and habitat goals are met. (DU currently provides leadership and guidance to the EPA's Chesapeake Bay Program through its Habitat Goal Implementation Team.) Finally, the Chesapeake Nutria Eradication Program will go a long way to removing nutria and restoring the vital marsh habitat destroyed by these invasive species. DU will work closely with your Subcommittee as the legislation moves forward to ensure these essential components are included in the final bill. We urge the subcommittee to remember the importance of wetlands not only to waterfowl, but to the overall health of the Bay.

S. 1816 complements the Senate Environment and Public Works Committee's efforts to protect wetlands through the Clean Water Act. Wetlands in the Bay watershed serve as crucial habitat for more than 900 species, including numerous migrating waterfowl and endangered species. But every year we lose more than 80,000 acres of American wetlands habitat. That number is only going to get worse unless Congress improves the Clean Water Act that has been weakened over the past few years. These regulatory changes have removed protections from an estimated 20 million acres of wetlands, threatening wildlife habitat and drinking water for millions of Americans. The Clean Water Restoration Act will restore these lost protections and ensure clean water and healthy wetlands throughout the Chesapeake Bay watershed.

Once again, thank you for your leadership on such an important issue. If Ducks Unlimited can be of assistance, please do not hesitate to contact me at bmarczyk@ducks.org or 410-224-6620.

Sincerely,



Bernie Marczyk
Governmental Affairs Representative

The Nature Conservancy
Protecting nature. Preserving life.™

The Nature Conservancy of
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tel (301) 897-8570
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nature.org

November 6, 2009

Senator Benjamin Cardin
Chairman
Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Cardin:

We are writing to thank you for introducing S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009. The Chesapeake Bay is a national treasure, providing us with outstanding ecological, economic, recreational, and cultural resources. For too long, however, pollution from a variety of sources has harmed the Bay and diminished the value of those resources. Despite years of public and private efforts to clean up the Bay, and despite progress in reducing nutrient pollution from agriculture and wastewater, the Bay's pollution problem persists. It is clear that current efforts are not enough. Your legislation takes the difficult but necessary step of requiring the additional pollution reductions essential for a healthy and sustainable Bay.

We believe that enforceable standards necessitate that the states have sufficient implementation flexibility to meet those standards. We appreciate that your bill includes these complementary measures. We also support the creation of a mechanism that allows the trading of nutrient credits and enables farmers and others to benefit from their successes in reducing harmful emissions to the Bay. Lastly, we commend you for including authorizations for new implementation funding in this legislation. The Nature Conservancy partners with the agricultural community on a number of fronts throughout the Bay watershed and we recognize that farmers increasingly understand the role they need to play in a healthy Bay. Clearly, the availability of funding and outreach has not been commensurate with the true need and remains a barrier to success. Accordingly, The Nature Conservancy calls on Congress and the Obama Administration to provide the needed technical assistance and financial support to implement the changes and new practices at the local level at the scale that will be required for Bay-wide success.

These are just a few elements of S. 1816, legislation that ultimately asks all sectors to take the actions necessary to restore the Chesapeake Bay. Your legislation is ambitious, but an ambitious and innovative approach is called for it we are to restore the Bay so that it delivers a wide range of ecological and economic benefits. We are eager to continue working with you,

others in Congress, the Administration, farmers, developers, and other key stakeholders to further refine the bill as it moves forward. Thank you again for your leadership in introducing this legislation.

Sincerely,

Nat Williams
Maryland/DC State Director

Bill Ulfelder
New York State Director

Michael Lipford
Virginia State Director

Roger Jones
Delaware State Director

Bill Kunze
Pennsylvania State Director

Rodney Bartgis
West Virginia State Director

James Curatolo, Watershed Coordinator
Upper Susquehanna Coalition
4729 State Route 414
Burdett, NY 14818
607-546-2528
jac3@htva.net

Senator Ben Cardin, Chairman
Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

5 November 2009

RE: The Chesapeake Clean Water and Ecosystem Restoration Act, a bill [S. 1816] [H.R. 3852]

Dear Senator Cardin,

I am the Watershed Coordinator for the Upper Susquehanna Coalition that covers the headwaters of the Susquehanna River and the Chesapeake Bay. We are coalition of 19 Conservation Districts in NY and PA that implement nonpoint source best management practices.

I am writing in support of your bill and with this letter will contact our NY Senators Schumer and Gillebrand and Congressional Representatives Hinchey, Arcuri, Massa and Murphy. They all have been great supporters of environmental efforts in NY 's Chesapeake Bay headwaters.

You are right in that we need to develop a long-term watershed approach and I believe your bill will be a key component. NY State has an excellent Agricultural Environmental Management Program that is based on a voluntary approach for Agricultural Practices and we have made great strides in supporting farm viability and environmental stewardship. It is imperative that local watershed stakeholders, such as the USC, be involved and your bill makes great strides to provide meaningful partnerships. I believe the key is to provide for local watershed improvements that will translate into a healthy Bay. This approach will be sustainable as stakeholders will actually have a stake. Should there be anything we can help with moving a Watershed Approach that provides for a healthy Bay Watershed and Bay, we are at your service.

Thank you for addressing this most important issue to all Bay States.

James Curatolo
USC Watershed Coordinator

Main Office: Tioga Soil and Water Conservation District, 183 Corporate Drive, Owego, NY 13827, 607-687-3553

cc: Senator Schumer, Senator Gillibrand, Congressman Hinchey, Congressman Arcuri, Congressman Massa, Congressman Murphy

PennFUTURE
Every environmental victory grows the economy.

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November 6, 2009

The Honorable Ben Cardin, Chairman
Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Cardin,

On behalf of Citizens for Pennsylvania's Future and our many members, we write to thank you for your leadership in drafting and introducing legislation to restore clean water to the rivers and streams that flow through Pennsylvania and into the Chesapeake Bay. The Chesapeake Clean Water and Ecosystem Restoration Act of 2009, S.1816, directly addresses the most damaging sources of pollution entering our waterways. We stand with you in protecting and cleaning streams and rivers throughout the region and ask that you act to ensure the passage of this legislation.

We are particularly supportive of the framework of the Chesapeake Clean Water legislation, which sets a clear cap on the amount of pollution running off the 64,000 square mile watershed. We support strong tributary implementation plans, federal oversight and enforcement, a citizen suit provision, and increased accountability for use of federal funds.

The poor water quality of the Chesapeake Bay is a reflection of the cumulative failure to protect and keep healthy our rivers and streams here in Pennsylvania. We commend you for working to promote strong and enforceable pollution limits that will resolve the problem of excess nutrients and sediment in our waterways. We also thank you for providing the associated technical and financial assistance to see that we meet our clean water goals.

Thank you for your leadership and making the reauthorization of the EPA Chesapeake Bay Program a priority in the 111th Congress.

Sincerely,

Jan Jarrett

Jan Jarrett, President & CEO
Citizens for Pennsylvania's Future (PennFuture)

cc: The Honorable Barbara Boxer
112 Hart Office Building
Washington, DC 20510

The Honorable Robert Casey, Jr.
383 Russell senate Office Building
Washington, DC 20510

The Honorable Mike Crapo
239 Dirksen Office Building
Washington, DC 20510

The Honorable James Inhofe
453 Russell Office Building
Washington, DC 20510

The Honorable Arlen Specter
711 Hart Office Building
Washington, DC 20510

COMMONWEALTH OF PENNSYLVANIA
OFFICE OF THE GOVERNOR
HARRISBURG

THE GOVERNOR

October 29, 2009

The Honorable Ben Cardin
United States Senate
509 Hart Building
Washington, DC 20510

Dear Senator Cardin:

We greatly appreciate your long-standing commitment and support for the restoration of the Chesapeake Bay. On May 12 of this year, when the Bay Program Executive Council convened for their annual meeting, each of our states committed to significantly increased levels of effort to restore the Bay. We agreed to measure our progress against two year milestones. This commitment represents, approximately, more than a doubling of existing efforts. In addition, the Council members adopted a new, aggressive, restoration end date of "No later than 2025" to have in place all the necessary restoration actions to fully restore the health of the Bay and tidal rivers. Setting a "No later than" date allows individual jurisdictions to achieve restoration actions even sooner if possible. Moreover, at the May Council meeting President Obama issued Executive Order 13508, committing numerous federal agencies to an unprecedented level of cooperation and effort to restore the Chesapeake Bay. And now, to compliment and further leverage these initiatives, your legislative proposal presents a historically significant opportunity for revitalizing the health of the Bay.

We endorse the need for enhanced accountability for restoration efforts and look forward to working with you and the EPA to increase accountability. The draft proposal outlines requirements for the EPA to expand certain regulatory programs. We request that your legislation afford ample flexibility for states to develop equivalent programs to achieve necessary pollution reduction levels. These state-level programs would be enforceable or otherwise binding and comply with appropriate performance standards set by EPA. We respectfully submit that individual jurisdictions are better positioned to effectively design and implement workable programs to suit their local circumstances.

Also included in the legislation is authorization for significantly increased funding to support the Bay restoration effort. We thank you for recognizing the daunting funding gap that exists to fully restore the Chesapeake Bay. For the Bay restoration effort to be successful, it is essential that funding for restoration activities be strengthened significantly. We submit that additional funding should be appropriated toward jurisdictional programs that are cost-effective and proven to produce positive restoration results. Also, to ensure the greatest return for the investment, it is essential that new funding be predominantly targeted to specific geographic areas where pollution reductions will yield the greatest environmental improvement.

There are several provisions where the legislative intent is unclear or clarification is needed. We respectfully request your consideration of the following items. EPA's Guidance for Watershed Implementation Plans states that EPA Region III intends to establish gross Waste Load Allocations (WLAs) and gross Load Allocations (LAs) for each major basin in the non-tidal states in the Bay TMDL. However, Section 3. (h)(1)(B) of the bill could be interpreted to require specific WLAs for each point source in PA in the TMDL. This would be contrary to the agreement reached between EPA and PA or the tributary states. We suggest that section be modified to be consistent with this agreement and the EPA Guidance.

Section 3. (h)(2)(B) appears to extend federal jurisdiction over state-level licensing and permitting outside of the NPDES permitting program. We do not believe that is an appropriate role for EPA and request that this provision be deleted.

Section 3. (i) (1) Watershed Implementation Plans appears to require specific plans to reduce loads from septic systems. We would suggest that this level of specificity for content of the Watershed Implementation Plans is over-reaching. Jurisdictions should be provided the flexibility to reduce nutrient and sediment loads from the most-cost-effective approaches.

In Section 3. (j)(6) Nitrogen and Phosphorous Trading, it is not clear if this interstate trading program will be the only program that is allowed to exist in the Bay watershed. We do not feel that the federal interstate program should usurp effective state trading programs.

This legislation has the potential to significantly enhance the Bay Partnership's efforts to fully restore the health of the Chesapeake Bay. Our Bay is a natural resource of national significance and provides recreational, economic and cultural benefits to our entire region. Thank you for your leadership in helping us to restore the Chesapeake Bay and to preserve this national treasure for future generations.

Sincerely,

Ed Rendell

Edward G. Rendell
Governor

CHESAPEAKE BAY FOUNDATION
Saving a National Treasure

THE EARTH'S BEST DEFENSE

November 20, 2009

The Honorable Senator Benjamin Cardin
Chairman
Subcommittee on Water and Wildlife
509 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Cardin:

On behalf of the Chesapeake Bay Foundation and the Natural Resources Defense Council and our combined membership of more than 800,000 members, we would like to thank you for your extraordinary leadership in introducing S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act. This legislation would help drive the pollution reductions necessary to clean up the Chesapeake Bay and the rivers and streams that feed it. In addition, the bill provides much needed funding for grants and technical assistance for states and localities and creates a trading program that will help facilitate the attainment and maintenance of the required limits and reduce the costs of compliance, particularly for local municipalities.

During the hearing, several points of opposition and concern were raised. We would like to take this opportunity to clarify some misunderstandings about the legislation, particularly as they relate to existing regulatory requirements.

Comment: The legislation will mandate new requirements and impose burdensome regulations.

Response: The legislation authorizes the Environmental Protection Agency (EPA) and the Chesapeake Bay states to develop programs that will restore the Chesapeake watershed. It does not require the states to impose new requirements, promulgate new regulations, or take any other specified action to reduce sources of pollution. Rather, the bill requires the states to develop and implement plans to meet scientifically-based pollutant reductions using some effective means by dates specified in the legislation.

Many of the elements of the bill, such as the Bay-wide total maximum daily load (TMDL) and implementation plans are already underway. The EPA is leading efforts to develop a Bay-wide pollution budget or TMDL by December 2010. As part of this process, EPA is requiring the states to develop detailed implementation plans that specify what "enforceable or otherwise binding mechanisms" they will implement to achieve the

necessary pollution reductions from all sources. The plans are expected to achieve a 60% level of implementation by 2017 and full implementation by 2025, with two year milestones as the blueprint for how these long-term goals will be achieved. Furthermore, EPA will take action to protect waterways (such as restricting the issuance of new permits, requiring additional reductions from sewage treatment plants) if the Bay jurisdictions fail to develop sufficient plans or to achieve the necessary pollution reductions specified in their plans. Under current law and as carried forward in the proposed legislation, EPA is setting the framework of pollution load reductions that must be achieved, but that framework is based on state-set water quality standards and states are deciding how they go about achieving those reductions, not EPA. The deadlines required in S. 1816 are consistent with the implementation timeline of existing actions required under current law.

The Executive Order (EO) "Draft Strategy for Protecting and Restoring the Chesapeake Bay" reaffirms the EPA's intent to have states to take the lead on developing TMDL implementation plans.

Furthermore, as detailed below, the Bay jurisdictions are already starting to better control and manage urban and suburban stormwater by ratcheting up the stormwater management requirements on already developed lands and setting standards for new development and redevelopment projects.

Improving Stormwater from Municipalities' Already Developed Lands: New MS4 Permits

Stormwater runoff from urban and suburban lands is the one source of nutrient and sediment pollution that is increasing in the Bay watershed. This is due in large part to the rapid pace of land development throughout the watershed, a pace that has outstripped population growth. All recent scientific studies by independent organizations, including a report from EPA's Inspector General in 2007 and a study by the National Academy of Sciences in 2008, have concluded that urban/suburban stormwater must be brought under improved control in order to "Save the Bay."

The challenge is to ensure that Municipal Separate Storm Sewer System ("MS4") permits under the Clean Water Act apply to all municipalities with populations above 10,000 and/or to certain institutions of equivalent size and impact. Between 400 and 500 communities and governmental entities in the Bay watershed are currently subject to such permits. Even without the effects of a new Bay-wide TMDL, which will be translated up the tributaries and applied to local jurisdictions by the states in the next two years, MS4 permits for both large (so-called Phase I) and small (so-called Phase II) communities will need to become increasingly stringent. These permits inevitably will increase the requirements for managing stormwater from already settled land in existing towns and cities – as several new MS4 permits now in place or under review already will do.

New State Stormwater Requirements for New Development and Redevelopment

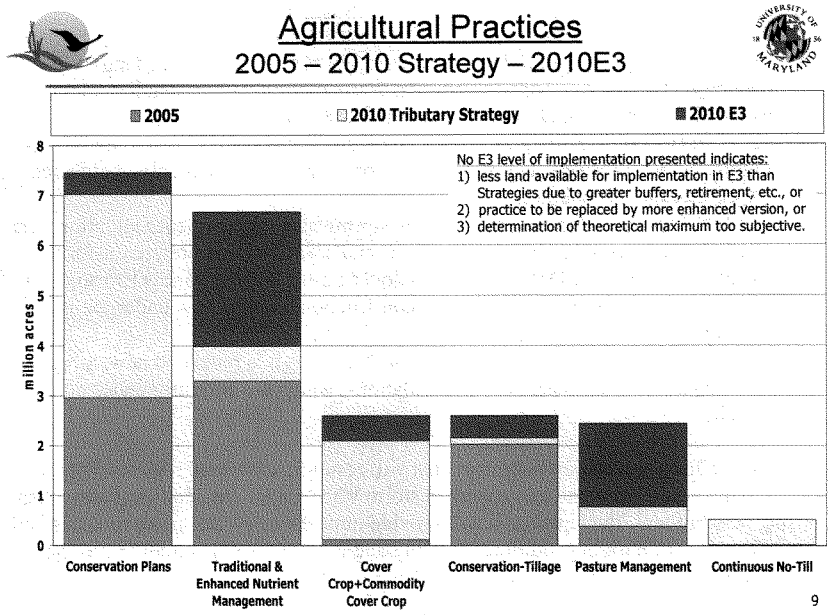
- In 2008, Pennsylvania introduced a new stormwater management Manual containing practices and approaches which advanced the understanding of so-called "Environmental Design" or Low Impact Development ("LID") – community design techniques which can reduce water pollution by more closely mimicking the flow of water prior to development than more highly engineered water "storage" techniques.
- In 2008-2009, Maryland introduced new stormwater management regulations that generally increase minimum requirements and set out a clear preference for the use of Environmental Design/LID techniques up front. Maryland's Erosion and Sediment Control regulations for new construction are also now undergoing revision.
- After several years under development, in 2009 Virginia proposed new, more stringent stormwater management regulations, which are currently under public review.

In summary, efforts are already underway that will result in additional requirements for pollution reduction from urban and suburban stormwater runoff. In addition, rather than imposing new burdens, the legislation will provide important new resources to states and municipalities by authorizing additional funding and by establishing a trading program that will help reduce the cost of compliance.

Comment: The pollution caps established in the Bay-wide TMDL and codified in the legislation will be so stringent that they will put farmers out of business (i.e., the concern is that they will cover every practice on every acre of farmland). In addition, the trading provisions of the bill won't help because there will be nothing left to trade.

Response: The most recent information on pollutant load targets and strategies to achieve them is based on the States' Tributary Strategies. This information suggests that implementation levels significantly below 100% will be sufficient to achieve the targeted load reductions likely to be required by the Bay-wide TMDL called for by the legislation.

An analysis by EPA comparing the theoretical maximum level of implementation (known as "E3") to that which will likely be required under the TMDL (shown as 2010 Tributary Strategy below) indicates that, for many practices (conservation tillage, forest buffers and cover crops), implementation levels needed are significantly below 100% (presentation by Jeff Sweeney, CBP Water Quality Goal Implementation Team, Sept. 29, 2009). The significance of this is that farmers will be able to sell credits based on more widespread implementation, earning revenue while cleaning up the Bay.



Both Maryland and Virginia have set baselines for the agricultural producers wishing to participate in state trading programs based on assuming "Tributary Strategy level" of implementation. In Virginia, the baseline is operationally defined as a suite of five practices, including: cover crops, nutrient management plans, conservation tillage, buffers and stream fencing, where appropriate. Farmers can generate tradable credits if they implement practices beyond this list such as wider buffers, enhanced nutrient management, rotational grazing, etc.

Maryland has defined its baseline numerically (e.g., pounds of nitrogen or phosphorus per acre) then uses a model to determine what suite and combination of best management practices on an individual farm will achieve this baseline of pollution load. Using Maryland's approach, a farmer has flexibility in determining what combination of practices to implement. Preliminary analysis by the Maryland Department of Agriculture suggests that a farmer using commercial inorganic fertilizer with a nutrient management plan and conservation tillage would need only to implement cover crops or forested buffers to meet the baseline.

While it is true that farms will need to achieve the baseline before participating in the trading market, it is worth noting that roughly $700 million is expected over the life of the current federal Farm Bill to support implementation of on-farm practices in the Bay watershed. In addition, as part of their commitment under the Executive Order strategy, the U.S. Department of Agriculture just committed to an additional $ 90 million per year to support such practices. These federal funds, complemented by those from state and private sources, will help offset the costs of achieving the implementation baseline.

Comment: The legislation basically requires the states to develop "Smart Growth" plans.

There are three principal ways that states and localities can improve water quality affected by stormwater in urban and suburban places:

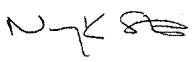
(1) ratchet up the stormwater management requirements with respect to already developed land;
(2) set new stormwater management standards that new development and redevelopment projects must meet; and
(3) keep undeveloped land far from transportation and other urban and suburban amenities from being developed.

As noted earlier, the first two are already starting to occur and will continue to occur with or without passage of the legislation, but an acceleration of the progress is essential to cleaning up the Bay. The third is a land planning issue, often called "smart growth," that is not the subject of the legislation. In fact, there is no provision of either bill that addresses where to develop, which is a central tenet of smart growth policy.

In closing, thank you again for your leadership on environmental issues. We hope you will find these comments useful. If you have any questions or if we can be of additional assistance, please contact either of us (Roy Hoagland at 443-482-2165 or Nancy Stoner at 202-289-2394).

Sincerely,

Roy A. Hoagland
Vice President, Environmental Protection and Restoration
Chesapeake Bay Foundation
6 Herndon Ave
Annapolis, MD 21403



Nancy Stoner
Co-Director, Water Program Natural Resources Defense Council
1200 New York Avenue, N.W., Suite 400
Washington D.C. 20005

Citizens Advisory Committee

TO THE CHESAPEAKE EXECUTIVE COUNCIL

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Young Delegates
Jess Cadwallender, VA
Jeremy Rothwell, MD

November 9, 2009

The Honorable Ben Cardin
United States Senate
Washington DC 20510

The Honorable Elijah Cummings
United States House of Representatives
Washington, DC 20515

Dear Senator Cardin and Congressman Cummings,

We are writing to follow up on our letter of September 22, 2009 and to underscore our strong support for the Chesapeake Clean Water and Ecosystem Restoration Act of 2009. A copy of our September 22, 2009 is enclosed.

For 25 years, the Citizens Advisory Committee to the Chesapeake Executive Council has been providing a citizen perspective on the Chesapeake Bay cleanup effort and on how Bay Program policies affect citizens who live and work in the Chesapeake Bay Watershed. During that time, we have observed many state and federal efforts to clean up the Bay and its tributaries that have helped hold the line on further degradation of the Bay but have not achieved the goal of restoring the Bay's health. We believe that your legislation, coupled with President Obama's Executive Order, offers a tremendous opportunity to make significant progress in restoring the water quality of Chesapeake Bay.

We particularly applaud provisions in your bill which:

- Set firm deadlines for implementing plans to reduce point and non-point source pollution;
- Impose consequences for failing to meet those deadlines;
- Give EPA additional authority to regulate non-point source pollution;
- Allow for citizen suits;
- Authorize stewardship grants;
- Authorize $1.5 billion in federal funding to address urban/suburban stormwater pollution

In our previous correspondence the CAC recommended additional provisions including a "do no harm" policy and an independent evaluator, to improve program performance and environmental results. We hope that, as the measures move through the legislative process, these provisions can be incorporated into your legislation.

Thank you for your leadership on this important legislation, and please do not hesitate to let us know if we can be of assistance to you.

Sincerely,

James Elliott
Chair, Citizens Advisory Committee

Jessica M. Blackburn, CAC Coordinator
P.O. Box 1981 | Richmond, VA 23218 | 804-775-0951 | 804-775-0954 (fax) | jblackburn@cbf-online.org

Chesapeake Bay Program
A Watershed Partnership

FROM : The ClearWater Conservancy FAX NO. : 8142374909 Nov. 12 2009 02:07PM P1

Conserving natural resources since 1930

ClearWater Conservancy

Everyone Working Together to Conserve Natural Beauty and the Environment in the Heart of Pennsylvania

November 12, 2009

The Honorable Barbara Boxer
112 Hart Office Building
Washington, DC 20510

The Honorable James Inhofe
453 Russell Office Building
Washington, DC 20510

The Honorable Benjamin Cardin
509 Hart Office Building
Washington, DC 20510

The Honorable Mike Crapo
239 Dirksen Office Building
Washington, DC 20510

Dear Chairman Boxer, Senator Cardin, Senator Inhofe and Senator Crapo:

On behalf of ClearWater Conservancy's Board of Directors and our members, I am writing you to express support for S. 1816, The Chesapeake Clean Water and Ecosystem Restoration Act of 2009. This groundbreaking legislation will have a dramatic impact on pollution reduction and ensure restored water quality for the Chesapeake Bay as well as the rivers and streams that crisscross its 64,000 square mile watershed.

We ask that you do everything possible to ensure its passage.

Since 1983, the federal government, the six Chesapeake Bay watershed states and the District of Columbia have worked in concert to reduce nitrogen, phosphorus and sediment pollution flowing to the Chesapeake Bay in hopes of restoring water quality and the Chesapeake Bay ecosystem. With pollution causing everything from oxygen-free dead zones to economic hardship in industries dependent upon a healthy ecosystem, it is clear that current federal and state laws have failed to accomplish watershed wide pollution reduction. Accordingly, water quality has not improved and EPA will soon implement a court-ordered, watershed-wide 'pollution budget,' or Total Maximum Daily Load (TMDL) for nitrogen, phosphorus and sediment pollution.

The Chesapeake Clean Water and Ecosystem Restoration Act of 2009, codifies that TMDL and requires states to meet scientifically-based pollution reduction targets while allowing state and local governments the autonomy to decide how to best achieve those targets. The bill also improves the TMDL by:

2555 N. Atherton Street ♦ State College, Pennsylvania 16803 ♦ (814)237-0400
www.clearwaterconservancy.org ♦ contactus@clearwaterconservancy.org

- adding process assurance provisions
- authorizing $2.125 billion dollars to offset the implementation costs to state and local governments and impacted sectors
- establishing a water quality credit program to reduce compliance costs.

Without this legislation, states will be forced to reduce pollution without added federal assistance or guidance.

The Chesapeake Clean Water and Ecosystem Restoration Act will improve water quality throughout the watershed while providing necessary technical and financial assistance and autonomy for state and local governments to decide how to best reduce pollution.

We urge you to support this important legislation.

Sincerely,

Jennifer Shuey
Executive Director

Cc: The Honorable Robert P. Casey
The Honorable Arlen Specter

ENVIRONMENTAL MANAGEMENT CENTER
BRANDYWINE CONSERVANCY
P.O. BOX 141 CHADDS FORD PENNSYLVANIA 19317 • 610/388-2700 • FAX 610/388-1575

November 3, 2009

Senator Ben Cardin
Chairman, Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Cardin,

We write to applaud your leadership in drafting strong reform legislation that restores clean water to the hundreds of rivers and streams that flow into the Chesapeake Bay. S.1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009, directly addresses the most pressing sources of pollution entering our waterways. As a land trust and environmental advocate focused on protecting our namesake and adjacent watersheds (including the Chesapeake's Elk and Octoraro Creek watersheds), we stand with you in protecting and cleaning streams and rivers throughout the region.

We are particularly supportive of the framework of the Chesapeake Clean Water legislation, which uses a hard "cap" to limit pollutants coming off of the 64,000 square mile watershed. Additionally we support strong tributary implementation plans, federal oversight and enforcement, expanded monitoring and implementation grants to states, grants to local governments for reducing stormwater pollution, and increased accountability for use of federal funds.

Our cumulative failure to keep our rivers and streams clean is tragically reflected in the poor water quality of the Chesapeake Bay. We commend your work to promote strong but realistic pollution limits that finally put an end to pollution of our waters.

Thank you for your incredible leadership and making the reauthorization of the EPA Chesapeake Bay Program a priority in the 111th Congress.

Yours Sincerely,

Sherri L. Evans-Stanton, Director
Environmental Management Center
Brandywine Conservancy, Inc.

Pennsylvania Council
Trout Unlimited
P.O. Box 5148
Pleasant Gap, PA 16823
www.patrout.org

November 5, 2009

The Honorable Barbara Boxer
112 Hart Office Building
Washington, DC 20510

The Honorable James Inhofe
453 Russell Office Building
Washington, DC 20510

The Honorable Benjamin Cardin
509 Hart Office Building
Washington, DC 20510

The Honorable Mike Crapo
239 Dirksen Office Building
Washington, DC 20510

Dear Chairman Boxer, Senator Cardin, Senator Inhofe and Senator Crapo:

The Pennsylvania Council of Trout Unlimited supports Senate Bill 1816, The Chesapeake Clean Water and Ecosystem Restoration Act of 2009. This groundbreaking legislation will have a dramatic impact on pollution reduction and ensure restored water quality for the Chesapeake Bay, as well as the rivers and streams that crisscross its 64,000 square mile watershed.

The Susquehanna River watershed, encompassing nearly half of Pennsylvania's land area, is the largest tributary of the Chesapeake Bay, and also the contributor of a large percentage of the pollutants entering the bay. Many of these pollutants that plague the Chesapeake Bay flow downstream from headwaters areas which support native brook trout and other important aquatic life. This legislation will assist Trout Unlimited in working with partners in Pennsylvania and the other headwaters states to improve water quality and restore aquatic habitat in the Susquehanna watershed.

Since 1983, the federal government, the six Chesapeake Bay watershed states, and the District of Columbia have worked in concert to reduce nitrogen, phosphorus and sediment pollution flowing to the Chesapeake Bay in hopes of restoring water quality and the Chesapeake Bay ecosystem. With pollution causing everything from oxygen-free dead zones to economic hardship in industries dependent upon a healthy ecosystem, it is clear that current federal and state laws have failed to accomplish watershed-wide pollution reduction. Accordingly, water quality has not improved, and the EPA will soon implement a court-ordered, watershed-wide 'pollution budget,' or Total Maximum Daily Load (TMDL) for nitrogen, phosphorus and sediment pollution.

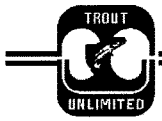
The Chesapeake Clean Water and Ecosystem Restoration Act of 2009, codifies that TMDL and requires states to meet scientifically-based pollution reduction targets while allowing state and local governments the autonomy to decide how to best achieve those targets. The Chesapeake Clean Water and Ecosystem Restoration Act will improve water quality throughout the watershed while providing necessary technical and financial assistance and autonomy for state and local governments to decide how to best reduce pollution.

Although it's a long way from the source to the bay, whatever improvements can be made in the headwaters for brook trout will ultimately have the same benefits for crabs, oysters and all of the other saltwater species that inhabit the Chesapeake. The 12,000 members of PA Trout Unlimited strongly urge you to support this important legislation.

Sincerely,

Dave Rothrock

Dave Rothrock
Council President



Arrowhead Chapter

November 5, 2009

Chairman and ranking member of the Senate Environment and Public Works Committee
and the SEPWC Water and Wildlife Subcommittee

Dear Honorable Congressman,

As President of Arrowhead Chapter of Trout Unlimited and its 350 members in Southwestern Pennsylvania, I kindly ask for your support relative to passing the Chesapeake Clean Water and Ecosystem Restoration Act of 2009. As you may know, Trout Unlimited is dedicated to both the protection and preservation of our nation's coldwater watersheds. Passage of the Chesapeake Clean Water and Ecosystem Restoration Act of 2009 will directly impact and benefit all drainage systems flowing into the Chesapeake Bay such of which encompasses the majority of Pennsylvania's rivers and streams. Protecting our environment inclusive of our watersheds and their delicate ecosystems is not a mere consideration but rather a necessity. I thank you for your consideration and hopefully your support in passing this critical legislation.

Sincerely,
Jerry Potocnak, President
153 Doyle Rd.
Sarver, Pa. 16055
724-295-2718

NOV-06-2009 FRI 10:43 AM WARWICK TOWNSHIP FAX NO. 7178268901 P. 01/02

ADDRESS ALL CORRESPONDENCE TO:
WEBSITE: www.warwicktownship.org

TELEPHONE: (717) 626-8900
FAX: (717) 626-8901

WARWICK TOWNSHIP
315 Clay Road
P.O. Box 308
Lititz, PA 17543-0308
(Lancaster County)

The Honorable Barbara Boxer
112 Hart Office Building
Washington, DC 20510

The Honorable James Inhofe
453 Russell Office Building
Washington, DC 20510

The Honorable Benjamin Cardin
509 Hart Office Building
Washington, DC 20510

The Honorable Mike Crapo
239 Dirksen Office Building
Washington, DC 20510

Dear Chairman Boxer, Senator Cardin, Senator Inhofe and Senator Crapo:

On behalf of Warwick Township, Lancaster County I am writing to express our full support of S. 1816, The Chesapeake Clean Water and Ecosystem Restoration Act of 2009. This legislation will have a dramatic impact on pollution reduction and ensure restored water quality for the Chesapeake Bay as well as the rivers and streams that crisscross its 64,000 square mile watershed.

We ask that you do everything in your power to ensure its passage.

Since 1983, the federal government, the six Chesapeake Bay watershed states and the District of Columbia have worked in concert to reduce nitrogen, phosphorus and sediment pollution flowing to the Chesapeake Bay in hopes of restoring water quality and the Chesapeake Bay ecosystem. With pollution causing everything from oxygen-free dead zones to economic hardship in industries dependent upon a healthy ecosystem, it is clear that current federal and state laws have failed to accomplish watershed wide pollution reduction. Accordingly, water quality has not improved and EPA will soon implement a court-ordered, watershed-wide 'pollution budget,' or Total Maximum Daily Load (TMDL) for nitrogen, phosphorus and sediment pollution.

The Chesapeake Clean Water and Ecosystem Restoration Act of 2009, codifies that TMDL and requires states to meet scientifically-based pollution reduction targets while allowing state and local governments the autonomy to decide how to best achieve those targets. The bill also improves the TMDL by:

- adding process assurance provisions
- authorizing $2.125 billion dollars to offset the implementation costs to state and local governments and impacted sectors

- establishing a water quality credit program to reduce compliance costs.

Without this legislation, states will be forced to reduce pollution without added federal assistance or guidance.

Warwick Township, along with the Lititz Run Watershed Alliance, have been working with the Lancaster County Conservation District in implementing BMP's throughout our watershed. We have had much success toward that end. The Chesapeake Clean Water and Ecosystem Restoration Act will improve water quality throughout the watershed while providing necessary technical and financial assistance and autonomy for state and local governments to decide how to best reduce pollution.

We urge you to support this very important legislation.

Sincerely,

DLZ

Daniel L. Zimmerman
Warwick Township Manager

Cc: The Honorable Robert P. Casey
The Honorable Arlen Specter

A coalition of stakeholders committed to encouraging watershed-based planning, restoration and protection in York County, PA, and beyond

November 13, 2009

The Honorable Barbara Boxer
112 Hart Office Building
Washington, DC 20510

The Honorable James Inhofe
453 Russell Office Building
Washington, DC 20510

The Honorable Benjamin Cardin
509 Hart Office Building
Washington, DC 20510

The Honorable Mike Crapo
239 Dirksen Office Building
Washington, DC 20510

Dear Chairman Boxer, Senator Cardin, Senator Inhofe and Senator Crapo:

I write to express the support of the Watershed Alliance of York, Inc., its partners and board of directors for S. 1816, The Chesapeake Clean Water and Ecosystem Restoration Act of 2009. This groundbreaking legislation will have a dramatic impact on pollution reduction and ensure restored water quality for the Chesapeake Bay as well as the rivers and streams that crisscross its 64,000 square mile watershed.

We ask that you do everything possible to ensure its passage.

Since 1983, the federal government, the six Chesapeake Bay watershed states and the District of Columbia have worked in concert to reduce nitrogen, phosphorus and sediment pollution flowing to the Chesapeake Bay in hopes of restoring water quality and the Chesapeake Bay ecosystem. With pollution causing everything from oxygen-free dead zones to economic hardship in industries dependent upon a healthy ecosystem, it is clear that current federal and state laws have failed to accomplish watershed wide pollution reduction. Accordingly, water quality has not improved and EPA will soon implement a court-ordered, watershed-wide 'pollution budget,' or Total Maximum Daily Load (TMDL) for nitrogen, phosphorus and sediment pollution.

The Chesapeake Clean Water and Ecosystem Restoration Act of 2009, codifies that TMDL and requires states to meet scientifically-based pollution reduction targets while allowing state and local governments the autonomy to decide how to best achieve those targets. The bill also improves the TMDL by:

- adding process assurance provisions
- authorizing $2.125 billion dollars to offset the implementation costs to state and local governments and impacted sectors
- establishing a water quality credit program to reduce compliance costs.

118 Pleasant Acres, York, PA 17402
Telephone (717) 840-7430 ♦ Fax (717) 755-0301
E-Mail: yorkccd@yorkccd.org

Without this legislation, states will be forced to reduce pollution without added federal assistance or guidance.

The Chesapeake Clean Water and Ecosystem Restoration Act will improve water quality throughout the watershed while providing necessary technical and financial assistance and autonomy for state and local governments to decide how to best reduce pollution.

We urge you to support this important legislation.

Yours in conservation,

Gary R. Peacock

Gary R. Peacock, WAY Secretary/Treasurer

Cc: The Honorable Robert P. Casey
The Honorable Arlen Specter

Wysox Creek Watershed Association

RR#1 Box 200B

Rome, PA 18853

The Honorable Benjamin Cardin

509 Hart Office Building

Washington DC

Dear Mr. Cardin

The Wysox Creek Watershed Association supports S. 1816, The Chesapeake Clean Water and Ecosystem Restoration Act of 2009. We ask you to do everything possible to ensure its passage.

Wysox Creek is a tributary to the Susquehanna River and contributes to the degradation of the Bay The watershed association was formed to encourage the improvement of the water quality throughout the watershed. This bill will advance that effort.

S 1816 wil provide some of the technical and financial resources necessary to improve the water quality within the watershed.

We encourage that you support this bill

Sincerely

John C. George

John C. George, Chm

Wysox Creek Watershed Association

Cc: The Honorable Robert P. Casey

The Honorable Arlen Specter

Burke, Mike (Cardin)

From: William Bailey [wbailey@kcnet.org]
Sent: Tuesday, November 03, 2009 4:55 PM
To: Burke, Mike (Cardin)
Cc: casey robert; specter arlen
Subject: The Chesapeake Clean Water and Ecosystem Restoration Act of 2009

372 Irwin St.
Lock Haven, PA 17745
Nov. 3, 2009

Dear Senator Cardin:

I am writing to indicate my support for "The Chesapeake Clean Water and Ecosystem Restoration Act of 2009". As a resident of the upper Susquehanna River watershed I am very much aware of the amount of pollutants that enters our waters and ultimitly ends up in the Chesapeake Bay. Not only will the enactment of this bill clean up the bay, it will also help to clean up the streams and river in my backyard.

As an active member of Trout Unlimited and Beech Creek Watershed Association, I have been concerned with and helped to improve the health of area streams for many years. Legislation such as this will do much to enable Trout Unlimited, watershed associations and other environmental groups to continue their efforts to restore and enhance the quality of the waters that eventually make up the
Chesapeake Bay.

Thank you.

Sincerely,

William Bailey

November 4, 2009

Senator Ben Cardin

Chairman

Subcommittee on Water and Wildlife

Senate Committee on Environment and Public Works

410 Dirksen Senate Office Building

Washington, D.C. 20510

Dear Senator Cardin,

I applaud your leadership in drafting strong reform legislation that restores clean water to the hundreds of rivers and streams that flow into the Chesapeake Bay. S.1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009, directly addresses the most pressing sources of pollution entering our waterways. Ie stand with you in protecting and cleaning streams and rivers throughout the region.

I am particularly supportive of the framework of the Chesapeake Clean Water legislation, which uses a hard "cap" to limit pollutants coming off of the 64,000 square mile watershed. Additionally I support strong tributary implementation plans, federal oversight and enforcement, expanded monitoring grants to states, a citizen suit provision, and increased accountability for use of federal funds.

As a citizen of Pennsylvania, I have taught college level biology for many years and have used the example of the Chesapeake Bay to illustrate how waters can be degraded, and also, how these waters can recover. Our cumulative failure to keep our rivers and streams clean is tragically reflected in the poor water quality of the Chesapeake Bay. I commend your work to promote strong but realistic pollution limits that finally put an end to pollution of our waters.

Thank you for your incredible leadership and making the reauthorization of the EPA Chesapeake Bay Program a priority in the 111th Congress.

Sincerely,

Barbara N. Benson

6558 Blue Church Rd S

Coopersburg, PA 18036

610-282-3611

MRS. LINWOOD HOLTON
3885 BLACK STUMP ROAD
WEEMS, VIRGINIA 22576

31 October 2009

09 NOV -6 AM 10: 52

11/5
Mike B.
FOR BLC'S SIGNATURE
11/16

The Honorable Ben Cardin
Chairman, Subcommittee on Water and Wildlife
509 Hart Senate Office Building
Washington DC 20510

Dear Senator Cardin:

I have just learned about the Chesapeake Clean Water and Ecosystem Restoration Act of 2009 that you and others have introduced in the Senate. That is wonderful news to those of us who live on or near the Bay. My husband and I moved to the Northern Neck of Virginia ten years ago. We are on Moran Creek, off the Corrotoman River that enters the Bay through the Rappahannock River. It has saddened us to see that in those years we have not been able to improve the quality of the Bay despite the efforts of many. The Clean Water Act just didn't have teeth enough to do the job.

Recently we have been encouraged by the strong words of the new head of EPA, but she will need the backing of Congress to enforce the rules and requirements she plans to insist on. Having spent considerable time on farms in western Virginia, I am concerned that we cannot address the pollution in the Bay without seriously addressing what goes into the streams that feed the Bay

My husband was Governor of Virginia from 1970 to 1974. The rivers were in terrible shape. The Federal Government offered states a matching grant to clean up the rivers, and my husband Linwood Holton took advantage of it. The steps he and others took at that time assured that by the time he left office, all rivers and streams in Virginia would be swimmable, and they were! We saw that if the Federal government puts the pressure on the state and local governments, the program can be successful. Over-building and bad practices since then have thwarted the efforts to the quality of the Bay.

Thank you for your bill. We will be watching with great interest its progress in Congress.

Sincerely,

Virginia R. Holton

Virginia R. Holton

W. TAYLOE MURPHY, JR.
174 COURT CIRCLE
WARSAW, VIRGINIA 22572-0277
tayloe.murphy@verizon.net

Tel: 804-333-4051
Fax: 804-333-3880
Cell: 804-366-3594

November 9, 2009

The Honorable Ben Cardin, Chairman
Subcommittee on Water and Wildlife
509 Hart Senate Office Building
Washington, D. C. 20510

Dear Senator Cardin:

It is with a great deal of pleasure and support that I write to you with regard to the Chesapeake Clean Water and Ecosystem Restoration Act of 2009 ("the Act") which you introduced on October 20, 2009. I have been involved in the Chesapeake Bay Program since its inception in the early 1980s. From 1982 to 2000 I was a member of the Virginia House of Delegates. During those eighteen years I also served on the Chesapeake Bay Commission which I chaired on three different occasions. From 2002 to 2006 I was a member of Governor Mark Warner's cabinet and served as his Secretary of Natural Resources. Since retiring from public service I have served as a Trustee of the Chesapeake Bay Foundation with which I worked closely during my years in both the legislative and executive branches. I admire the quality of the research and public policy initiatives of the Foundation. It was exceedingly helpful to me in obtaining passage of the Chesapeake Bay Preservation Act and the Water Quality Improvement Act when I was a member of the General Assembly. When I was Secretary of Natural Resources the Foundation's assistance was critical in getting the State Water Control Board to adopt regulations requiring the inclusion of nitrogen and phosphorous limits in wastewater discharge permits.

In 2003 while I was chairing the Bay Program's Principals Staff Committee the three Bay states, Maryland, Pennsylvania and Virginia, the District of Columbia and the Environmental Protection Agency, accompanied by the headwater states of Delaware, New York and West Virginia agreed to cap annual nutrient discharges at 175 million pounds of nitrogen (recently revised to 200 million pounds based on new computer modeling) and 12.8 million pounds of phosphorous (recently revised to 15 million pounds based on new computer modeling). Each participant received a jurisdictional cap which established the reductions each was required to make to reach the overall baywide cap. These individual caps will be raised to reflect the increases in the baywide caps. While I still support the validity of this strategy, more is required to insure that each participant reaches its cap and maintains it thereafter. Your legislation addresses the need for federal leadership to implement fully the strategy which is already in place. I applaud you for your courage and commitment to this goal through the introduction of the Act.

In order for the Chesapeake Bay to be restored water quality standards must be achieved in all jurisdictions whose waters flow to the Bay. Such standards will not be met if the goal is left entirely to the states without federal oversight and enforcement. TMDLs are now being prepared by the Environmental Protection Agency (EPA) and by the states pursuant to the decree in the 1999 suit brought by the American Canoe Association. The Act brings together these efforts in a single baywide TMDL that can be enforced by EPA under the provisions of your legislation. The Act not only provides accountability by the bay states; it also authorizes the expenditure of hundreds of millions of dollars in federal funds to facilitate compliance with the terms of the TMDL. It provides both the carrot and the stick to insure success.

It has been almost 30 years since the Chesapeake Bay Program was launched. While there has been some success in protecting the Bay from increased pollution, efforts to date have not restored the Bay. The Act is a critical next step to make sure that the goal of restoration is achieved. Moreover, it is a well conceived bill, articulately drafted and designed to give us all hope that the water quality standards established for the Bay and its tributaries will at last be met.

I support the Act unequivocally and I offer you any assistance I may give to make sure it is passed.

Sincerely yours,

W. Tayloe Murphy, Jr.

cc: The Honorable Mark Warner
The Honorable Jim Webb
Mr. William C. Baker
Ms. Ann Jennings

Senator Ben Cardin
Sub-committee on Water and Wildlife
Senate Committee on Environment and Public Works
31416 Dirksen Senate Office Building
Washington, DC 20510

Nov. 2, 2009

Dear Senator Cardin,

Re: I support The Chesapeake Clean Water and Ecosystem Restoration Act.

I am a resident of Pennsylvania and a constituent of Senator Specter, Senator Casey, and Representative Holden. The health and productivity of the Chesapeake and its watershed is a great concern to me. The livelihood of many people depends on it. I live by the Susquehanna in downtown Harrisburg, and I know the River in a different way. From my window and sidewalk, I see the beauty and the power of this historic river. Unfortunately, I also know that the strong currents are carrying deadly pollutants downstream to Chesapeake Bay. I know, too, that the efforts of many individuals and groups over the years to "Save the Bay" have not done the job.

I believe that federal regulation is necessary to stop the flow of pollutants into the Bay and its watershed. Since considerable pollution comes from water sewage treatment and other urban run-off sites, funding to improve infrastructure in many counties and towns will be needed, also.

I wholeheartedly support the efforts of your Committee to provide legislation through the Chesapeake Clean Water and Ecosystem Restoration Act of 2009 to enable the EPA and other agencies to move forward with the tools and funding to heal the Chesapeake Bay and its watershed.

Very truly yours,

Jane Wilshusen
553 South Front St.
Harrisburg, PA 17104

Copies to Senator Specter, Senator Casey, and Representative Holden

Cc Senator Specter, Sen. Casey, and Rep. Holden

From: Rob and Lucy Wood [spoutwood@comcast.net]
Sent: Monday, November 02, 2009 8:35 PM
To: Burke, Mike (Cardin)
Subject: Your new Clean Water initiative

I know, as a Marylander, you value the Chesapeake Bay, and understand the immense stresses we in the Bay's watershed have been giving it.

Therefore I am thanking you for sponsoring this legislation.

My husband and I own and farm a 26-acre farm in the headwaters of one of the tributaries to Codorus Creek, which empties into the Susquehanna River. I am consistently distressed by the muddiness of the water that flows into our stream from two sources, neither a full mile in distance. Goodness knows what besides soil is washing into our water, which is used to irrigate our organic vegetables and to provide drinking water for our horses. Sadly, only one of the few property owners upstream of us has planted a riparian buffer.

I hope your office will inform us of progress on the Bill.

Thank you,

Rob and Lucy Wood
4255 Pierceville Road
Glen Rock, PA 17327

Choose Clean Water

A Campaign for the Chesapeake and all of its Waters

September 17, 2009

The Honorable Eddie Bernice Johnson
Chairwoman
Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure
Rayburn HOB B-376
Washington, DC 20515

The Honorable John Boozman
Ranking Member
Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure
Rayburn HOB B-375
Washington, DC 20515

Dear Chairwoman Johnson and Ranking Member Boozman:

We write in strong support of H.R. 3265, the Chesapeake Bay Restoration Act of 2009, introduced by Representative Gerry Connolly of Virginia. In endorsing this legislation, we ask you to include strong stormwater language in the reauthorization of the EPA Chesapeake Bay Program, legislation that is currently being considered by your committee.

Pollution from stormwater is the fastest-growing source of pollution entering the Chesapeake Bay and the only one that is increasing. We particularly commend Representative Connolly's focus on managing stormwater runoff on new development and preserving and restoring forests owned by the federal government.

Thank you for your strong leadership on this issue and for making the reauthorization of the EPA Chesapeake Bay Program a priority in the 111th Congress. The Chesapeake Bay Watershed Coalition now represents more than 85 organizations who want increased federal leadership to restore the hundreds of river and streams that flow into the Chesapeake Bay. If you have any questions, your staff may contact the Coalition's Senior Manager, Hilary Harp Falk at falkh@nwf.org, 443-758-3406.

Sincerely,

Tony Caligiuri
National Wildlife Federation

Doug Siglin
Chesapeake Bay Foundation

Chris Miller
Piedmont Environmental Council

Co-chairs, Chesapeake Bay Watershed Coalition and *Choose Clean Water* Campaign

Cc: Representative Elijah Cummings

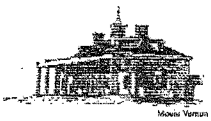
706 Giddings Avenue, Suite 2-B, Annapolis, MD 21401
443.759.3407 info@choosecleanwater.org

Chesapeake Bay Watershed Coalition
Members to Date – October 2009

1000 Friends of Maryland
10000 Friends of Pennsylvania
Adkins Arboretum
Alliance for Aquatic Resource Monitoring (ALLARM)
American Rivers
Anacostia Riverkeeper
Anacostia Watershed Restoration Partnership
Anacostia Watershed Society
Audubon MD/DC
Audubon Naturalist Society
Audubon Society of Northern Virginia
Baltimore Harbor Waterkeeper
Baltimore Jewish Environmental Network
Bay Hundred Foundation
Bohemian River Association
Chapman Forest Foundation
Chesapeake Bay Foundation
Chesapeake Bay Maritime Museum
Chesapeake Wildlife Heritage
Chester River Association
Choptank River Eastern Bay Conservancy
Citizens for a Fort Monroe National Park
Clean Water Action
ClearWater Conservancy
Coalition for Smarter Growth
Corsica River Conservancy
Delaware Nature Society
Dorchester Citizens for Planned Growth
Ducks Unlimited
Eastern Shore Land Conservancy
Elizabeth River Project
Environment America
Environment Maryland
Environment Virginia
Environmental Defense Fund
Environmental Working Group
Float Fishermen of Virginia
Friends of Dyke Marsh
Friends of Lower Beaverdam Creek
Friends of Powhatan Creek Watershed
Friends of Shenandoah Mountain
Friends of the Blue Ridge Mountains
Friends of the Chemung River Watershed
Friends of the Nanticoke
Friends of the North Fork of the Shenandoah River
Friends of the Rappahannock
Friends of the Rivers of Virginia
Growth Action Network of Anne Arundel County
Harriet Tubman Underground Railroad Byway
Herring Run Watershed Association
James River Association
Jones Falls Watershed Association
Lower Shore Land Trust
Lower Susquehanna Riverkeeper
Lynnhaven River NOW
Maryland Bass Federation Nation
Maryland League of Conservation Voters
Mattawoman Watershed Society
Nanticoke Watershed Preservation Group
National Aquarium
National Parks Conservation Association
National Wildlife Federation
Natural Resources Defense Council
Nature Abounds
New York League of Conservation Voters
Partners for Open Space
Partnership for Smarter Growth
Peach Bottom Concerned Citizens Group
PennFuture
PennEnvironment
Pennsylvania Council of Churches
Pennsylvania Farmers Union
Pennsylvania Interfaith Climate Change Campaign
Phillips Wharf Environmental Center
Piedmont Environmental Council
Potomac Conservancy
Potomac Riverkeeper
Presbyterian Citizens in Action
Public Policy Virginia
Queen Annes Conservation Association
Restore America's Estuaries
Sassafras River Association
Savage River Watershed Association
Severn Riverkeeper
Shenandoah Valley Network
Sierra Club- Maryland Chapter
Sierra Club- Pennsylvania Chapter
Spring Creek Watershed Commission
South River Federation
Southern Environmental Law Center
St. Mary's River Watershed Association
Talbot Rivers Protection Association
Upper Susquehanna Coalition
Virginia Conservation Network
Virginia League of Conservation Voters
Virginia State Waterman's Association
Virginia Wilderness Committee
West/Rhode Riverkeeper
Wetlands Watch
Wicomico Environmental Trust
Wild Virginia


choose clean water

11/06/2009 8:23AM



Gerald W. "Gerry" Hyland
Board of Supervisors, Mt. Vernon District
2511 Parkers Lane
Alexandria, VA 22306

Telephone (703) 780-7518 *Fax: (703) 780-1491*

FAXED

November 4, 2009

The Honorable Senator Ben Cardin
509 Hart Senate Office Building
Washington, DC 20510

The Honorable House Member
Elijah Cummings
2222 Rayburn House Office Building
Washington DC 20515

Dear Senator Cardin and Congressman Cummings,

I write to express my full support for your legislation: S.1816 and H.R.3852, both entitled *The Chesapeake Clean Water and Ecosystem Restoration Act of 2009.*

When I first took office in 1988 Fairfax County's population was 746,568 persons; in 2008 the population estimate is 1,045,000. With over a million residents, Fairfax County is the most populous local jurisdiction in the entire 64,000 square mile Chesapeake Bay watershed.

I served as the first Chairperson of and continue to be a member of the Chesapeake Bay's Local Government Advisory Committee and I recognize all too well and for all too long the desperate help this estuary needs if it is to be saved. Local governmental agencies have been at the forefront in assisting residents, the agricultural communities and industries but we can no longer do it alone. As an example, the Fairfax County Board of Supervisors dedicates one penny from each $100 of real estate assessed value to stormwater management and with the county's annual budget of more than three billion dollars we are still losing ground. Additionally, we are creating "friends groups" for each of the 30 watersheds that drain to the Potomac River out into the Chesapeake Bay.

Even though during these years we have voluntarily strengthened our own regulations, and with new EPA regulations coming, we know we will do a lot more. But the down turn in the economy is having a very negative impact on this county and all counties in the watershed, causing local legislators to re-think what we need to do and should do versus what we can do financially.

Your proposed legislation provides changes to the Clean Water Act that will benefit the people of Fairfax County and all counties in the watershed. It promotes an even-handed, science-based approach to reducing excess nutrient and sediment loads in the entire 64,000 square mile watershed, leveling the playing field for pollution management across

NOV-06-2009 09:05 FROM:SUPERVISOR HYLAND 7037801491 TO:US SENATE P.002/003

11/06/2009 8:23AM

parts of six states and the District of Columbia. It allows 15 years for states, counties, municipalities, and individuals to make the investments necessary to get into compliance. It provides a generous authorization of new funds to complement the hundreds of millions of dollars in federal dollars already available in the Chesapeake Bay watershed to assist the agricultural community with conservation practices and will allow local government managers to continue with the upgrades to wastewater and stormwater systems for all counties located within this magnificent watershed.

Please do everything you can, making sure the funding source remains in this proposed legislation, to get the Senators and House of Representatives Members to understand and support your legislation: S.1816 and H.R.3852. As you know this is vital to the restoration of the Chesapeake Bay.

Sincerely,

Supervisor Gerry Hyland, Mount Vernon District
Fairfax County, Board of Supervisors
And
Chesapeake Bay Local Government Advisory Committee member

CC:

Senator Jim Webb
Senator Mark Warner
House of Representative Member Jim Moran
House of Representative Member Gerry Connolly

NOV-06-2009 09:05 FROM:SUPERVISOR HYLAND 7037801491 TO:US SENATE P.003/003

OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Isiah Leggett
County Executive

November 6, 2009

The Honorable Benjamin L. Cardin
United States Senate
509 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Cardin:

I write to express my support for your recently introduced legislation, the "Chesapeake Clean Water and Ecosystem Restoration Act of 2009" (S. 1816), which was also introduced in the House by Congressman Elijah Cummings as H.R. 3852.

Montgomery County, Maryland is a leader in watershed protection and restoration and we are proud of our record in managing stormwater and in improving the quality of our local waterways. This benefits not only the residents and resources users of Montgomery County, but those downstream from us as well. Our next round NPDES stormwater permit will include numeric goals for watershed restoration and requirements for TMDL implementation plans that are recognized as the most forward-looking in the entire Chesapeake Bay region. We are proving that we are up to the challenge by developing a coordinated MS4 Permit Implementation Strategy to meet these significant new requirements.

We intend to continue to identify and implement innovative, cost-effective approaches to reduce the excessive nutrient and sediment loads to the Bay to levels that will protect its many resources. We support your proposed legislation because it promotes a science-based approach to reducing excess nutrient and sediment loads and it provides incentives as well as regulatory criteria for a consistent minimum level in pollution management across the Bay states and the District of Columbia. It sets a timeline for states, counties, municipalities, and individuals to make the investments necessary to meet Bay restoration goals. It provides a generous authorization of new funds specifically for urban stormwater management, which will complement the hundreds of millions of dollars in federal funds for the Bay watershed to assist farmers in implementing agricultural conservation practices and to wastewater treatment plant managers for upgrade costs.

On behalf of the residents of Montgomery County, I applaud you for your vision in introducing this important bill, and pledge to do all I can to help you advance this initiative through the legislative process.

Sincerely,

Isiah Leggett
County Executive

cc: The Honorable Barbara A. Mikulski

NEWARK DELAWARE

WATER AND WASTE WATER DEPARTMENT
CITY OF NEWARK
220 Elkton Road • P.O. Box 390 • Newark, Delaware 19715-0390
302-366-7055 • Fax 302-366-7160 • www.cityofnewarkde.us

November 3, 2009

Senator Ben Cardin
Chairman
Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Cardin,

We write to applaud your leadership in drafting strong reform legislation that restores clean water to the hundreds of rivers and streams that flow into the Chesapeake Bay. S.1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009, directly addresses the most pressing sources of pollution entering our waterways. We stand with you in protecting and cleaning streams and rivers throughout the region.

We are particularly supportive of the framework of the Chesapeake Clean Water legislation, which uses a hard "cap" to limit pollutants coming off of the 64,000 square mile watershed. Additionally we support strong tributary implementation plans, federal oversight and enforcement, expanded monitoring grants to states, a citizen suit provision, and increased accountability for use of federal funds.

Our cumulative failure to keep our rivers and streams clean is tragically reflected in the poor water quality of the Chesapeake Bay. We commend your work to promote strong but realistic pollution limits that finally put an end to pollution of our waters. Perhaps this will be a model that can used to improve the water sheds in other states

Thank you for your incredible leadership and making the reauthorization of the EPA Chesapeake Bay Program a priority in the 111th Congress.

Sincerely,

Roy Simonson, P.E.

Director of Water and Waste Water

From: Smkoch@aol.com
Sent: Monday, November 09, 2009 12:01 PM
To: Burke, Mike (Cardin)
Cc: Greenberger, Sarah (Cardin)
Subject: Letter of Support from Audubon Naturalist Societ for Chesapeake Bay Bill

November 9, 2009

Senator Ben Cardin
Chairman
Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Cardin:

The Audubon Naturalist Society, with members throughout the Washington, DC area, is pleased to support Senate Bill 1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009. We also want to thank you for your leadership on this legislation that focuses not only on the restoration of clean water in the Chesapeake Bay mainstem but also recognizes the importance of protecting and restoring the myriad rivers and streams, "our local waters," throughout the Chesapeake Bay watershed.

As an organization engaged in protecting suburban and urban streams, we support the hard "cap" limit to pollutants and other strong stormwater provisions of the bill. We also support strong tributary implementation plans, federal oversight and enforcement, expanded monitoring grants to states, a citizen suit provision, and increased accountability for use of federal funds.

Thank you for your leadership in the reauthorization of the EPA Chesapeake Bay Program a priority in the 111th Congress.

Sincerely,

Stella Koch

Stella M. Koch
Virginia Conservation Associate
Audubon Naturalist Society
703-628-6983
stella@audubonnaturalist.org

Selected as one of the "finest smaller charities Greater Washington has to offer" by the Catalogue for Philanthropy

NATIONAL WILDLIFE FEDERATION

Chesapeake Mid-Atlantic Regional Center
706 Giddings Avenue, Suite 2-B Annapolis, MD 21401 443.759.3400 www.nwf.org

November 9, 2009

Senator Ben Cardin
Chairman
Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Cardin,

We write to applaud your leadership in drafting strong legislation that restores clean water and protects wildlife in the Chesapeake Bay Watershed. S.1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009, directly addresses the most pressing sources of pollution entering our waterways.

There are more than 3,600 plant, fish and wildlife species native to the Chesapeake Bay, and they all need your help. This year, we need to make sure our elected officials lead the way to restoring Chesapeake waters and protecting the wildlife that call this area home. The Chesapeake Clean Water and Ecosystem Restoration Act will ensure that we clean up the Chesapeake's waters and protect one of our national treasures. We stand with you in protecting and cleaning streams and rivers throughout the region.

Inspiring Americans to protect wildlife for our children's future.

We are particularly supportive of the framework of the Chesapeake Clean Water legislation, which uses a hard "cap" to limit pollutants coming off of the 64,000 square mile watershed. Our cumulative failure to keep our rivers and streams clean is tragically reflected in the poor water quality of the Chesapeake Bay. We commend your work to promote strong but realistic pollution limits that finally put an end to pollution of our waters.

Thank you for your incredible leadership and making the reauthorization of the EPA Chesapeake Bay Program a priority in the 111th Congress.

Sincerely,

Julie Lalo
Regional Representative
National Wildlife Federation

Mixed Sources

DELAWARE NATURE SOCIETY

ABBOTT'S MILL NATURE CENTER • COVERDALE FARM • ASHLAND NATURE CENTER • COOCH-DAYETT MILLS

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www.delawarenaturesociety.org

•

Administrative Offices
Ashland Nature Center
PO Box 700
Hockessin, DE 19707
(302) 239-2334 Tel
(302) 239-2473 Fax

November 5, 2009

Senator Benjamin L. Cardin
Chairman
Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Cardin,

On behalf of the Delaware Nature Society and our 8,000 members statewide, I would like to thank you for your leadership in introducing S.1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009. The Delaware Nature Society is a private, non-profit, membership, organization that works to foster understanding, appreciation, and enjoyment of the natural world through education, advocacy, and preservation. Protecting and improving the health of streams and rivers throughout the region has been a central focus for the organization throughout our 45-year history and we strongly support your commitment to Chesapeake Bay restoration.

With approximately one third of the land area in the state draining to the Chesapeake Bay, Delaware has a vested interest in keeping this waterway as pristine as possible. For more than 25 years, nonprofit organizations, state and local agencies, and the federal government have been fighting for clean water, fishable rivers and streams, and a healthy Chesapeake Bay. S.1816 is the largest step forward for Chesapeake Bay restoration since the Clean Water Act. The Delaware Nature Society is particularly pleased that our Senators Carper and Kaufman have signed on to the legislation as original co-sponsors.

The Chesapeake Clean Water and Ecosystem Restoration Act gives Bay states strong tools to restore our rivers and streams. For the first time, headwater states like Delaware will be eligible for implementation grants. In addition, the Act creates two new grant programs for local governments related to reducing stormwater pollution.

Federal, state, and local governments must work together to achieve everyone's goal of clean water. The Chesapeake Clean Water and Ecosystem Restoration Act gives them the tools necessary for success. Establishing legal pollution limits for the Bay watershed is the first step to finally restore and maintain the integrity of our waters.

Thank you for your leadership and dedication to a healthy Chesapeake Bay watershed.

Sincerely,

Michael E. Riska
Executive Director

EDF
ENVIRONMENTAL DEFENSE FUND
Finding the ways that work

Senator Ben Cardin, Chairman
Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Cardin,

On behalf of the Environmental Defense Fund (EDF), I am writing to applaud your leadership in introducing critical and strong legislation to reauthorize the Chesapeake Bay Program and dramatically accelerate efforts to restore clean water to the hundreds of rivers and streams that flow into the Chesapeake Bay. S.1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009, addresses the pressing sources of nutrients and sediments entering our waterways. EDF strongly supports your efforts to protect and restore streams and rivers throughout the region.

In particular, EDF supports the framework of the Chesapeake Clean Water and Ecosystem Restoration Act to establish a hard "cap" to limit pollutants coming off of the 64,000 square mile watershed and to require states to develop strong watershed implementation plans. EDF also strongly supports the bill's expanded federal funding for financial and technical assistance for farmers and communities and meaningful federal oversight and enforcement.

While many stakeholders have made considerable efforts to reduce nutrient and sediment runoff, as shown by the declining levels of runoff coming from agriculture and wastewater treatment plants, we have not done enough and water quality in this treasured resource remains poor. We commend your work to promote strong but realistic pollution limits that will enable us to realize the goal of a restored, healthy Chesapeake Bay.

Thank you for your leadership and for making the reauthorization of the EPA Chesapeake Bay Program a priority in the 111th Congress.

Sincerely,

Suzy Friedman, Regional Director for the Chesapeake Bay
Environmental Defense Fund

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Washington, DC 20009
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COMMENTS ON DRAFT LEGISLATION
Chesapeake Clean Water and Ecosystem Restoration Act
October 19, 2009
Proposed by Senator Benjamin Cardin

Background

The EnergyWorks Group of Companies (www.energyworks.com), whose headquarters are located in Annapolis, Maryland, has developed, owned and operated distributed energy infrastructure facilities since 1995. In addition, the group has provided technical and management services to developers and owners of conventional and renewable energy facilities across North America.

In 2006, EnergyWorks began developing agricultural waste-to-energy projects using previously proven, market-based business models. It was soon recognized that, within the Chesapeake Bay region, the value created by reducing water pollution is of greater importance than the energy production potential from agricultural wastes. The Pennsylvania Nutrient Credit Trading Program provides a mechanism for monetizing these water pollution benefits, enabling the creation of commercial environmental services facilities. EnergyWorks conducted extensive commercial scale tests and laboratory analysis that led the submittal of its proposal for nutrient credit process certification by the Pennsylvania Department of Environmental Protection (PA DEP). Certification approval is anticipated in time to support completion of a project near Gettysburg Pennsylvania that will generate nutrient credits for the 2010/2011 water year. The fully implemented project will be capable of generating over 1.2 million pounds of nitrogen credits and over 87 thousand pounds of phosphorous credits annually for the next 30 years.

Comment on Draft Legislation

Facilities such as EnergyWorks' Gettysburg Energy and Nutrient Recovery Facility described above can make a significant contribution to achieving and maintaining Chesapeake Bay water quality objectives. Managed technology solutions can provide immediate, measurable and verifiable reductions in Chesapeake Bay nitrogen and phosphorous loading from agricultural and other sources (e.g., elimination of land-applied biosolids from wastewater treatment). These solutions can reliably produce large quantities of credits over an extended period. Processing of animal manure in a facility with monitored discharges transforms current non-point source releases into point source releases. These characteristics are highly desirable to municipal planners and developers who must weigh purchase of credits as an alternative to capital investments to achieve liquid discharge limits.

The proposed legislation to establish an interstate nitrogen and phosphorous trading program for the Chesapeake Bay for generation, trading and use of nitrogen and phosphorous credits is an essential step to unleash the potential for technology solutions.

These solutions will provide speed and certainty in achieving the Chesapeake Bay Program objectives.

In order to obtain the desired impact, it is critical that the legislation provide long-term certainty for the parties that generate and purchase nutrient credits. Decisions to invest in costly processing facilities and to purchase long-tem offsets must be protected from future changes in the Trading System regarding the methods and assumptions affecting credit certification and eligibility for trading. Paragraph (xii) of sub-part (6) of Actions by the Administrator to "consider and incorporate, to the maximum extent, elements of State trading programs in existence as of the date of enactment of the Chesapeake Clean Water and Ecosystem Restoration Act of 2009" appears to recognize this necessity.

ENVIRONMENTAL WORKING GROUP

The Honorable Benjamin L. Cardin
Chairman
Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

November 5, 2009

Dear Senator Cardin,

For more than twenty-five years, efforts have stalled to address the pollution choking the Chesapeake Bay watershed's streams and rivers. For the first time in a quarter century, however, and due in large part to the introduction of your legislation, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009 (S. 1816), the Environmental Working Group has found reason to be optimistic about the future of the Bay.

We are particularly supportive of the move in your legislation away from sole reliance on voluntary compliance strategies to mitigate toxic run-off that has hampered restoration efforts to date. Additionally, the use of strong funding penalties for Bay states that do not meet pollution control requirements is a refreshing and needed component of any plan to restore the Chesapeake Bay watershed. Finally we support your effort to secure additional funds to accelerate efforts to improve the health of the Chesapeake Bay and its watershed.

EWG commends your work to promote strong but realistic pollution limits that will hopefully put an end to the continuing environmental catastrophe occurring in the Chesapeake Bay watershed.

Thank you for your leadership and making the reauthorization of the EPA Chesapeake Bay Program a priority in the 111th Congress.

Sincerely,

Craig Cox
Vice President
Environmental Working Group

HEADQUARTERS 1436 U St. NW, Suite 100 Washington, DC 20009 I P: 202.667.6982 F: 202.232.2592
CALIFORNIA OFFICE 2201 Broadway, Suite 308 Oakland, CA 94612 I P: 510.444.0973 F: 510.444.0982
MIDWEST OFFICE 103 E. 6th Street, Suite 201 Ames, IA 50010 I P: 515.598.2221

Mike B.

NRDC
THE EARTH'S BEST DEFENSE

NATURAL RESOURCES DEFENSE COUNCIL

October 29, 2009

The Honorable Benjamin Cardin
United States Senate
Washington, DC 20510-2002

Dear Senator Cardin:

On behalf of myself and the Natural Resources Defense Council's 1.3 million members and online activists, I am writing to thank you for your leadership in protecting our water and the Chesapeake Bay. The Chesapeake Clean Water and Ecosystem Restoration Act is a landmark bill signifying a turning point for the Bay and for clean water protection around the country.

Your legislation sets clear, enforceable pollution limits and deadlines and provides states with funding and flexibility to achieve them. The bill's nutrient trading provisions tap market innovations that will dramatically reduce the costs of compliance. Trading has proven to be an effective tool for achieving other environmental and health goals. NRDC believes that, when carefully implemented, water nutrient trading offers a powerful opportunity to address runoff from stormwater, crops and farms.

The science and crippled fisheries of the Bay send a clear message: a largely voluntary approach to cleaning up our waters simply hasn't worked. NRDC stands ready to help you move this important legislation forward to insure that federal dollars are delivering meaningful results cleaning up the streams and rivers that drain into the Chesapeake Bay.

Thank you for being an original author of this important legislation.

Sincerely,

Frances Beinecke

Frances Beinecke
President

www.nrdc.org 1200 New York Avenue, NW, Suite 400
Washington, DC 20005
TEL 202 289-6868 FAX 202 289-1060

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09 NOV 17 PM 2:30

November 10, 2009

Dear Editor:

I live near the Shenandoah River, one of the many rivers and streams that flow into the Potomac and then the Chesapeake Bay. (I love to fish, swim, boat, etc.—something about what's beautiful and valuable about this body of water, or the bay itself).

Unfortunately, pollution is killing the Shenandoah River and hundreds of other rivers and creeks in the region. All this pollution gets collected into the bay, which is no better shape today than it was 25 years ago.

The future of farms and healthy food depends on clean water and soil. We can't afford to destroy these resources through wasteful, polluting agricultural practices. Well run, economically viable, independent farms are vital to our economy, ecology, and natural heritage.

Senator Cardin and Congressman Cummings, both of Maryland, have recently proposed legislation that provides new tools to restore clean water to our communities. This legislation has the potential to have the greatest benefit for the waters of this region since the Clean Water Act passed in 1972. After decades of unmet promises, we finally have a chance this year for a meaningful turning point in this battle to provide clean water to all 17 million citizens in the bay region.

I hope Senators Byrd and Rockefeller will co-sponsor and work with Senator Cardin to pass this critical piece of legislation, and that Representative Rahall will co-sponsor the bill's counterpart in the U.S. House of Representatives.

Right now, more than ever, we need true leadership for clean water.

Thanks,

Matthew Knott

From: Wendy at River Riders [wendy@riverriders.com]

Sent: Monday, November 09, 2009 11:38 AM

To: Burke, Mike (Cardin)

Subject:Supporting Clean Water Legislation

November 10, 2009

Dear Editor:

I live near the Shenandoah River, one of the many rivers and streams that flow into the Potomac and then the Chesapeake Bay. (I love to fish, swim, boat, etc.-something about what's beautiful and valuable about this body of water, or the bay itself).

Unfortunately, pollution is killing the Shenandoah River and hundreds of other rivers and creeks in the region. All this pollution gets collected into the bay, which is no better shape today than it was 25 years ago.

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Right now, more than ever, we need true leadership for clean water.

Thanks,

Matthew Knott
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November 24, 2009

The Honorable Ben Cardin
United States Senate
509 Hart Senate Office Building
Washington, DC 20510

Dear Senator Cardin,

Thank you for your leadership in introducing S. 1816, the Chesapeake Bay Clean Water and Ecosystem Restoration Act of 2009. This landmark legislation builds upon past efforts and includes strong new features that I believe will make all the difference for restoring the health of the 64,000 square mile Chesapeake Bay watershed.

S. 1816 provides increased financial assistance to states and localities to help them reduce point and nonpoint sources of pollution, a comprehensive strategy that builds upon the Clean Water Act. It also, however, includes provisions for additional technical assistance. At a time when funding is scarce, this ensures that states and localities can develop restoration plans that are as efficient and cost-effective as possible. Equally important, the Act creates real consequences for failure to fulfill requirements. This legislation sends the strong message that it is high time to fully commit ourselves to restoring this national treasure and, at the same time, provides the support and "teeth" necessary to get the job done.

The Chesapeake Bay Clean Water and Ecosystem Restoration Act establishes, for the first time, a firm deadline for implementing Bay watershed restoration activities. A deadline is necessary if we hope to achieve the level of restoration that the Chesapeake Bay requires. Every additional year that we wait, however, prolongs watershed damage. I hope that as the bill moves forward this deadline can be pulled from 2025 back to the original goal of 2020 that was included in the draft bill.

If I—or Smart Growth America—can be of help supporting this important legislation, either in Congress or the community, please do not hesitate to contact me at (202) 207-3355 ext. 121.

With the support provided in S. 1816, the Chesapeake Bay will again be able to fulfill its potential as a source of economic, recreational, and environmental benefits for generations to come.

Sincerely,

Parris N. Glendening
Governor (1995-2003)

south river
federation

2830 Solomons Island Rd., Suite B ◊ Edgewater, MD 21037
410-224-3802 ◊ Fax: 410-224-0364
www.southriverfederation.net

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November 4, 2009

Senator Ben Cardin
Chairman
Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Cardin,

The South River Federation would like to thank you for your leadership in drafting S.1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009. This bill codifies pollution limits for the Bay region, creates additional penalties for non-compliant jurisdictions, and most importantly, significantly expands funding for the Bay restoration effort. Only through these mechanisms can we achieve the fishable, swimmable waters that all the residents of the Bay states deserve.

For too long, the decline of the Chesapeake has been marked by inadequate enforcement of environmental laws, excuses for failure to see improvements in water quality, and insufficient fiscal resources to address a problem of this scale. This legislation and a new seriousness at EPA represent critical steps in the federal government's effort to lead the way in cleaning up the Bay.

Thank you for making the Chesapeake Bay and its rivers a priority in the 111th Congress. If you have any questions or would like to join our Riverkeeper for a ride on the South River, please give me a call at 410-224-3802.

Sincerely,

Erik Michelsen
Executive Director

South River Federation, Inc. is a 501 (c)(3), non-profit organization and donations are tax-deductible to the fullest extent of the law. For your records our tax ID number is 52-2301464.

Steve Moyer
Vice President for Government Affairs

November 13, 2009

The Honorable Benjamin L. Cardin
Senate Environment and Public Works Committee
Water and Wildlife Subcommittee
U.S. Senate
Washington DC 20515

Re: Hearing on Chesapeake Clean Water and Ecosystem Restoration Act of 2009

Dear Senator Cardin:

Trout Unlimited submits the following letter for the hearing record on S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act.

A healthy Chesapeake Bay relies on clean headwater streams, and the protection and restoration of headwater areas provides quality trout habitat as well as a steady supply of clean water to the Chesapeake. Trout Unlimited has long worked to protect and restore the Chesapeake Bay headwaters, and supports S. 1816 as a way to enhance these efforts.

Trout Unlimited has more than 10,000 members living in the Chesapeake Bay watershed and a long history of grassroots habitat restoration work in the Bay's headwater streams. For example, in Pennsylvania, Trout Unlimited is working to restore rivers and streams of the West Branch Susquehanna watershed impacted by abandoned coal mines, and in Virginia and West Virginia Trout Unlimited is working cooperatively with agricultural landowners to restore streams in the Shenandoah and Potomac watersheds.

If enacted, the Chesapeake Bay Ecosystem Restoration Act of 2009 would support Trout Unlimited's partnership-driven restoration efforts by setting enforceable cleanup goals for the Chesapeake Bay and its tributaries, encouraging efforts to reduce nonpoint source pollution, setting up a regional cap-and-trade program for nitrogen and phosphorous, and authorizing important grant programs that support collaborative habitat restoration efforts.

The bill would require the Environmental Protection Agency to set nitrogen, phosphorous and sediment pollution limits for the Chesapeake Bay, and require each of the six states within the Bay watershed and the District of Columbia to develop implementation plans with concrete benchmarks for measuring progress toward pollution reduction goals. These measures will improve accountability as states work toward science-driven pollution reduction goals.

The bill also calls for the creation of a Bay-wide nitrogen and phosphorous trading program. Such a program can help to achieve cost-effective pollution reduction, and

Trout Unlimited: America's Leading Coldwater Fisheries Conservation Organization
1300 N. 17th St. Suite 500, Arlington, VA 22209
Direct: (703) 284-9406 • Fax: (703) 284-9400 • Email: smoyer@tu.org • www.tu.org

create momentum for restoration projects by providing incentives and rewards for agricultural landowners who reduce nutrient input from farm runoff.

TU looks forward to its continued partnership with state and federal agencies and private landowners to improve trout habitat and accomplish Chesapeake Bay restoration goals.

Sincerely,

Steven N. Moyer

Steve Moyer

From: jgpauline@windstream.net
Sent: Tuesday, November 10, 2009 8:35 AM
To: Burke, Mike (Cardin)
Cc: Craig Hudson; Murray Neeper; Stanley Hastings Sr.
Subject: clean water act

Dear Senator, James Zwald Chapter 314 of Trout Unlimited, serving Elk and Cameron Counties, PA ,located in the heart of the Pennsylvania Wilds region of the state, takes pride in our local environment. We have many cold water fisheries that flow into the Chesapeake Bay watershed.

We wholeheartedly support your imitative on the Chesapeake Clean Water and Ecosystem Restoration Act. Outdoor recreation activities such as fishing play a key role in local tourism, and enhances "quality of life" for our local residents.

Sincerely,

Gary Pauline
President

UNIVERSITY OF DELAWARE

COLLEGE OF HUMAN SERVICES, EDUCATION & PUBLIC POLICY

INSTITUTE FOR PUBLIC ADMINISTRATION

Senator Ben Cardin
Chairman
Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

RE: Chesapeake Bay - S.1816, Chesapeake Clean Water and Ecosystem Restoration Act of 2009

Dear Senator Cardin,

We support your leadership in drafting new legislation to restore the waters of the 64,000 square mile Chesapeake Bay watershed in 6 states and the District of Columbia. The Chesapeake Clean Water and Ecosystem Restoration Act of 2009 will set strict deadlines to reduce 60% of the pollutant loads entering the bay by 2017 and promulgates up to $1. billion in grants to the states to accomplish this mission. As 30% of Delaware drains to the Chesapeake Bay, we at the University of Delaware Water Resources Agency energetically support you and our Senators Carper and Kaufman in introducing this watershed legislation.

As President Obama wrote in his executive order, the Chesapeake Bay is a national treasure. This will be a watershed moment in clean water legislation.

Thank you for your leadership in introducing the act to reauthorize the EPA Chesapeake Bay Program during the 111th Congress. I recommend considering the river basin commission as the model for watershed governance in the Chesapeake Bay. The Chesapeake Bay Program should be strengthened and given more authority to provide a singular focus between the Federal government and the 6 states and D. C. on bay cleanup, much as the Delaware River Basin Commission has done successfully in the Delaware Estuary since JFK signed the DRBC compact in 1961.

Warmly,

Gerald J. Kauffman, Director
University of Delaware
Water Resources Agency

Senator Ben Cardin
Chairman
Subcommittee on Water and Wildlife
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

November 17, 2009

Dear Senator Cardin:

Waterkeepers Chesapeake is a collective of sixteen independent grassroots advocates whose organizations represent thousands of citizens throughout the Chesapeake Bay watershed and Coastal Bay watersheds. We patrol our water bodies to enforce laws and speak for these valuable resources and we will use all available tools to protect and restore water quality and the communities who depend upon it. We write to thank you and applaud your leadership in drafting reform legislation to protect and restore clean water to the hundreds of rivers and streams that enrich our entire region and which feed and shape the Chesapeake Bay. S.1816, the *Chesapeake Clean Water and Ecosystem Restoration Act of 2009*, addresses the most pressing sources of pollution entering our waterways.

We share your intent to preserve the strong authorities already available through the Clean Water Act. Many parties, including EPA's Inspector General, have documented the fact that these authorities have been underused and we can attest to these shortcomings from extensive first-hand experience. We must ensure that all agencies implementing and enforcing the Act meet appropriate minimum standards – a mandate that has not been met to this point. We pledge to work with you to see that your proposal maintains the intricate structure of the Clean Water Act, which has supported government and citizen enforcement actions for nearly four decades and provided the driving force for improvements so far achieved.

In addition, we strongly agree that new regulatory measures to strengthen the Act are necessary and important for us to finally reach the objective and goals of the Act. We particularly support your proposals for a strong, enforceable "cap" to limit pollutants pouring into the Chesapeake Bay from all parts of the 64,000 square mile watershed, which continue to stymie progress, despite the investment of millions of dollars and decades of hard work. Additionally we support strong tributary implementation plans, federal oversight and enforcement, expanded monitoring grants to states, and the citizen suit provision in your bill.

The impairment of thousands of miles of our rivers and streams, denial of citizens' rights to use our waters for a full range of beneficial purposes, and the huge economic and social costs these failures impose are only magnified by the resulting damage to the Chesapeake Bay. We commend your work to promote strong pollution limits and to finally meet the goals and promises the Clean Water Act created.

Thank you for your dedication and leadership and for making the reauthorization of the Chesapeake Bay Program a priority in the 111th Congress.

Sincerely,

Dottie Younger
Anacostia RIVERKEEPER
1st Street & Potomac Avenue
Washington, DC 20003

Kathy Phillips
Assateague COASTKEEPER
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Berlin, MD 21811

Eliza Smith Steinmeier
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David Sligh
Upper James RIVERKEEPER
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Dave Burden
Virginia Eastern SHOREKEEPER
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Eastville, VA 23347

Chris Trumbauer
West/Rhode RIVERKEEPER
4800 Atwell Road, Suite 6
Shady Side, MD 20764

Senator CRAPO. I have no objection, Mr. Chairman. I would like to follow up on that. I note in Senator Inhofe's opening statement that he had asked that a number of letters also be introduced.

Senator CARDIN. Oh, absolutely. Those letters also will be included in the record.

We now are joined by Ann Swanson. Ann Swanson has been a leader in the Chesapeake Bay restoration effort for over 25 years and has spent the last 20 years as the Executive Director of the Chesapeake Bay Commission. She is also a trained wildlifeologist and ecologist. In 2001, she was awarded the Bay Region's highest award as the Conservationist of the Year.

Although she has worked primarily in the Chesapeake Bay, Ms. Swanson's expertise has been tapped by other great water bodies programs across the country and even abroad.

Dr. Donald Boesch is an internationally known marine ecologist and President of the University of Maryland Center for Environmental Science. He has conducted research and published extensively on the environmental issues facing both the Gulf of Mexico and the Chesapeake Bay. He has also served on numerous advisory boards, including the National Research Council, ensuring that world class science is applied to protecting these two nationally significant ecosystems.

Dr. Boesch will provide us with a scientific perspective on restoring and protecting these two great water bodies.

Mr. Peter Hughes has been a leader in facilitating nutrient credit trading between point source and non-point sources and assisting farmers in improving water quality through on-farm nutrient control. In 2005, he founded Red Barn Trading Company, the only privately held entity with certified nutrient credits in the Commonwealth of Pennsylvania. It is also the only entity that has brokered point to non-point credit sales in the Commonwealth.

And Susan Parker Bodine is a Partner at the law firm of Barnes and Thornburg, where she practices environmental law with a focus on public policy issues, including wetlands, water pollution and water resources. She has previously served as an Assistant Administrator of the Office of Solid Waste and Emergency Response and Staff Director and Senior Council to the Subcommittee on Water Resources and Environment within the House Committee on Transportation and Infrastructure.

It is a pleasure to have all four of you with us. Without objection, your full statements will be made a part of our record. You may proceed as you wish, and we will start off with Ms. Swanson, and then we will go to Dr. Boesch. Is that fine?

STATEMENT OF ANN SWANSON, EXECUTIVE DIRECTOR, CHESAPEAKE BAY COMMISSION

Ms. SWANSON. Well, first of all, Senator Cardin and Senator Crapo, thank you so much for this opportunity to come before you and represent the Chesapeake Bay Commission. As you heard, my name is Ann Swanson, and I have served as the Executive Director of the Commission for the past 21 years.

The Commission is the only State-level organization that works watershed-wide. Our 21 members are largely elected officials from

both parties, representing the General Assemblies and Administration of Maryland, Pennsylvania and Virginia.

Because we were created in 1980 and are a leader in the Chesapeake Bay Program, we have been involved in every major policy negotiation since the program got its start in 1983.

I would like to really begin by thanking Senator Cardin for introducing this landmark legislation. I can say I have probably worked on more than 50 pieces of legislation in my time with the Commission, and I do believe this is probably the most profoundly important piece of legislation yet.

The other thing I should say is that half of my family is from Idaho. So Senator Crapo, I would also like to thank you very much for coming here today to listen to the concerns of both the Chesapeake and the Gulf of Mexico.

The Bay restoration effort is now more than three decades old. And section 117 is, of course, what authorizes it. It has been authorized a number of times, and I think the important point to make here is that with each authorization comes a maturity of the program and therefore a maturity of the appropriate policies to be acted on as the Congress moves the program forward.

The Clean Water Act covers all point sources of pollution, encompassing municipal waste, wastewater, concentrated feedlots, but the important point in the Chesapeake, where roughly 60 percent of the nutrient pollution comes from the other type of source, or non-point source, we need this legislation to really cover all sources, to make sure that they are all controlled in meaningful ways.

And I should emphasize here that doesn't necessarily mean regulatory ways. But the point is that it would be very accountable, programs to meet those load reductions, and that the States would develop programs with some confidence that they would actually get the pollutants out of the water.

In my brief minutes before you, I want to make five key points that I think really summarize the Commission's strong support for this piece of legislation.

The first is that the bill does indeed, as Mr. Fox suggested, respect the collaborative nature of this program. And I cannot emphasize that enough. A week never goes by where I am not at meetings with representatives from all the jurisdictions in the watershed, any number of Federal agencies, in a variety of combinations depending upon the subject.

The point is that right now we have been very aggressively negotiating a TMDL process because we tried to do it voluntarily and over the course of roughly 10 years of trying, we didn't succeed. So instead, we have now developed a program with 2-year milestones, with end term dates of 2025, and with a very clear process and expectations for exactly how much pollution needs to come out of the Bay to define clean water.

That puts us uniquely in a place that nowhere else in the country is. We have a 64,000-square mile TMDL and one of the most vulnerable estuarine systems on the planet. And we have negotiated. This legislation directly reflects that negotiation. And so on that point, from a State point of view, I think it is extremely important because it is saying what the States have agreed to do.

The second thing is that the bill uses that clean air construct, that construct that uses consequences not to actually ever levy them, but to say it is possible so that it really pushes the envelope and pushes the interest at the State and local level to get the job done.

The third is that the bill clearly articulates Federal Government expectations in clean water. It sets a cap. It says what is needed.

The fourth is there is an interstate trading program. Suffice it to say that this puts the Chesapeake Bay Program in the modern framework. It is using markets to get at conservation instead of strictly public investment. And that is critical to this piece of legislation and to pursuing cost effective approaches that can matter.

Finally, it is about financial assistance. I say that last to leave you with that mark. But it is not just Federal financial assistance. It is enormous leverage at the State level. The other thing is it is very guided. It is very guided toward stormwater, which is the fastest growing pollutant in our watershed and the only one that is growing. And the other thing is it focuses on technical assistance for farmers, something that is sorely needed if we are really going to get vast and total cooperation.

So with that, I would like to end by saying this program is so important. The collaborative nature that the Federal Government started here is wholly appropriate for the Gulf of Mexico. It is what the Federal Government can do. It can really nurture interstate relations, and at this point it seems both of the pieces of legislation are well constructed for those regions, place and time right now.

Thank you very much.

[The prepared statement of Ms. Swanson follows:]

Chesapeake Bay Commission
Policy for the Bay

CHESAPEAKE BAY COMMISSION
ANN PESIRI SWANSON, EXECUTIVE DIRECTOR

TESTIMONY
S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act and S. 1311, the Gulf of Mexico Restoration and Protection Act

Senate Committee on Environment and Public Works
Legislative Hearing

November 9, 2009

Introduction

Chairman Boxer, Ranking Minority Member Inhofe, and members of the Committee, thank you for this opportunity to testify on the Chesapeake Clean Water and Ecosystem Restoration Act and the Gulf of Mexico Restoration and Protection Act. My name is Ann Pesiri Swanson and I have served as the Executive Director of the Chesapeake Bay Commission for the past 21 years. The Commission is a legislative commission established in 1980 representing the state legislatures of Maryland, Pennsylvania and Virginia on matters of Bay-wide concern.

Over the past three decades, the Commission has had the opportunity to address many issues. We have participated in developing and executing nearly every major Chesapeake Bay Program policy since the Program got its start in 1983. We are a signatory to all three Bay agreements executed by the partnership established under Section 117 of the Clean Water Act.

My work has also led me beyond the basin's borders and into advisory relationships with similar restoration efforts on the Great Lakes, Gulf of Mexico, Puget Sound, Narragansett Bay, Galveston Bay, Everglades, Gulf of Maine, Platte River, Upper Mississippi River, and the California Bay Delta. I have also had the honor of working on a number of ecosystems around the globe. Collectively, these experiences have helped me to refine my professional knowledge and expertise regarding the water quality and habitat restoration needs of watersheds throughout the world. I hope that this expertise can be helpful to you today.

I should also explain the Chesapeake Bay Commission and its role in the watershed. The Commission was first created in 1980 to serve as a governmental policy leader in the restoration of Chesapeake Bay. Its 21 members represent the states of Maryland, Pennsylvania and Virginia. Fifteen are members of the General Assemblies, three are

cabinet-level secretaries and three are prominent citizens. Its membership is politically diverse, drawn from both parties and representing urban and rural districts from across the watershed.

CHESAPEAKE BAY PROGRAM

The Commission would like to begin by thanking Senator Benjamin Cardin for introducing this landmark legislation. The role of the Federal government is critical to the success of the Bay's restoration. We are here to offer our complete support for this legislation to amend the Clean Water Act's Section 117 and for the first time provide accountability measures that complement and bolster the Bay states' efforts to minimize pollution from all sources.

Background

Section 117 of the Clean Water Act established the Chesapeake Bay Program more than two decades ago. It focused on the establishment of the Chesapeake Bay Program office and a strong, cooperative partnership among the jurisdictions, the Federal government and the Chesapeake Bay Commission (representing the legislative branch). EPA's Chesapeake Bay Program expired in 2005. S. 1816 provides us with the opportunity to reauthorize the Bay Program and build upon it. It provides us with an opportunity to refocus the Program, improve its accountability and put the restoration process on a well-paced path toward clean water.

In its current form, the Clean Water Act covers all *point* sources of pollution encompassing municipal wastewater and stormwater, industrial discharges and concentrated animal feedlots. To protect a system like the Chesapeake, where roughly 60 percent of nutrient pollution comes from *nonpoint* sources, we must be sure that all sources are controlled in a meaningful, measurable and accountable way.

We believe that Senate Bill 1816 is moving in that direction. The bill provides the support to control *all* sources of pollution, building on current strengths in the Act, and establishing new assurances that any source of pollution not covered in the Clean Water Act as a point source will be adequately addressed by the states to reduce their pollutant loads to meet pollution reduction targets.

Because of the existing strengths within the Clean Water Act, we in the Bay region have become a model of success for upgrading our wastewater treatment plants. Hundreds of sewage treatment plants throughout the watershed are being upgraded with new technologies to reduce their nutrient loads to the Bay. Because point sources are clearly regulated under existing permit structures we are on target to achieve our point source reduction goals as set in *Chesapeake 2000*. This is because of strong financial commitments from Federal, state and local governments and our citizens and because of clear regulatory authority laid out in the Act.

In fact, perhaps more than any other region in the country, we have taken full advantage of the Act, and have strongly supplemented it with more than a billion dollars at the state level. These actions have resulted in the establishment of standards that require advanced nutrient controls – down to 4 to 8 mg/l of nitrogen – at most of our major sewage treatment plants in the region. This puts us ahead of most of the nation when it comes to nitrogen removal at our waste treatment facilities.

While the States have made significant progress with point sources, we have not been successful with reducing the more diffuse nonpoint sources of nutrient pollution entering the Bay. When one considers the vast and diverse nature of these pollution sources across the Bay's 64,000 square mile watershed, it is not hard to see why we have fallen short in this area.

Nearly one-quarter of the Bay watershed's land is devoted to agricultural production. As such, agriculture is the largest source of nitrogen, phosphorus and sediment in the watershed. Through the Federal Farm Bill we now have a program targeting funding to the Chesapeake Bay watershed which, together with state funding, provides an important new tool to reach new farmers and increase farmer participation in on-the-ground conservation practices. But the enrollment levels and best management practice implementation levels are not close to where we need them to be. Furthermore, support for technical assistance to encourage further participation is not adequate. S. 1816 ensures that 20 percent of federal implementation grant funding be dedicated to technical assistance to farmers and foresters. It also increases accountability for agricultural pollution reduction programs.

The other source of non-point pollution yet to be adequately addressed is stormwater runoff from urban and suburban lands. Here we are actually losing ground. Polluted runoff from the land is actually escalating because of increased development across the Bay watershed.

The proposed legislation offers remedies to this situation that we believe are critically needed to ensure successful restoration of the Bay, its waters and the living resources therein. Specifically, there are six key points that I would like to highlight that underscore our support for this bill.

Legislation

First, the bill respects a collaborative Federal and State approach. EPA and the Bay states have been focused on delisting the Bay from the Federal impaired waters list for more than two decades. The Bay Program partnership has acknowledged previous efforts will not achieve this goal. , Thus, EPA is working with the states to develop a court-ordered Bay-wide TMDL due in 2011. The Bay states have agreed to chart-out and implement cleanup plans in two year increments, to reach the nutrient and sediment cap load allocations agreed to by all the partners.

By building on the successful elements of the Chesapeake Bay Program partnership, S. 1816 directly complements this effort. The bill codifies the process and deadlines agreed to by the states, thus ensuring coordination, requires an annual Federal Implementation Plan, increases state accountability, steps up compliance and increases Federal funding. Both Federal and state governments will work together to develop individual state Watershed Implementation Plans that will chart out state-specific goals designed to achieve a Bay-wide pollution cap.

Critical to the design of the bill, each state would be provided with the flexibility to develop and implement its own plan to meet its share of the watershed goal. Each jurisdiction faces a different set of challenges dependent upon the land use, climate, topography and socioeconomic and physiographic characteristics of their jurisdictions. Flexibility will allow them to reach for the most cost-effective, politically-doable solutions. The pollution cap, dates certain (including a half-way mark), consequences and stepped-up Federal funding will collectively ensure that the job gets done.

Second, the bill uses a Clean Air Act construct to improve accountability. Borrowing from successful provisions of the Clean Water Act and the Clean Air Act, S. 1816 strengthens authority for states to act and provides consequences for failure to act.

If we are to learn from what has worked in the past and what continues to work in the present, the Clean Air Act offers some useful models for success. The Clean Air Act utilizes State Implementation Plans and time schedules giving states discretion to develop state-specific means to attain air quality standards within a region by a certain date. The watershed-based approach of the Bay-wide TMDL would benefit from a similar approach. The Clean Air Act also contains noncompliance sanctions that work as incentives for expeditious and effective state programs. Using this approach with the already agreed upon two-year state milestones and deadlines would help to ensure progress continues throughout the restoration process- not only with our point sources but also with our multitude of non-point sources of pollution.

So far, our greatest successes have involved strong intergovernmental partnerships, clear regulatory authority and predictable, reliable government support. By building on our existing partnerships, S. 1816 will increase our accountability and increase our rate of success.

Third, S. 1816 clearly articulates the Federal governments expectation for Clean Water. At the end of the day, the assurance of Clean Water is the combined responsibility of the Federal and state governments. S. 1816 establishes strong enforceable pollution caps with clear deadlines, along with an iterative process for addressing nonattainment issues along the way. A clear expression of these expectations is needed to ensure that the stakeholders involved are making adequate progress and that their pollutant loads can be sufficiently reduced within the expected timeframe. Provided that the separation of Federal and state responsibility is clearly respected, we believe that this clarification will be helpful in policy making at both the state and local scale.

Fourth, S. 1816 will provide for better tracking, accountability and technical assistance. As we accelerate the pace of restoration, it will be critical to accurately account for what we have done in order to understand where the reductions have come from and, importantly, where they have not. This will allow us to adapt our programs over time to ensure success. Furthermore, providing added technical assistance for both the agricultural and urban and suburban sector will be critical to achieve the levels of participation needed and to better understand what must be counted. The bill before will provide for improved tracking, technical assistance and accountability.

Fifth, an interstate nutrient trading program is laid out within the bill. Nutrient trading can help speed the cleanup of the Chesapeake by encouraging facilities to not only meet but also go below their pollutant reduction caps. Trading taps the most efficient available reductions and facilitates cost-effective attainment and maintenance of pollutant caps. In addition, trading markets spur innovation to reduce nutrient runoff. For instance, by generating additional nutrient reductions that can be sold to point sources, local farmers stand to gain financial rewards for being active stewards of their land. But for these markets to work there must be a clear cap. S. 1816 provides that cap. In fact, we believe that a Chesapeake Bay-wide trading program would generate revenue to farmers comparable to existing federal and state agricultural conservation funding while at the same time achieving cost savings for municipalities.

Sixth, Federal financial assistance will be greatly enhanced.
I list this last so that I can underscore not only its importance overall, but also to strongly support the subcategories of funds contained in the bill. The health of the Bay is only as good as the sum of its parts. S. 1816 targets money to some of the sectors that are most able to make substantial reductions – namely our local governments, farmers and foresters. Furthermore, the bill highlights the importance of monitoring to serve as a real time reminder of the state of the water, not subject to the assumptions of a model or the spin of any given sector, state or politician. The Bay has been repeatedly recognized as one of this country's greatest national treasure. A ramped up Federal investment will leverage the kind of further investment at the state, local and private sector necessary to get the job done.

Suggested Amendments

The Commission strongly supports S. 1816, and suggests two important changes. First, provisions should be added to establish an EPA Technology Development Fund to support the development of advanced septic systems, denitrification technologies, regional enhanced methane digesters and other innovative technologies to further nutrient reduction in the watershed. We must keep ourselves on the cutting edge of technological advances in order to bring about affordable solutions to the diverse sources of nutrient pollution that we face.

The second amendment that we offer relates to the specificity at which individual sectors are covered in the bill. The current language would require reductions (p. 32, lines 3-16)

and no net increase (p. 30, lines 3-11) in loads from each individual source sector. Instead, we recommend that states be responsible for reductions and no net increase in loads from the sum of all sources collectively. It makes no difference to the Bay whether a pound of nitrogen comes from a septic system or a wastewater treatment plant, so to maintain flexibility and maximize cost-effectiveness, a state must be able to choose the level of reductions it will require of any one sector. However, none of the mentioned sectors should be left out when calculating total loads and if a state chooses not to require limits on one sector, the state must demonstrate how those loads will be offset by other sectors.

Our closing comments related to S. 1816 should certainly address the public commitment to clean water is real; support for this bill can be found throughout the watershed states. Strong cultural and historic values are at stake because their survival is intertwined with clean water. Segments of our economy rely heavily on clean water, such as our productive wild fisheries, budding aquaculture trade, and the recreation and tourism industries. The flexibility provided in this legislation will enable each state to prescribe its own plan, addressing state priority areas first. States continue to view restoration of their streams and rivers that lead to the Chesapeake as investments in clean water that far outweigh the costs of inaction.

GULF OF MEXICO PROGRAM

I have also been asked to comment briefly on S. 1311 which reauthorizes the Gulf of Mexico program. More than twenty years ago, in 1988 I traveled to Florida at the invitation of Governor Bob Martinez. He asked that I consult with a group of people beginning to work on the Gulf of Mexico in order to address the growing anoxia of its waters. Republicans and Democrats alike were joining forces, as they have in the Chesapeake, to address an issue that transcends party lines.

Since that time, much has happened in the Gulf of Mexico and many efforts have been tried. The challenges of the Chesapeake in some ways pale in comparison to those presented by the size and complexity of the Gulf's watershed. Still, the effort has persisted and its importance has only grown over time.

S. 1311 amends the Clean Water Act to reestablish the Gulf of Mexico Program under the EPA. It reestablishes a program office along with staff intended to coordinate the activities of the EPA and other federal agencies with those of the states and local authorities. These activities are to be focused on venues that will result in measurable improvements to water quality and living resources of the Gulf of Mexico system. The important role of monitoring is clearly recognized.

As I said when I began, my career has focused on Chesapeake Bay issues. Throughout the years I have witnessed the profoundly important role that the Federal government, and particularly EPA, has played in its clean up. The Bay Program Office has provided a strong coordinating role that is both substantive and inclusive. Data analysis and

monitoring services have been vital. This same service will be critical to addressing the needs of the Gulf. While I am certainly not an expert on the Gulf of Mexico program, nor are our members, we can only conclude that the reestablishment of a Gulf of Mexico program is an important step forward in cleaning the waters of the central and southern United States.

This concludes my remarks on behalf of the Chesapeake Bay Commission. It has been my honor to appear before you today. I would be happy to answer any questions that you might have.

THE CHESAPEAKE BAY COMMISSION:

The Chesapeake Bay Commission is a tri-state legislative commission, established in 1980 prior to the creation of the Chesapeake Bay Program, to advise the members of the Maryland, Virginia and Pennsylvania legislatures on matters of Bay-wide concern. The catalyst for our creation was the Environmental Protection Agency's (EPA) landmark seven-year study (1976-1983) on the decline of the Chesapeake Bay. Congressional concern prompted our beginnings and has since contributed handsomely to our success.

The Commission is a partner in the Chesapeake Bay Program – one of six signatories to the agreements that make up its leadership. What makes the Commission unique is the simple fact that it is *not* an Executive Branch agency (like the other five partners) and it is not of a single state. Instead, 21 members from three states, 15 of whom are legislators, provide a regional voice within the Program.

CHESAPEAKE BAY COMMISSION
Policy for the Bay• www.chesbay.state.va.us

Answers to Questions Posed to
Ann Swanson, Executive Director, Chesapeake Bay Commission
December 29, 2009

Environment and Public Works Committee Hearing
November 9, 2009
S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act and
S. 1311, the Gulf of Mexico Restoration and Protection Act
Follow-Up Questions for Written Submission

Questions from Senator James M. Inhofe

1. Were your comments at the November 9th hearing the opinion of the entire Chesapeake Bay Commission or are your comments only representative of your opinion?

The comments I shared with you at the November 9th hearing of the Environment and Public Works Committee were that of the Chesapeake Bay Commission. As the Executive Director of the Commission my testimony was informed by discussions of the members of the Commission held at our open public meetings, together with my own experiences having worked for the Commission for 21 years. Having said that, my testimony should not be attributed to any one individual member of the Chesapeake Bay Commission alone, but instead to the Chesapeake Bay Commission as a whole.

2. You mention that the Bay region has become a "model of success" for upgrading wastewater treatment plants. Recently Salisbury, MD spent $84 million to upgrade its wastewater treatment plant, but officials say nitrogen discharge still has not dropped to levels required under Maryland's state permit. Does it concern you that there may be technological limits to what is an achievable reduction in nutrient levels?

No, when it comes to wastewater treatment plants conventional technology to achieve nutrient limits has been established. Wastewater treatment plants throughout the entire 64,000 mile watershed have been asked to upgrade their nutrient removal technology and have been successful in doing so. In fact the largest in the watershed, Blue Plains Wastewater Treatment Plant, treats 330 Million gallons per day from the capitol region including all of Washington, D.C. as well as Southern Maryland and Northern Virginia.

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Blue Plains has successfully reduced its phosphorus level to the limit of technology-0.10 mg/l, which is well below its permit limit of 0.18 mg/l. The plant has also reduced its nitrogen effluent from 11 Million pounds per year in 1999 to about 6 Million pounds per year currently. The plant is in the process of spending about $1 Billion dollars to achieve its new permit limit for nitrogen of a stringent 4.7 Million pounds per year through enhanced nutrient removal technology.

The Salisbury, Maryland plant has a design capacity of up to 10.2 Million gallons per day. At that level, the plant is expected to achieve a nitrogen effluent limit of 5.5 mg/l. As I understand it, Salisbury has a uniquely designed wastewater treatment plant and chose to retrofit the existing plant rather than invest in a new plant with conventional technology. Apparently, the city is now suing their engineering firm for major and numerous design defects, breach of contract, professional negligence, fraudulent and negligent misrepresentation. This unfortunate case of discord currently under litigation should certainly not be held as a model for the entire watershed's efforts to restore the Chesapeake.

3. Additionally, the Salisbury plant was discharging 21 milligrams per liter into the river. The state requires not more than 6 milligrams per liter be discharges. The $84 million upgrade only got the plant down to 15 milligrams per liter. In the Executive Order and S. 1816 there is no mention of cost effective choices.
a. Are you concerned that for $84 million a Maryland point-source was only able to reduce nitrogen discharges by 6 milligrams per liter?
b. How will burdensome regulations help municipalities who cannot afford these costly upgrades?

In the Chesapeake Bay Commission's *The Cost of a Clean Bay* report released in 2003, we concluded that the effort to clean up the Chesapeake would require substantial expenditures beyond the capacities of current programs and that it was incumbent on each state to maximize the environmental benefits realized from each dollar spent. The Commission also realized that to get the most benefit out of limited resources, the Bay Program partners would need to further target their pollution control resources toward those practices that result in the greatest reduction per dollar spent — the most cost-effective practices.

The Commission then reported on *Cost-Effective Strategies For the Bay* in 2004, taking an intensive look at a broad suite of pollution control options and for the first time, measuring not only their ability to reduce nutrients but also the environmental benefit to be gained by widespread adoption. Fundamentally, this report demonstrated that significant water quality benefits can be had at reasonable cost from six practices that give "the biggest bang for the buck." There are huge benefits to be derived from: wastewater treatment upgrades, diet and feed changes, nutrient management, enhanced nutrient management, conservation tillage and cover crops. When taken along with riparian forest buffers, wetlands restoration and other measures proposed by the Bay partners, they maximize our chances to achieve our goals.

The Commission clearly recognizes that there is geographic and economic variability among the jurisdictions in the watershed. We do not suggest that these practices represent the only way to achieve the restoration of the Chesapeake. However, it is critical that the states target their limited resources toward those practices that hold the most promise for achieving the allocated reductions. This report was intended to be a tool for that effort and to direct programmatic and funding priorities.

At the time, the Commission acknowledged that several of the practices, including enhanced nutrient management and diet and feed adjustments, represented emerging technologies. The Commission also continues to recognize the lack of sufficient money, both at the state and federal level, is a significant barrier to implementation of these practices. The reality is that the task before us is to choose nutrient and sediment reduction practices that will control the most pollution for the least cost in the near term and then ensure we have the policies, programs and funding in place to accomplish them.

4. Are you concerned that a statutory TMDL would prevent EPA from making the adjustments they see as necessary as goals are being met or not met and when additional science becomes available?

No. Senate Bill 1816 would only codify the process to develop the Chesapeake TMDL and set the timeline to achieve it. The specific numbers to be achieved and the specific plans are not included in the bill. However, ensuring flexibility to work with the states in developing the specific plans and two year milestones to implement the TMDL are included in the bill. This process will allow for incorporation of new information and science as they become available.

5. One of your suggested amendments is to create a Technology Development Fund to keep the Bay on the cutting edge of nutrient reduction. Does it concern you that if the current TMDL is mandated in S. 1816, that leaves no room for any new input from such a fund if it were to be created?

The Bay TMDL is currently mandated by the Clean Water Act. Senate Bill 1816 sets out the process providing clarity and accountability for the development and implementation of the TMDL. The bill requires two-year milestones and provides for adaptive management techniques so new information and technology can be incorporated into the state developed implementation plans over time.

6. I share your concerns from pitting load reductions from agriculture against reductions from other sources and industries. Do you have any suggestions on how states could come up with more flexible tools to meet these goals?

This is one of the many reasons why the specific components of the implementation plans must be left to the states. They can best determine the most cost-effective means to achieve nutrient and sediment reductions, of which nutrient trading can be a valuable tool. In fact, Virginia and Pennsylvania have developed nutrient trading programs for water quality by bringing very diverse interests to their tables. Agriculture, wastewater treatment plants, builders and state and local governments are all engaged toward a common goal – achieving the most cost-effective nutrient reductions. By creating a market value for nutrient reductions, entrepreneurs are encouraged to develop new technology. Much of this emerging technology is now centered on bioenergy, creating additional benefits for small farms and non-agriculture firms, communities and the region.

7. I am extremely concerned about EPA's assertion that withholding clean water act funds as punishment for meeting nutrient reduction goals, will somehow ensure that states will meet their goals more quickly. States are already facing enormous shortfalls of capital for doing any major projects, from highways to drinking water and waste water treatment expansions. EPA estimates that there will be close to a trillion dollars in future need for clean water and drinking water infrastructure in the next 20 years and that does not take into account the new, more stringent water requirements from EPA. How will taking away the money that states need to build the infrastructure to meet the goals of the Clean Water Act, help them meet the goals for the Chesapeake Bay?

The threat of losing federal support for water programs provides very strong motivation for states to keep pace in achieving their nutrient reduction goals. Should they fall short, and funds are withheld, then the Commission believes that at least 75% of the dollars "withheld" should be instead administered by the Administrator. That way projects could go forward, pursuant to the Watershed Implementation Plans. States will not want to lose that decision-making power as federal dollars are targeted to individual projects. This will serve as a strong motivator for states to properly work towards achievement of the TMDL and avoid federal take-over. By transferring the decision making instead of simply withholding funds, you maintain a strong motivator while continuing to invest in the infrastructure that allows the nation to maintain clean water.

8. I am concerned about the attitude toward our farmers that has been shown by some organizations pushing for this bill. As you mention, agricultural pollution and storm water runoff, in your opinion, are the largest sources of nitrogen, phosphorus and sediment in the watershed. When family farmers, who are struggling currently, go out of business, those farms are rarely returned to forest land. Instead, those farms are developed into shopping malls and houses, an expansion of impervious surfaces. Don't you think it is in the Bay's best interest to assist these farmers who are stewards of the land in to stay in businesses rather than allowing them to fail, inevitably creating more urban development that would only increase storm water runoff and exacerbate many of the Bay's problems?

Yes, I absolutely agree. It is the Commission's opinion that agricultural operations provide many of the most cost-effective opportunities to ensure clean water in the watershed. Since nearly one quarter of the lands in the watershed are agricultural and over half are forested, our farms and forests are worthy of Federal investment. Senate Bill 1816 would provide significant funding for technical assistance to reach these farmers and would complement cost share provisions for conservation practices within the 2008 Farm Bill. There will be subsequent Farm Bills between now and 2025 to further enhance support of our farmers' efforts to continue to be stewards of the land *and water* and to stay in business.

9. I am concerned about how expansive the nutrient trading program can be before it becomes ineffective. For example, a farmer in Upstate New York trading with a waste water treatment plant in Virginia may not be as effective as a waste water treatment plant in its own tributary. Do you have any suggestions for maximizing the effectiveness of a trading program?

The individual state trading programs should be allowed to continue. However, states should be able to opt in to a larger market. Increasing the size and reach of the nutrient trading market within the Chesapeake Bay watershed would result in a number of benefits that the individual state trading programs could not provide. It is a general feature of markets of all types that increasing the size of the market (the number of participants and transactions) would have wide benefits. Market risks would be reduced, prices would be more stable and predictable, and supply and demand better understood by participants.

Eliminating the geographic barriers imposed by individual state trading programs would have these benefits as well as:

- Allow more efficient matching of credit supply to credit demand;
- Avoiding geographic mismatches between where credits can be produced and where the demand is, as well as local growth constraints that could result from these mismatches;
- Make the least expensive credits in the Bay watershed available to all buyers, not just those that happen to be located in the restricted geographical area where the credit was generated;
- Increase competition among credit sellers, leading to lower credit prices;
- Preclude credit monopolies or artificially-restricted supplies;
- Give credit suppliers access to many more potential buyers, thereby creating incentives for the creation of credits; and
- Create additional opportunities for generating credits;

The question "How expansive can a trading program be before it becomes ineffective?" is a fair one. As noted in the question, a credit supplier in New York wanting to sell credits to a wastewater treatment plant in Virginia could probably not compete with sellers in Virginia because of the disadvantageous deliver ratio he faces (delivery ratio

refers to the percentage of a source's discharged load that actually reaches the main stem of the Bay; for a source in NY the delivery ratio is relatively low, essentially discounting the value of credits produced in NY to downstream buyers). This loss to New York however, would be offset by the fact that NY wastewater treatment plants that wished to purchase credits instead of upgrading their treatment processes would have the advantage of very favorable delivery ratios if they purchased credits from downstream suppliers. This would dramatically reduce the number of credits they would have to buy.

10. I am glad to hear your strong support for federal-state partnerships to deal with significant issues such as the Chesapeake Bay; I am however concerned that some of the increased EPA authorities in S. 1816 will erode some of that important federal/state partnership. What protection do you see in this bill to ensure that state governments do not lose too much authority and the federal-state partnership not only continues but strengthens?

Senate bill 1816 respects the collaborative Federal and State approach established in the Chesapeake Bay Program and complements existing efforts. EPA and the Bay states have focused on delisting the Bay from the Federal impaired waters list for more than two decades. The Bay Program partnership has acknowledged previous efforts will not achieve this goal and in May 2009 agreed to the development of a Baywide TMDL by December 2010. The Partnership also agreed to a goal of "not later than 2025" as an aggressive but both doable and reasonable deadline to get the job done with a two year milestone process to chart the course to clean water.

This bill would establish strong enforceable pollution caps with clear deadlines, along with an iterative process for addressing nonattainment issues along the way. A clear expression of these expectations is needed to ensure that the states are making adequate progress and that their pollutant loads can be sufficiently reduced within the expected timeframe.

Senate bill 1816 would: codify the process and deadlines agreed to by the states, thus ensuring coordination; require an annual Federal Implementation Plan; increase state accountability; step up compliance; and increase federal funding. Importantly, it respects the state need for flexibility by calling for individual state Watershed Implementation Plans. I cannot emphasize enough that this is an already agreed upon process with already agreed upon dates, and that it is one that incorporates the flexibility needed to get the job done.

Senate Bill 1816 also ensures the involvement of the Congress in the process. Without it, it remains a matter of the EPA and the courts. In our mind, the bill ensures congressional oversight that will ensure that state governments will not lose too much authority and that the federal-state partnership will not only continue to be strengthened. We need the Congress's involvement. There are certainly examples up until now that demonstrate the importance of this role. It is a role that must continue and strengthen as will the partnership overall.

11. You state that the "greatest successes have involved strong intergovernmental partnerships, clear regulatory authority and predictable, reliable government support". How do you reconcile all permits being revocable by EPA or the state every 2 years with the need for predictability and reliability?

I am not aware of two-year permitting. As I understand it, permits issued under the CWA are effective for five years. Senate bill 1816 would not change this.

12. In your testimony you discussed what you perceived the legislative intent of S. 1816 to be. While we all agree that improving the water quality at the Chesapeake Bay is a legitimate goal, are you at all concerned with the potential unintended consequences of the bill's language discussed by Senator Crapo and Susan Bodine?

Yes, Senator Crapo's comments and Susan Bodine's testimony both provided a very constructive analysis of the bill. Much work is being done to address their concerns within the bill's language to ensure those unintended consequences indeed do not occur. For example, the reach of the legislation is not intended to extend beyond the boundaries of the watershed and efforts are underway, via managers' amendments, to correct these vagaries in the bill. We believe that the bill will be much stronger because of their input and that the Chesapeake Bay will benefit from their thoughtful evaluation and assessment.

Senator CARDIN. Thank you for your testimony.
Dr. Boesch.

STATEMENT OF DONALD F. BOESCH, PRESIDENT, UNIVERSITY OF MARYLAND CENTER FOR ENVIRONMENTAL SCIENCE

Mr. BOESCH. Yes, Senator Cardin, Senator Crapo, it is a great pleasure to be here before you.

As I describe in my written testimony, I am very familiar with both the Chesapeake Bay Program and the Gulf of Mexico Program, having divided my scientific career working on these two great water bodies.

I am very pleased to note that both authorizing bills make reference to reliance on scientific information, monitoring and science based decisionmaking. It is simply not possible to restore and manage these complex ecosystems without understanding the forces that have degraded them and caused their natural variability.

But science must move beyond diagnosis and prognosis toward prescription and treatment. We must be able to effectively monitor the patient's return to health. Rigorous scientific guidance and assessment are critical to achieving real results efficiently and to accurate accounting to the Congress and the American people.

The bills on these two great water bodies share a common focus on improving water quality and living resources. Yet they differ significantly in the level of specificity regarding goals, objectives, requirements of State partners and organizational components.

Largely, as Ms. Swanson indicated, this is a result of their geographic scope and environmental diversity, but also the evolution of the programs. The Gulf of Mexico Program seeks to address water quality and associated living resources in five States bordering the Gulf of Mexico, a coast as long as that from Florida to Maine. Except for the area receiving the effluents of the Mississippi River, Gulf water quality issues are manifest principally in the bays and estuaries of the coast, and the Gulf Program must address the diverse circumstances of these coastal waters.

The Chesapeake Bay Program, on the other hand, is a more mature partnership of Federal Government and the six States and the District of Columbia that drain into the Bay. Four of these States don't even border on the Chesapeake Bay. The Chesapeake Bay Program has incrementally evolved to a point of addressing very specific pollutant load reduction objectives, as was discussed, for which unfortunately we have continued to fall short.

Consequently, it is highly appropriate that S. 1816 emphasizes the Federal responsibility under the Clean Water Act to, indeed, achieve clean water through very specific Chesapeake Bay watershed implementation plans, including the measures, programs, milestones, deadlines and enforcement mechanisms needed to implement them.

Its requirement for incremental 2-year periods of implementation with assurances that alternative mechanisms are applied as contingencies represents a significant advance over what we have been doing for the last 20 years. This moves the Chesapeake Bay Program beyond the largely voluntary approaches to reduce non-point sources of nutrients and sediments that have limited the effective-

ness of the program but will require sustained and targeted Federal technical and financial assistance.

From my work as a scientific adviser to European nations, working to restore the Baltic Sea, I have observed that the only fully effective approaches to control nutrient pollution from most significant non-point sources, that is agricultural non-point sources, have come from closely linking Government payments to the achievement of mandatory requirements. It should be pointed out that strategic Federal investments are also going to be required on the scientific programs that make sure that we are achieving the results and learning as we progress.

The nearest analog to the Chesapeake for the Gulf of Mexico is the effort to reduce nutrient loadings to alleviate the very low oxygen conditions that characterize the Gulf dead zone. The EPA Gulf of Mexico Program has contributed to the Watershed Nutrient Task Force which is setting out to do this, and I think it could play a larger role in achieving commitments of the Gulf hypoxia plan.

In this way, the evolution of the Chesapeake Bay Program and the steps now proposed under S. 1816 are very much a pathfinder for Gulf of Mexico hypoxia abatement. Modern concepts of adaptive management, which was mentioned by Mr. Fox, involve not just changing tactics based on trial and error, but on very systematic approaches to learning by doing, which constantly test assumptions against reality and therefore achieve quicker and more efficient outcomes. It requires a close interplay between the models that we use to prescribe the approaches being taken and the observations that verify their effectiveness. That is going to be particularly important going forth.

The Chesapeake Bay Program has very good and substantial modeling and monitoring programs, but in my opinion they need to be more tightly integrated to truly achieve adaptive management. And in that regard, Mr. Chairman, I noticed your bill requires that EPA develop a strategy for implementation of adaptive management principles to assure full implementation of the plan.

This adaptive approach is not just a strategy and effort by scientists and engineers. It requires full engagement of decisionmakers at all levels. And I am particularly pleased that the announcement today by the Federal agencies includes the initiation of ChesapeakeStat, which is modeled after our Governor's BayStat, again involving very high level decisionmaking, analyzing the data, assessing progress and moving on.

Finally, let me just point out that one of the very critical aspects of these programs is their scientific integrity. We have a vibrant scientific community that provides a compass and a self-correcting mechanism that should be effectively engaged. Recently the Chesapeake Bay Program has engaged the National Research Council as an independent evaluator of its nutrient reduction strategies and achievements. So as we look forward, I hope the bill will make sure that we continue to maintain that scientific integrity of these programs.

Thanks for the opportunity.

[The prepared statement of Mr. Boesch follows:]

U.S. Senate Committee on Environment and Public Works
Subcommittee on Water and Wildlife
Legislative Hearing on Great Water Body Legislation: S. 1816 and S. 1311
November 9, 2009

Testimony of
Dr. Donald F. Boesch, Professor and President
University of Maryland Center for Environmental Science
Cambridge, Maryland 21613

Chairman Cardin and members of the subcommittee, I am Donald F. Boesch and I am very appreciative of the opportunity to appear before you today to address both the proposed Chesapeake Clean Water and Ecosystem Restoration Act of 2009 and the Gulf of Mexico Restoration and Protection Act.

I am very familiar with both the Chesapeake Bay Program and the Gulf of Mexico Program, having divided my scientific career working on these two great water bodies. During the 1970s, while working in Virginia, I contributed to the Chesapeake Bay Study inspired and supported by former Senator Mathias that led to the establishment of the Chesapeake Bay Program. During the 1980s, as Director of the Louisiana Universities Marine Consortium, I initiated research on the so-called Northern Gulf of Mexico "Dead Zone" and was in on the ground floor of the formation of EPA's Gulf of Mexico Program. Since 1990 I have been President of the University of Maryland Center for Environmental Science, a member of the Scientific and Technical Advisory Committee of the Chesapeake Bay Program, and a member of the Maryland Governor's Chesapeake Bay Cabinet.

Science-Based Restoration and Management

I like to tell my colleagues, the senior leaders of state and federal governmental agencies engaged in these programs, that I see my role as that of a loyal skeptic, strongly committed to these programs of restoration and sustainable management, but rooted in the evidence-demanding skepticism of science. From that perspective, I note that both authorizing bills make specific reference to the reliance on scientific information, monitoring and science-based decision making. It is simply not possible to restore and manage the Gulf of Mexico or the Chesapeake Bay without understanding the forces that have degraded them and that cause their natural variability. But, science must move beyond diagnosis and prognosis toward prescription and treatment; it must be able to effectively monitor the patient's return to health. Rigorous scientific guidance and assessment is critical to achieving real results in an efficient manner and to accurate accounting to the Congress and the American public.

Two Different Ecosystems, Two Different Bills

The bills on the Chesapeake Bay Program and the Gulf of Mexico Program share a common focus on improving water quality and living resources in two of this nation's most important coastal water bodies. However, they differ substantially in their level of specificity regarding goals and objectives, requirements of the state partners, and organizational components. To a large degree, this is because of differences in the geographic scope, environmental diversity, and programmatic evolution of the programs. The Gulf of Mexico Program seeks to address water quality and associated living resource issues in five states bordering on the vast Gulf of Mexico, a coast as long as that from Florida to Maine. Except for the area receiving the effluent of the nation's largest river, the Mississippi, Gulf water quality issues are manifest principally in the bays and estuaries of the coastal states. The Gulf Program has to address the diverse circumstances of these coastal waters. The Chesapeake Bay Program, on the other hand, is a more mature partnership of the Federal government and the six states and the District of Columbia that drain into one bay—four of these states do not have tidal shorelines on the Chesapeake Bay. The Chesapeake Bay Program has incrementally evolved to the point of addressing very specific pollutant load reduction objectives for which, unfortunately, we have continued to fall short.

Chesapeake Bay Program

Consequently, it is highly appropriate that S. 1816 emphasizes very specific Chesapeake Bay Watershed Implementation Plans, including the measures, programs, milestones, deadlines, and enforcement mechanisms needed to implement these plans. The requirement for incremental, two-year periods of implementation by the states, with assurance that measures will yield results and alternative measures as contingencies, represents a significant advance. In particular, this moves the Chesapeake Bay Program beyond the largely voluntary approaches to reduce nonpoint sources of nutrient and sediment pollution that have had limited effectiveness. However, this will not be successful if the Federal government does not also exercise its direct regulatory authority related to animal wastes, storm water runoff and atmospheric emissions. Furthermore, the state efforts will fall short without sustained and targeted Federal financial and technical assistance.

I have served as a scientific advisor to European nations working to restore the Baltic Sea and have observed that the only fully effective approaches to control nutrient pollution from agricultural nonpoint sources have come from closely linking support payments, both commodity and conservation payments, to the achievement of mandatory requirements. Denmark, for example, has been able to reduce nitrogen losses from agriculture by nearly 50% while

maintaining an economically viable agricultural enterprise. Strategic Federal investments in scientific programs are also required to guide and verify the state implementation plans, especially through tightly integrated modeling and monitoring.

Gulf of Mexico Program

The nearest analog of the Chesapeake Bay Program for the Gulf of Mexico is the effort to reduce nutrient loadings to alleviate the very low oxygen conditions (hypoxia) that characterize the Gulf Dead Zone. This is under the purview of the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force operating in response to the Harmful Algal Bloom and Hypoxia Research and Control Act, also under consideration for reauthorization by Congress. The EPA Gulf of Mexico Program has, in fact, contributed to the Task Force activities in the past and could, I believe, play a larger role in achieving the commitments of the Action Plan by, for example, helping to develop the pollutant reduction load allocations, the implementation of which is very much the focus of the Chesapeake Bay bill. In this way, the evolution of the Chesapeake Bay Program and the steps now proposed under S. 1816 are very much a pathfinder for Gulf of Mexico hypoxia abatement.

The situation in the Gulf of Mexico is organizationally complex in that, in addition to the Gulf of Mexico Program and the Hypoxia Action Plan, there is the Gulf of Mexico Alliance, a partnership among the five states and Federal agencies, which is focused on the Gulf coast and offshore waters and covers issues beyond water quality. To the degree that it is possible under S.1311, it would be beneficial to consolidate or at least ensure the coordination of these multiple efforts.

Adaptive Management

I mentioned the critical importance of tightly integrated modeling and monitoring for the Chesapeake Bay Program. This is an essential requirement for applying adaptive management. Adaptive management is not just changing tactics based on trial and error, but a very systematic approach to learning by doing, which constantly test assumptions against reality and thereby achieves quicker and more efficient outcomes. Adaptive management also allows one to incorporate new information about how the ecosystem works and to incorporate the effects of external changes that cannot be effectively controlled, for example changing climatic conditions. Adaptive management requires the close interplay between forecasts of responses to management actions based on models and observations of the actual responses based on monitoring. This allows verification and improvement of effectiveness and continued improvement of management models.

The Chesapeake Bay Program has substantial modeling and monitoring capabilities, but in my opinion has not effectively integrated them into an adaptive management approach. This has led, for example, to criticism that the Program was overly relying on optimistic model projections to track progress rather than real-world measurements. Recently, the Program has formally committed to an adaptive management approach and S. 1816 requires a strategy developed by the Administrator for implementation of adaptive management principles to ensure full implementation of all plan elements.

It should be understood that adaptive management must not be assigned just to the scientific and technical program components, but must be embraced by and involve senior decision makers in order to effect continuing improvement in management outcomes. Toward that end, I am pleased to see that in response to the President's executive order, the Federal agencies are proposing to establish ChesapeakeStat, modeled after Maryland Governor O'Malley's BayStat approach to accountability and decision making. Also, the two-year milestones and requirements for periodic progress reports provide the opportunity for periodic stock taking that is required for adaptive management.

The resources authorized in S. 1816 for both freshwater and tidal water monitoring are critically important to the success of the Program. Fiscal pressures coupled with the need to expand monitoring in the watershed to better evaluate the effectiveness of management actions have led to an unhealthy competition for resources. While efficiencies in monitoring should always be sought, discontinuation or disruptions of invaluable time series of conditions in the bay are at risk. While we need to more accurately measure the drip rates on the IV, this is no time to reduce measurements of the vital signs of the patient, particularly when we are beginning to see signs of recovery.

Scientific Integrity

Whether it be the Chesapeake Bay Program or the Gulf of Mexico Program, scientific integrity is essential both to the determination of attainable goals and to the objective accounting for outcomes and return on the public's investments. Within the Chesapeake Bay region we are fortunate to have a world-class scientific community based largely in universities and research institutions, members of which are, as I said earlier, rooted in the evidence-demanding skepticism of science. The independence and objectivity of their scientific research and appraisal have provided a compass for ecosystem restoration and a self-correcting mechanism when things stray off course. However, because of the magnitude of the challenges before us,

and the tight timeframes in which we need to act, more rigorous involvement of this community through such mechanisms as the Scientific and Technical Advisory Committee will be required.

I have served as an external scientific evaluator for several other ecosystem restoration programs, including the Comprehensive Everglades Restoration Program, the Louisiana Coastal Area Ecosystem Restoration Program, and the Baltic Sea Action Plan. Such external evaluation can be very effective because it is truly independent and not conflicted and because it brings broader experience and world view to the evaluation. Curiously, the Chesapeake Bay Program has seldom been subjected to such external evaluation of its scientific integrity. Recently, the Executive Council has committed to the concept of an independent evaluator and the Bay Program has engaged the National Research Council to provide an independent evaluation of how the Program and the states are accounting for pollutant load reductions. An NRC committee has just been empanelled to undertake this task and Congress should observe this process to determine how external evaluation can best maintain a high level of accountability and scientific integrity.

This concludes my testimony, Mr. Chairman. I am privileged to appear before you today and happy to address any questions the members of the subcommittee may have.

U.S. Senate Committee on Environment and Public Works
Subcommittee on Water and Wildlife
Legislative Hearing on Great Water Body Legislation: S. 1816 and S. 1311
November 9, 2009

Follow-Up Questions for Written Submission

Responses by Dr. Donald F. Boesch

Questions form Senator Benjamin L. Cardin

1. *How will S. 1311 help address the problem of the Gulf's dead zone?*

   In my testimony, I pointed to the several ways that the Gulf of Mexico Program has aided Gulf of Mexico hypoxia assessments and implementation efforts of the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force, authorized by Harmful Algal Bloom and Hypoxia Research and Control Act (HBARCA) also under consideration for reauthorization by the Congress. However, neither the Gulf of Mexico Program nor S. 1311 are sufficiently organized to address fully the problem of Gulf hypoxia—their reach does not extend far into the basin. A recent National Research Council report (*Mississippi River Water Quality and the Clean Water Act: Progress Challenges, and Opportunities*, 2008) indicated a number of ways that the existing authorities of the Clean Water Act and the Farm Act could be marshaled to reduce nutrient pollution of the Mississippi River system. Another NRC committee is currently evaluating Clean Water Act Implementation Across the Mississippi River Basin. However, in my mind the evolution of the Chesapeake Bay Program serves very much as a pathfinder for Gulf of Mexico hypoxia abatement. Comparable comprehensive legislation such as S. 1816 may be required.

2. *Would an inventory of major nutrient sources discharging into the Gulf of Mexico be helpful in mitigating the Gulf's dead zone?*

   Actually, there have been a number of inventories already completed that are helpful to guide this mitigation. The EPA Science Advisory Board completed a report, *Hypoxia in the Northern Gulf of Mexico: Scientific Assessment of Causes and Options for Mitigation*, that assesses these inventories. A useful tool ready to use now for allocation of nutrient load reductions by watershed and state and in targeting mitigation efforts is the U.S. Geological Survey's SPARROW model, which has already produced published results quantifying the delivery of nutrients to the Gulf from throughout the Mississippi-Atchafalaya River Basin http://water.usgs.gov/nawqa/sparrow/gulf_findings/. While these estimates will undoubtedly be refined over time, they serve as a very reliable basis for moving forward.

Questions from Senator James M. Inhofe

1. *How much of the "Dead Zone" areas in both the Gulf of Mexico and the Chesapeake Bay can be attributed to natural run off that would occur even without man made pollutants?*

   Only a small amount can be attributed to natural runoff. Research based on chemical and biological indicators in dated sediment cores has clearly shown in both locations that hypoxia (harmful low oxygen conditions) occurred only moderately and occasionally as a result of heavy river discharges, which add nutrients and intensify the density stratification of water masses. In both cases, hypoxia has been show to have become more recurrent (every year), severe (lower oxygen concentrations) and extensive (larger area and volume) since the 1960s. This is strongly linked to increased nutrient pollution. The unavoidable natural occurrence of hypoxia has been taken into account in determining pollutant reduction goals.

2. *I am concerned about the attitude toward our farmers that has been demonstrated by some organizations pushing for this bill. As you mention, storm water runoff and agricultural pollution are, in your opinion, some of the largest sources of pollution in the Bay. When family farmers, who are struggling currently, go out of business, those farms are rarely returned to forest land. Instead, those farms are developed into shopping malls and houses, an expansion of impervious surfaces. Don't you think it is in the Bay's best interest to assist these farmers who are stewards of the land in to stay in businesses rather than allowing them to fail, inevitably creating more urban development that would only increase storm water runoff and exacerbate many of the Bay's problems?*

   Strictly from the Bay's perspective, agricultural abandonment reduces nutrient pollution and development of agricultural lands does not necessarily increase such pollution. For example, research conducted by the Baltimore Ecosystem Study has shown that nutrient yields from intensely cropped agricultural lands are substantially higher than from suburban lands on an acre by acre basis. Furthermore, many agricultural lands once abandoned are not subsequently developed into shopping malls and houses. Having said this, society has embraced the goals of preservation of agricultural lands for reasons including food production, local economies and landscape aesthetics; constraints on sprawling development for reasons of social cohesion and costs to government; and also to restoring the Bay to good health. These goals can be compatible and simultaneously achieving them requires effective programs for improving both the environmental management and the economic viability of farms and commitments to permanent land conservation.

3. *In your testimony you discuss the need for science to move "beyond diagnosis and prognosis toward prescription and treatment." While I agree with that assessment and am encouraged by some of the technical assistance provided for in S. 1816, I am concerned that parts of the bill are too heavy handed in regulation and punishment. Don't you think that training, assistance, and technical support for local agriculture, industries, and communities could better help achieve the ultimate goal of improving the health of the Bay rather than simply punishing those who struggle to meet compliance standards?*

Training, assistance and support for local agriculture and communities struggling to improve water quality and environmental sustainability are essential. But experience indicates that pollution control requirements, coupled with financial incentives and disincentives, are needed to achieve pollution reduction. In my testimony, I referenced Denmark as a country that has effectively integrated aggressive technical assistance, performance requirements, financial support and sanctions to achieve a 50% reduction of nitrogen pollution from agriculture.

4. *You mention that the Gulf of Mexico's "water quality issues are manifested principally in the bays and estuaries of the coastal states" except for the area receiving the effluent of the Mississippi River.*

   a *Because of the potential impacts of a river the size of the Mississippi, how far do you think the scope of federal legislation needs to extend to the areas up the river?*

   It is my understanding that the subject bill of the hearing S. 1311 does not extend federal authority up the river. In my testimony, I observed that alleviation of Gulf of Mexico hypoxia would likely require a course similar to that for the Chesapeake Bay and, thus, similar authority to guide and financially support an effort extending over a large, multistate part of the Mississippi River Basin. That said, I note that there is already substantial authority under the existing Clean Water Act including relief from interstate pollution and the legal basis for implementing TMDLs. This has been recently evaluated in a report of the National Research Council (*Mississippi River Water Quality and the Clean Water Act: Progress Challenges, and Opportunities*, 2008).

   b. *In your opinion, is it vital to the Gulf of Mexico to regulate run off into the river in Tennessee? How about in Minnesota?*

   Efforts to reduce nutrient pollution in the Mississippi River Basin that contributes to Gulf hypoxia should be targeted to the most significant sources. Fortunately, the U.S. Geological Survey has used water quality observations and models to identify the location of nutrient pollution that is actually delivered to the Gulf of Mexico http://water.usgs.gov/nawqa/sparrow/gulf_findings/. While these estimates will undoubtedly be refined over time, they serve as an excellent and reliable basis for the targeting of mitigation efforts. By the way, the USGS analysis indicated that Tennessee ranks seventh among basin states as a source of both nitrogen (5.5%) and phosphorus (5.3%). Minnesota ranks 12th for nitrogen (2.9%) and 16th for phosphorus (2.0%). So, there are obviously more significant targets, such as in Illinois, Iowa, Indiana and Missouri, that require more immediate attention

5. *Are you concerned that a statutory TMDL would prevent EPA from making the adjustments necessary as goals are being met or not met and when additional science becomes available?*

   No, because I assume after the discussion at the hearing that Senator Cardin had agreed to include the necessary flexibility to refine goals as additional science becomes available. I

will be happy to offer my judgment as to whether the new language provides sufficient flexibility.

6. *I am a big supporter of Natural Resource Conservation Service and other non-point source pollution programs run through voluntary programs. I am also concerned, as you are about the lack of support for these programs financially recently. We continue to see an increase in enforcement, but without the technical assistance and guidance that is needed to meet the goals of the programs.*

   a. *Do you believe that voluntary programs run through local soil conservation districts, land grant university agriculture extension service and other locally lead community based organizations are essential in helping farmers achieve any regulatory goals for nitrogen, phosphorous and sediment reduction?*

      I concur that the technical assistance provided by the Natural Resource Conservation Service, Soil Conservation Districts, and Cooperative Extension Service is critically important to helping farmers achieve regulatory goals for nitrogen, phosphorus and sediment reduction. Based on empirical evidence, however, I am not convinced that these regulatory goals can be achieved on a strictly voluntary basis.

   b. *Without these efforts do you believe that we can successfully reach the goals for the Chesapeake Bay?*

      As I wrote, this assistance is critically important and it would be extremely difficult to reach the goals without it.

7. *The EPA already committed to the same TMDL level that would be codified in S. 1816. Because TMDL's are a regulatory tool, isn't it important to allow them flexibility rather than fixing them in statute?*

   My understanding of the bill is that it is based on EPA's implementation of the TMDL, but provides for expectations, tools, and milestones for this implementation. It is important to allow flexibility in refining the TMDLs and implementation strategies based on emerging science and practical experience. As I responded for question 5, my understanding is that Senator Cardin indicated that he intended to provide for that in the further drafting of the bill.

8. *Do you see any benefit or potential harm in codifying a TMDL level that is already being set by the EPA?*

   If it were an absolute, fixed level, yes I would. But see my responses to questions 5 and 7.

9. *I agree with your support for independent external evaluation of the Chesapeake Bay program. With the importance you stress on relying on science and the current evaluation underway by the National Research Council, wouldn't it be in the best interests of the Bay to not make any major changes in policy until this evaluation has yielded some data?*

5

Not at all. The current evaluation by the National Research Council is focused narrowly on the methods for accounting for nutrient and sediment reductions and their use in the two-year milestone process. I am quite sure that the study will not undermine the policies for nutrient and sediment reduction proposed in S.1816, but instead will yield some recommendations that will approve program accountability and efficiency. From my twenty-year perspective, the Chesapeake Bay Program has often lost valuable time while waiting for new model results while it was clear what the most important objectives to accomplish were.

Senator CARDIN. Thank you for your testimony.
Mr. Hughes.

STATEMENT OF PETER HUGHES, PRESIDENT, RED BARN TRADING COMPANY

Mr. HUGHES. Senator Cardin and Senator Crapo, I thank you for the opportunity to speak here today.

I believe that the role of the Federal Government is critical to the success of the Bay restoration effort. I am here today to lend a voice from an agricultural perspective, more specifically, animal agriculture in the neighboring State of Pennsylvania.

I grew up on a dry land wheat farm in Washington State, and I have been out in Pennsylvania 10 years. Eight years ago, I started an ag consulting company, an engineering company, just to work with farmers within the Chesapeake Bay region. Today, we have over 650 clients within the Chesapeake Bay, and I don't mean to trump Ms. Swanson's connection with Idaho, but my wife and business partner, Molly, is from Boise and holds a master's degree from the University of Idaho. So thank you.

Senator CARDIN. I am starting to feel that Senator Crapo has more witnesses here from his side than our side.

[Laughter.]

Mr. HUGHES. We do serve the gamut of Pennsylvania agriculture from the 30-head Amish dairy to the 2,500-head dairy CAFO located on the Mason-Dixon Line. Pennsylvania agriculture may not have a mental connection to the Chesapeake Bay itself, but I don't know a single farmer that does not have a direct relationship with the stream that runs through his or her land. We must think of the Chesapeake Bay as a report card for environmental compliance and focus our stewardship efforts on the localized streams and rivers that ultimately flow into the Bay.

There are a myriad of regulations backed by the Clean Water Act for the protection of these local streams and watersheds. If we are to meet and exceed the expectations of the Executive Order of the Chesapeake Bay Protection and Restoration, we in the ag industry must first and foremost focus on our local bodies of water.

The enforcement of regulations under the Clean Water Act is only one tool in the toolbox for Chesapeake Bay restoration. A boots on the ground approach local effort needs to be supported through strengthening the technical assistance of the public and private sectors. Agriculture desperately needs the leadership and technical assistance provided by soil conservation districts, natural resource conservation service, crop consultants, land grant universities, and extension agents.

The bill as proposed will bring significant new money to the system, with critical emphasis on the needed technical assistance. The Chesapeake Bay Ecosystem Restoration Act offers a path forward that both ensures the future of the Nation's largest freshwater estuary and gives local stakeholders the responsibility and financial and technical support to do their part.

Three years ago, Pennsylvania's DEP put forth a nutrient credit trading policy. As a part of that policy, since we already had agricultural clients within the watershed, we formed a sister company called Red Barn Trading. As was noted before, we entered into

agreements for the first point to non-point source trade with a local municipality. We continue working with developers and waste treatment plants so that they are able to meet their NPDES permit requirements.

A geographically based cap and trade system is a vehicle for sound economic and environmental compliance. Since the Chesapeake Bay does not recognize the State geographical boundaries on a map, it is my contention that for a cap and trade system to truly work, we need a robust, multi-State Chesapeake Bay trading framework. This bill will bolster the fledgling credit trading market and allow for economic and environmental sustainability.

The bill introduced by Senator Cardin creates a framework for water quality trading for nitrogen and phosphorus that will offer farmers new economic opportunities for the water quality improvements they implement. In order to have a robust water quality trading market, we must break down the geographical State barriers that are currently inhibiting a successful market.

This can only happen if the Environmental Protection Agency is given authority to establish a water quality trading program that extends to all Bay States, which will result in a level playing field for the credit trading market.

Now only would such a measure bring down the cost of wastewater treatment plant upgrades, it would provide an economic and environmental incentive for agriculture and other non-point sources to carry their fair share of the load toward Chesapeake Bay restoration.

Agriculture is willing to do their part for the restoration of the Bay provided that farmers have real and factual clarity of what is expected of them. Agriculture will go above and beyond compliance through creative and innovative practices, but it can only attain this goal if there is reason and clarity of the process. The bill proposed by Senator Cardin offers the path forward in directional funding that is so desperately needed.

It has been an honor for me to have the opportunity to share my views with you in regard to the responsibilities of agriculture and the Chesapeake Bay. I would ask for the support of the Chesapeake Bay initiative by keeping our farms sustainable and environmentally responsible.

Thank you.

[The prepared statement of Mr. Hughes follows:]

TESTIMONY

Presented to

Senate Committee on Environment and Public Works

Subcommittee on Water and Wildlife

"Legislative Hearing on Great Water Body Legislation: S. 1816 and S. 1311"

United States Senate

Submitted by

Peter Hughes

President, Red Barn Consulting, Inc

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Chairman Cardin, Ranking Member Crapo and members of the Subcommittee. I thank you for this opportunity to testify in support of the reauthorization of the Chesapeake Bay Program, cited as the "Chesapeake Clean Water and Ecosystem Restoration Act of 2009". I believe the role of the Federal Government is critical to the success of the Bay restoration effort. I am here today to lend a voice from an agricultural perspective, more specifically an animal agriculture perspective from a neighboring Chesapeake Bay state, Pennsylvania.

Although I grew up on a dry-land wheat farm in Washington State, I have lived in Lancaster, Pennsylvania for the past ten years. Eight years ago I started an agricultural consulting and engineering company called Red Barn Consulting. Red Barn has grown over the years, and currently ten employees work with approximately 650 farm clients within Pennsylvania's Chesapeake Bay Watershed. Most of our farm clients are third and fourth generation farmers. Red Barn is a niche consulting business solely focused on agriculture, tasked with guiding our farmers through environmental stewardship and compliance. We serve the gamut of Pennsylvania agriculture, from the thirty (30) head Amish dairy to the two thousand five hundred (2,500) head dairy CAFO located on the Mason Dixon Line.

As you know, fifty percent of the fresh water flowing into the Chesapeake Bay comes from the Commonwealth of Pennsylvania. With over 83 thousand miles of streams and rivers, and an estimated eighty trillion gallons of ground water, Pennsylvania is truly a blessed water-rich state. I would like to sit here and look you in the eye and tell you that the Pennsylvania's nitrogen and phosphorous loading problems to the Chesapeake Bay are only because of the 164 waste treatment plants and urban and suburban stormwater runoff. But this statement is simply not true. Depending on what pie chart you use, the largest contributor of nitrogen, phosphorous, and sediment to the Chesapeake Bay is from agricultural activities.

One does not have to go far to read about the issues surrounding the depletion of the blue crab populations or the dead zones that plague our largest fresh water estuary. Even though we have the scientific modeling and the statistics to support the degradation of the Chesapeake Bay, we are crippled by the sociological and geographical connectivity to the Bay. Seventy three percent of all Pennsylvanians have never seen nor will ever visit the Chesapeake Bay. That is why it is important for agriculture to change its rhetoric and mindset about what the Bay means to its future sustainability.

Although we may not have a mental connection to the Chesapeake Bay itself, I do not know a single farmer who does not have a direct relationship with the stream that runs through his or her land. We must think of the Chesapeake Bay as our report card for environmental compliance and focus our stewardship efforts on the localized streams and rivers that ultimately flow into the Bay. There are a myriad of regulations backed by the Clean Water Act for the protection of these local streams and watersheds. If we are to meet and exceed the expectations of the Executive Order of Chesapeake Bay Protection and Restoration, we in the agricultural industry must first and foremost focus on our local bodies of water.

It is my contention that agriculture not only has the will but the ultimate ability to meet these reductions in nitrogen, phosphorous, and sediment. In order to meet this challenge and raise the bar of environmental stewardship, agriculture does need the technical and educational tools provided under the reauthorization of the Chesapeake Bay Initiative. I believe that we already

have the laws and statutes within Pennsylvania to guide compliance, but we have to muster the political will to enforce these regulations.

Enforcement of regulations under the Clean Water Act is only one tool in the toolbox for Chesapeake Bay restoration. A "boots on the ground" local effort needs to be supported through strengthening the technical assistance of the public and private sectors. Agriculture desperately needs the leadership and technical assistance provided by soil conservation districts, natural resource conservation service, crop consultants, and Land Grant University extension agents. We have seen a dramatic cut in personnel and budgetary constraints over the last three years at a time when the knowledge of soil and water conservation are needed the most. The Chesapeake Bay reauthorization needs to provide significant resources for technical assistance, outreach, and education to enable and guide the agricultural community. The bill as proposed will bring significant new money to this system with a critical emphasis on the needed technical assistance. The Chesapeake Bay Ecosystem Restoration Act offers a path forward that both ensures the future of the nation's largest freshwater estuary and gives local stakeholders the responsibility and financial and technical support to do their part.

The private sector is also ready to meet the agricultural challenge, but many depend on grant funding and federal dollars to support agricultural conservation practices. Red Barn has received Federal Stimulus money in the form of AARA; I know the private sector will be fiscally responsible with this money as it is applied to agricultural operations and new ingenuity. Pennsylvania has become a national model for a nutrient cap and trade free market system that the agricultural community has embraced. Due to low commodity prices, especially milk prices, farmers are more than ever seeking ecosystem services to bring new revenue streams onto the farm through the acres they own.

Three years ago Pennsylvania's Department of Environmental protection put forth a nutrient credit trading policy to foster the relationship between point sources and non point sources. Red Barn Consulting formed a sister company, Red Barn Trading, to serve as an aggregator and certifier of nutrient credits, or quite simply to aid in the reduction of pounds nitrogen and phosphorous through various farm best management practices. We conducted the first point to

non-point credit trade with a local municipal authority two years ago and continue to sign contracts with developers and waste treatment plants so that they are able to meet NPDES permit requirements. A geographically based cap and trade system is a vehicle for sound economic environmental compliance.

Since the Chesapeake Bay does not recognize the state geographical boundaries drawn on a map, it is my contention that for a cap and trade system to truly work we need a robust multistate Chesapeake Bay trading framework. This will bolster the fledgling credit trading market and allow for economic and environmental sustainability. The Chesapeake Bay will reap the benefits of a multistate trading system as long as it is constructed at a local level and local stream impairment is not given up for the greater cause.

The bill introduced by Senator Cardin creates a framework for water quality trading for nitrogen and phosphorus that will offer farmers new economic opportunities for the water quality improvements they implement. In order to have a robust water quality trading market, we must break down the geographical state barriers that are currently inhibiting a successful market. This can only happen if the Environmental Protection Agency is given authority to establish a water quality credit trading program that extends to all Bay states which would result in a level playing field for credit trading. Not only would such a measure bring down the cost of wastewater treatment plant upgrades, it would provide an economic and environmental incentive for agriculture and other non-point sources to carry their fair share of the load towards Chesapeake Bay Restoration.

Agriculture is willing to do its part for the restoration of the Bay provided that farmers have real and factual clarity of what is expected of them. Agriculture will go above and beyond compliance through creative and innovative practices, but it can only obtain this goal if there is reason and clarity of the process. Grants to local governments and localities need to look beyond stormwater and provide real resources for working lands. Congress has been generous with USDA funding for the Chesapeake Bay Watershed Initiative and other Farm Bill Funding, but more is needed, in particular for people who deliver financial assistance. The bill proposed by Senator Cardin offers the path forward and directional funding so desperately needed.

It has been an honor for me to have the opportunity to share my views with you in regard to the responsibilities of the agricultural community and the Chesapeake Bay. I cordially invite each of you to put on your boots and support the Chesapeake Bay Initiative by keeping our farms sustainable and environmentally responsible.

red barn
TRADING COMPANY
www.redbarntrading.com

October 15, 2009

Senator Benjamin L. Cardin
509 Hart Senate Office Building,
Washington, DC 20510

RE: Support of the Chesapeake Bay Ecosystem Restoration Act through the proposed section 117 amendments of the Clean Water Act.

Dear Senator Cardin,

I am writing on behalf of Red Barn Trading Company (RBT), a consulting and nutrient trading aggregator located in Lancaster County, Pennsylvania. I commend your leadership and focused efforts regarding the restoration of Chesapeake Bay. The avocation and dedication to the Chesapeake Bay Ecosystem Restoration Act by the United States Congress is the essential component to insuring the future of the nation's largest fresh water estuary. It is clear that Chesapeake Bay restoration will benefit from increased Federal authority, improved accountability requirements, and targeted Federal funding. We stand as willing private sector partners to make sure that the improved targeted actions set forth in the proposed CWA section 117 amendments not only become a reality but actually result in improved water quality.

It is an honor to give support to the establishment of a bay-wide water quality credit trading program. For the past four (4) years, RBT has dedicated itself to the fledgling Chesapeake Bay nutrient credit trading market in the Commonwealth of Pennsylvania. RBT as executed the only public / private nutrient credit sales agreements with point sources, for both developers and waste treatment plants, within the watershed. We currently represent eighty-five percent (85%) of the aggregated non-point source nitrogen and phosphorous available in the Pennsylvania nutrient credit market. On behalf of our six hundred and fifty (650) agricultural clientele that reside within the Pennsylvania Chesapeake Bay Watershed, we continue to support the Pennsylvania Department of Environmental Protection in these local efforts.

In order to have a robust water quality trading market, we must break down the geographical state barriers that are currently inhibiting a successful market. This can only happen if the Environmental Protection Agency is given authority to establish a water quality credit trading program that extends to all Bay states which would result in a level playing field for credit trading. Not only would such a measure bring down the cost of wastewater treatment plant upgrades, it would provide an economic and environmental incentive for agriculture and other non-point sources to carry their fair share of the load towards Chesapeake Bay Restoration.

I hope that these comments of support are helpful to the reauthorization of Section 117 of the Clean Water Act. I have attached my written comments to the Subcommittee on Water Resources Transportation and Infrastructure for your information. We stand as ready and willing

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participants to insure the economic and environmental success to a Chesapeake Bay wide nutrient credit trading program.

Yours for a better environment,

Peter Hughes

Peter Hughes
President
Red Barn Trading Company

Cc: Senator Arlen Specter
Senator Robert P. Casey Jr.

Encl: (1) Testimony Presented to Subcommittee on Water Resources Transportation and Infrastructure Committee. United States House of Representatives, October 22, 2009.

Environment and Public Works Committee Hearing
November 9, 2009
Follow-Up Questions for Written Submission

Questions for Hughes

Questions from:

Senator James M. Inhofe

1. I am a big supporter of Natural Resource Conservation Service and other non-point source pollution programs run through voluntary programs. I am also concerned, as you are about the lack of support for these programs financially recently. We continue to see an increase in enforcement, but without the technical assistance and guidance that is needed to meet the goals of the programs. I would like you to know that I will continue to work with my colleagues here in the Senate to continue these essential voluntary programs.

   We appreciate your continued support of these important programs. Farmers and those involved in the farming industry rely heavily on these essential voluntary programs.

   a. Do you believe that voluntary programs run through local soil conservation districts, land grant university agriculture extension service and other locally lead community based organizations are essential in helping farmers achieve any regulatory goals for nitrogen, phosphorous and sediment reduction?

   Voluntary programs run through local soil conservation districts, land grant university agriculture extension service are essential in helping farmers achieve regulatory goals for nitrogen phosphorous and sediment reduction. Related to agriculture, the fundamental barrier to greater progress has been that some farmers choose to participate and some do not. We need all farmers to participate and no amount of educational appeals will be sufficient to reach those remaining farmers. Voluntary based financial and technical assistance programs are essential, but without greater accountability (clear and fair regulations that are enforced) voluntary efforts are insufficient.

   b. Without these efforts do you believe that we can successfully reach the goals for the Chesapeake Bay?

   Voluntary programs backed with greater accountability will be the catalyst for us to successfully reach the goals for the Chesapeake Bay. We will not be able to meet the mandates of the Chesapeake Bay without the aid of these Voluntary efforts.

2. What can you share with us from your experience with trading phosphorous and nitrogen?

   After working within the nutrient credit trading program in Pennsylvania for the past four years I believe there are many factors that affect a successful market. Like all creative and new markets it is demand driven. The Pennsylvania market for nutrient credits has not taken off because the purchasers (waste treatment plants, and developers) are not required to come into compliance with their NPDES permits until October 2010. Therefore we have many farms and non-point source pollution reduction technology that can be implemented;

we are just waiting for the buyers of the credits to come on board. That is why I believe a multi-state trading program would help in the effort of trading both nitrogen and phosphorous. In my experience nitrogen is the "gold" standard where phosphorous is the "silver" standard. Most buyers are interested in nitrogen reduction credits. We have not seen a particular need for sediment credits yet.

3. How have you dealt with the departure from the normal water quality model, where you sample at a point source and determine if they are either in or out of compliance to this model of trading and working on a larger watershed approach?

   Water sampling of nonpoint sources like agriculture is a much more difficult undertaking (unless there is a direct discharge of some kind) that is fraught with complexities and of limited value for trading. Credits are based on calculations of expected reductions derived from the application of various Best Management Practices, using accepted values averaged across many farms.

4. I am very interested in this trading model. I understand that there are a number of waste water treatment plants who currently are unable to meet their nutrient goals, even with state of the art technology. Do you think that there are technological limits to how much can be achieved in nutrient reduction in the Bay watershed even incorporating a robust trading program?

   The most recent information on pollutant load targets and strategies to achieve them is based on the States' Tributary Strategies. This information suggests that implementation levels significantly below 100% will be sufficient to achieve the targeted load reductions likely to be required by the Bay-wide TMDL called for by the legislation.

   An analysis by EPA comparing the theoretical maximum level of implementation (known as "E3") to that which will likely be required under the TMDL (shown as 2010 Tributary Strategy below) indicates that, for many practices (conservation tillage, forest buffers and cover crops), implementation levels needed are significantly below 100% (presentation by Jeff Sweeney, CBP Water Quality Goal Implementation Team, Sept. 29, 2009). The significance of this is that farmers will be able to sell credits based on more widespread implementation, earning revenue while cleaning up the Bay. This also means that there should be significant capacity for trading to enable wastewater treatment plants to offset pollution loads that they cannot cost effectively treat.

5. I am concerned about how expansive the nutrient trading program can be before it becomes in-effective. For example, a farmer in Upstate New York trading with a waste water treatment plant in Virginia may not be as effective as a waste water treatment plant in its own tributary. Do you have any suggestions for maximizing the effectiveness of a trading program?

Any legitimate trading strategy will adjust for diminishing effectiveness of reductions the farther up the watershed one travels and/or the degree to which one watershed has a greater effect on the receiving waterbody than another. Thus, reductions on a farm in New York would, all other factors equal, would be less cost effective than reductions on a farm closer to the Chesapeake Bay. At the same time, an interstate trading program, by increasing the number of buyers and sellers, will increase the overall cost effectiveness of trading and enhance opportunities for all farmers to participate to the extent they are able.

Senator CARDIN. Mr. Hughes, thank you very much for your testimony.

Ms. Bodine.

STATEMENT OF SUSAN PARKER BODINE, PARTNER, BARNES AND THORNBURG

Ms. BODINE. Thank you, Chairman Cardin, Ranking Member Crapo. Thank you for the invitation to appear before you today to talk about S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act, as well as S. 1311, the Gulf of Mexico Restoration and Protection Act.

Let me start with S. 1816. My full analysis of the bill is in my written statement, so I just want to highlight a few points.

First, let me say that I am very impressed by the collaboration and cooperation among all the jurisdictions in the Chesapeake Bay watershed. As Ms. Swanson pointed out, each jurisdiction is committed to restoration, and they have been working together. And by working together, EPA, the District of Columbia, and the States in the watershed, as well as local governments, have the authorities and the tools that they need to achieve this goal. This is a model of cooperative federalism.

So I have to step back and ask, what is the purpose of S. 1816? Because if it is to provide additional authorities, I have to question whether it is necessary. EPA has the authority to control air emissions across jurisdictions. State and local governments have the authority to control land use and to control non-point source runoff. And of course, the Clean Water Act, the Federal Water Pollution Control Act, provides for controls on point sources of pollutants into bodies of water. Collectively, those tools are there, and the tools are held by the group of people who are already working together.

If the goal of the bill is to provide additional funding, then it could actually be a lot shorter, and the funding levels actually could be higher as well. But what we have is a bill, S. 1816, that would codify a TMDL for the Chesapeake Bay in the statute. It also gives States and EPA extensive new authorities and creates new mandates that are then enforceable by citizen suits.

I am concerned that these provisions may have some unintended consequences, and I would like to summarize those concerns.

First, under the language of the bill as introduced, the load allocations that are in the Chesapeake Bay, what comes out in December 2010, would be codified in Federal law. This is the point that I believe Mr. Fox and Senator Crapo were discussing earlier, that you don't want to freeze science. You don't want to codify the load allocations in Federal law no matter what the models show later because these models are constantly evolving. It shouldn't take an act of Congress to allow States and EPA to revise a water quality implementation program to reflect best available science.

Second, the bill would authorize States to issue permits under section 402 of the Clean Water Act to any pollution source that the State determines is necessary to achieve the nitrogen, phosphorus and sediment load reductions in the implementation plan. Now, 402 permits are designed to address point source discharges of pollutants. These are collected in a channel. You have pollutants that you can measure, and you issue permits to control that.

What you have authorized are section 402 permits for any source of pollution. That includes air deposition. There isn't actually a geographical limit. So as drafted, you could have one State, for example, the State of New York, issuing 402 permits for utilities in Ohio. That is how the bill is drafted. You have granted very broad authority for section 402 permits for any pollution source. These permits would also then apply to non-point sources. And again, it is unclear how that would work.

Third, you have given EPA similar authority. If the State doesn't come forward with their implementation plan, then EPA has the authority, and in fact the bill says "shall," "shall promulgate such regulations or issue such permits as EPA determines is necessary to control pollution." That is enormously broad. It is authority for any regulations, any permits that EPA determines is necessary to control pollution. That is authorizing EPA to determine where highways are. That is authorizing EPA to determine what is built. That could be determining that some land uses can't be allowed anymore, or land uses have to change. This is an enormous expansion of Federal authority.

Finally, I have two more points on S. 1816. One is that the mandates on EPA are enforceable in the bill through citizen suits. So you could have the agency craft a reasonable program, and I am sure that they would, but you could then have a citizen say, well, we don't think that goes far enough and then file suit in Federal court to try and mandate changes.

Last, to the extent that the bill sets up enforceable mechanisms against States, I believe that it would be found to be unconstitutional because under the Tenth Amendment, Congress doesn't have the authority to commandeer State legislatures and direct them to carry out a Federal regulatory program. EPA can carry out a program. Of course, EPA can use its spending, the Federal Government can use spending power, as has been pointed out, but you can't directly mandate a State to implement a Federal regulatory program. And so to the extent that it purports to do that, I believe that section would be found to be unconstitutional.

I just want to make one point on S. 1311. I know I am over my time. I apologize. On S. 1311, I provided some analysis in my written testimony, and I would just ask the committee to look at all of the existing groups that are working collaboratively under the existing program, and then make sure that those organizations and functions are matched up with the authorization. Some of the language in the authorization that is used is different. It is unclear if all the groups are supposed to be now in a single entity or not. So I would just ask as a technical matter to make sure that that works.

Thank you.

[The prepared statement of Ms. Bodine follows:]

TESTIMONY OF SUSAN PARKER BODINE
PARTNER
BARNES & THORNBURG
BEFORE THE SUBCOMMITTEE ON WATER AND WILDLIFE
OF THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
LEGISLATIVE HEARING ON GREAT WATER BODY LEGISLATION:
S. 1816 AND S. 1311
NOVEMBER 9, 2009

Chairman Cardin, Ranking Member Crapo, and members of the Subcommittee, thank you for the invitation to testify today on S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009 and S. 1311, the Gulf of Mexico Restoration and Protection Act.

My goal today is to provide a legal analysis of these two legislative proposals, based on my understanding of the Clean Water Act and water quality implementation programs. I am currently a partner in the law firm of Barnes & Thornburg. I have previously held positions at both the U.S. Environmental Protection Agency (EPA), as Assistant Administrator for the Office of Solid Waste and Emergency Response, and in the House of Representatives, as the staff director for the Water Resources and Environment Subcommittee of the Committee on Transportation and Infrastructure. During my tenure on the Water Resources and Environment Subcommittee, I worked on the last reauthorization of the Chesapeake Bay Program, as Title II of Public Law 106-457 (2000). I also participated in extensive oversight of EPA's Total Maximum Daily Load (TMDL) program.

S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009

Establishment of a Chesapeake Bay TMDL

Consistent with EPA's announced plans, S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009, requires EPA to establish, by December 31, 2010, a basin-wide Chesapeake Bay TMDL for the 92 Bay and tidal tributary segments that are impaired by nitrogen, phosphorus, and sediment. This TMDL will cover 64,000 square miles in six States and the District of Columbia. Under the bill, the TMDL must include wasteload allocations for point sources for nitrogen, phosphorus, and sediment, necessary to implement applicable water quality standards. The bill also requires the TMDL to include enforceable or otherwise binding

load allocations on nonpoint sources, including atmospheric deposition, agricultural runoff, and any stormwater runoff that is not currently regulated. Finally, under the bill, the TMDL must prohibit any net increase in nitrogen, phosphorus, and sediment from any new or expanding source, including increases from new or increased impervious surfaces, concentrated animal feeding operations, transportation systems, and septic systems, even if a discharge meets water quality criteria so the source is not causing or contributing to the violation of a water quality standard.

S. 1816 provides States with greatly expanded State authorities to implement the TMDL. If a State fails to implement the TMDL, EPA must implement it, with the greatly expanded federal authorities provided by the bill. Finally, if persons are not satisfied with the implementation by a State or by EPA, the bill provides for citizen suits to use the courts to implement the TMDL. These provisions all raise significant issues. A few of those issues are highlighted below.

Load Allocations and Water Quality Standards

Under new section 117(i), S. 1816 requires each State to develop an implementation plan for each impaired segment in its jurisdiction. The implementation plans must incorporate the caps on nitrogen, phosphorus, and sediment that were agreed to among EPA and the States in 2003, or the caps identified in the TMDL developed by EPA. The 2003 agreement caps nitrogen loads at 175 million pounds, phosphorus loads at 12.8 million pounds, and sediment loads at 4.15 million pounds.[1] These maximum loads were based on modeling in 2003 that assumed that States would be modifying their water quality standards based on ambient water quality criteria for the Bay for dissolved oxygen, water clarity, and chlorophyll published by EPA in April 2003.[2] The 2003 agreement notes that:

[1] Memorandum dated April 28, 2003, from W. Tayloe Murphy, Jr., Chair, Chesapeake Bay Program Principals' Staff Committee to Principal Staff Committee Members and Representatives of the Chesapeake Bay "Headwater" States, titled "Summary of Decision Regarding Nutrient and Sediment Load Allocations and New Submerged Aquatic Vegetation (SAV) Restoration Goals," reprinted as Appendix A of "Setting and Allocating the Chesapeake Bay Basin Nutrient and Sediment Loads," EPA 903-R-03-007, December 2003.

[2] Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll *a* for the Chesapeake Bay and Its Tidal Tributaries, EPA 903-R-03-002 (April 2003).

> "Over the next two years, Maryland, Virginia, Delaware, and the District of Columbia will promulgate new water quality standards based on the guidance published by EPA. Although the public process for adopting water quality standards varies among the states, each state's process will provide opportunities for considering and acquiring new information at the local level. States may choose to explore a number of issues during their adoption process, such as the economic impact of water quality standards and specific designated uses."[3]

Scientific analysis did not stop in December 2003, and EPA and the Chesapeake Bay States have continued to refine the models on which these load allocations are based. In fact, based on the most recent modeling, EPA and the Chesapeake Bay Program's Principals' Staff Committee have agreed to preliminary target loads of 200 million tons per year of nitrogen and 15 million tons per year of phosphorus. These targets are likely to continue to change. In fact, the most recent model (phase 5.3) is not expected to be ready until December 2009. However, S. 1816 codifies the nitrogen, phosphorus and sediment load allocations as no more than the December 2003 allocations, or whatever allocations EPA establishes in the TMDL. Thus, the load allocations are capped by federal law even if, after the TMDL is established in December 2010, new data or further changes to the model show that increased loads would achieve water quality standards.

By codifying specific pollutant caps in law, S. 1813 may be freezing both science and policy. As noted above, the models used to establish pollutant loads are very complex and are continually evolving. Codifying the pollutant caps could preclude EPA and States from using their evolving understanding of the Bay and improved modeling to achieve water quality goals. Also, the models seek to answer the question of whether or not water quality standards are met. States must review and, as appropriate, revise, their water quality standards every three years. 40 CFR 131.20. Under current law, water quality standards can be made less stringent if meeting those standards "would result in substantial and widespread economic and social impact." 40 CFR

[3] "Setting and Allocating the Chesapeake Bay Basin Nutrient and Sediment Loads," December 2003, at A6. For example, in setting its water quality standards for dissolved oxygen, Maryland has included variance that allows dissolved oxygen criteria to exceed the water quality standard in some of the deepest parts of the Bay because: "Even after spending billions of dollars to reduce nitrogen, phosphorus, and sediment pollution to clean up the rest of the Bay, essentially doing everything we know how to do at this time, the deep areas still could not attain the dissolved oxygen standard." http://www.mde.state.md.us/Programs/WaterPrograms/TMDL/wqstandards/faqs.asp

131.10(g)(6). It appears that, by codifying specific load allocations, S. 1813 would eliminate the ability of States to later make changes to the loads based on changed water quality standards that may be needed to account for substantial and widespread economic and social impacts. Finally, codifying load allocations is contrary to the principles of adaptive management. The Chesapeake Bay watershed is a complex, dynamic system. It is unclear how the watershed will respond to the various measures being proposed. In its report, *Assessing the TMDL Approach to Water Quality Management*, the National Academy of Sciences (NAS) recommended using the scientific method to apply adaptive implementation to TMDLs. NAS describes this as "a process of taking actions of limited scope commensurate with available data and information to continuously improve our understanding of a problem and its solutions, while at the same time making progress toward attaining a water quality standard."[4] The NAS's recommended framework for water quality management includes reviewing the attainability of designated uses and water quality standards both before the development of a TMDL and as part of adaptive implementation.[5] S. 1813 would prevent EPA and States from implementing that recommendation.

State Implementation

S. 1816 requires State implementation plans to include enforceable or otherwise binding measures to reduce loads of nitrogen, phosphorus, and sediments, to meet the targets discussed above. Although programs to achieve voluntary reductions through funding commitments may be included in the implementation plan, S. 1816 makes it clear that the State must have enforcement mechanisms to employ if an entity does not achieve its assigned pollutant reductions. S. 1816 provides federal authority for binding measures and enforcement mechanisms in new section 117(i)(2), which **authorizes States to issue permits under section 402 of the Clean Water Act to any pollution source the State determines to be necessary to achieve the nitrogen, phosphorus, and sediment reductions in the implementation plan.** These permits are authorized for any source of pollution, whether or not that source is currently

[4] Assessing the TMDL Approach to Water Quality Management, National Research Council, National Academy of Sciences (2001), at 90.

[5] *See id*, Figure 5-1, at p. 91.

excluded from regulation under current law. The permits are then fully enforceable by EPA and by citizen suits.

This provision greatly expands the scope of federal water pollution control law. Under current law, the Clean Water Act controls point source discharges of pollutants. "Point sources" are defined in section 502 of the Clean Water Act as any discernible, confined and discrete conveyance, such as pipes, ditches, channels, etc. Diffuse runoff of water is not a point source. The Clean Water Act also specifically excludes agricultural stormwater discharges and return flows from irrigated agriculture from the definition of point source, so they are not regulated under federal law. In addition, EPA, by regulation (in 40 CFR 122.27) has defined what is and is not a silviculture point source, excluding a variety of activities such as natural runoff from forest road construction and maintenance. These sources all could be subject to permits under S. 1816.

"Pollutants" are defined in section 502 of the Act as specific, measurable, materials that are discharged into water, such as solid waste, sewage, chemical wastes, biological materials, radioactive materials, heat, and industrial, municipal, and agricultural waste. In contrast, "pollution" is defined as the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water. Pollution includes increased water flows and habitat alternation. Under S. 1816, any activity that causes increases flow or habitat alteration, no matter how distant from a body of water, could be required to obtain a permit.

In fact, under S. 1816, permits issued under section 402 of the Clean Water Act could be required for any activity that affects water, whether or not there is any addition of a pollutant to the water, and whether or not there is even a discharge that can be measured and controlled. The bill specifically requires reductions in pollution from agricultural runoff, point sources including point source stormwater discharges, nonpoint source stormwater discharges, and septic systems. Although not specifically required, the bill also would authorize a State to issue a section 402 permit to a source of air deposition, because the States' new authority applies to "any pollution source," and air deposition is a source of pollution to the Bay. Finally, the bill does not restrict the States' new authority to sources located within the geographic boundaries of that State.

The section 402 permitting program is designed for point source discharges of measurable pollutants into bodies of water. It is unclear how section 402 permits could be used to address all the diverse sources of pollution affecting the Chesapeake Bay. For example, S. 1816 does not address what types of technology-based and water-quality based effluent limitations could be established to address diffuse sources of pollution that do not directly discharge into a water body. Absent specific statutory language clarifying how these sources are intended to be controlled, it is unclear where and how compliance is to be measured, whether numeric limitations could be imposed, and who would be legally responsible for meeting any requirements. Because these new permits can be enforced by citizen suits, these questions may be answered by courts.

S. 1816 also imposes specific requirements for development. Under new section 117(i)(3), EPA must issue regulations identifying, based on the area of impervious surface,[6] what development projects States must regulate to maintain or restore predevelopment hydrology, to the maximum extent feasible. EPA must define "predevelopment hydrology" by regulation. This may mean that the owner of property must return the volume of water leaving the property to its predevelopment levels, whether or not the water flows into a water body and whether or not there is any impact on water quality. These requirements will apply to existing projects seeking to expand, as well as new projects. When the term "maximum extent feasible" is used, that is usually understood to mean technically feasible without regard to cost.[7] If an impact to predevelopment hydrology is not avoidable, then a permit (presumably a section 402 permit, although the bill does not specify) must require mitigation using a ratio to be established by EPA by regulation. States are required to provide assurance to EPA that they will implement these regulations.

Federal Implementation

If a State fails to submit an implementation plan or submits a plan that does not meet criteria established by EPA, new section 117(j)(5) requires EPA to withhold all Clean Water Act funds

[6] The area of impervious surface may include roofs as well as parking lots.

[7] In contrast, the term "practicable" is usually understood to include consideration of cost.

from the State. This includes the capitalization grants for State Revolving Loan Funds. EPA also must develop a federal implementation plan to implement the TMDL in that State.

To implement the TMDL, S. 1816 gives EPA the authority to **promulgate any regulations or issue any permits as EPA determines is necessary** to control pollution sufficient to meet the water quality goals defined in the implementation plan. This is an extraordinary expansion of federal authority. It literally means that EPA could regulate any activity that has any impact at all on water quality. Under this provision EPA could supersede the local development plan of every community, as well as State and metropolitan transportation plans. EPA could prohibit or prescribe sidewalks, parking lots, buildings, roads, even lawns. EPA could dictate the length of gutters or require rain barrels and green roofs. EPA could prohibit the use of fertilizer. EPA could shut down factories or require farm land to become idle. EPA could force communities to spend billions of dollars beyond the limits of affordability to meet nutrient standards at sewage treatment plants. EPA could require all municipal separate storm sewer systems to carry out retrofits, at an estimated cost of $7.9 billion.[8]

S. 1816 also requires EPA to impose requirements for 2 to 1 offsets in permits under section 402 for any new or expanding discharges of nitrogen, phosphorus, or sediments in a State where EPA is implementing the TMDL. All permits would be enforceable as permits issued under section 402 of the Clean Water Act, including citizen suit enforcement.

EPA's new authority is to be implemented to advance a single goal: meeting the load allocations of a TMDL. S. 1816 does not provide for consideration of other values that a State or local government may want to take into account, such as safe transportation, locally grown produce, the economic health of a community, and even the ability of individuals to afford the cost of shelter. In fact, as discussed above, even if a State chooses to change its water quality standards to address any substantial and widespread social and economic impacts of implementing the TMDL, those new standards may not be implemented. It appears that S. 1816 would still

[8] *See* "The Next Generation of Tools and Actions to Restore Water Quality in the Chesapeake Bay, A Draft Report Fulfilling Section 202a of Executive Order 13508" (Sept. 9, 2009), at 23-24.

mandate achievement of the goals established in 2003 or in the TMDL to be issued in December 2010.

Nutrient Trading

New section 117(j)6) directs EPA to establish, by May 2012, an interstate nitrogen and phosphorus trading program to facilitate implementation of the TMDL. However, trading opportunities may be limited. First, it appears that trading must occur between "points-of-regulation" which must be entities regulated under the Clean Water Act. It is unclear if a regulated entity can rely on credits generated from unregulated activities, such as wetlands restoration, nutria eradication, or increasing the number of filter feeders such as oysters. It also is unclear if trading can occur with sources of air deposition. Second, few sources will be able to reduce nitrogen, phosphorus, or sediment loadings above the reductions assigned to them under the TMDL implementation plan. Given that credits must arise in the watershed and all sources of pollution in the watershed would become regulated under the bill, there may be very few excess reductions to trade as credits. In fact, the only cost-effective source of credits may be the retirement of agricultural land, driving agriculture from the watershed. The May 2009 plans put forth by States to meet their 2011 milestones for reducing nitrogen and phosphorus already assume the retirement of 81,676 acres of land.[9]

Federal Assistance

S. 1816 requires EPA to develop guidance, model ordinances, and guidelines, to help States and local governments ensure that land maintains predevelopment hydrology and to encourage low impact development. The bill authorizes $1.5 billion in grants to help local governments that adopt the guidance, ordinances, and guidelines to implement projects designed to reduce stormwater discharges. However, as noted above, EPA estimates the cost of retrofitting municipal separate storm sewer systems to reduce stormwater discharges of nitrogen, phosphorus, and sediment to be $7.9 billion.

[9] *See* http://archive.chesapeakebay.net/pressrelease/EC_2009_allmilestones.pdf

Enforcement

New section 117(n) includes provisions to authorize federal and citizen suit enforcement against States for failure to implement the TMDL, and citizen suit enforcement against EPA for failure to carry out any requirement of section 117.

The section authorizing federal and citizen suit enforcement against States for failure to act would likely be found to be unconstitutional under the 10th Amendment to the Constitution, even if the bill successfully waives State sovereign immunity under the 11th Amendment.[10] Specifically, the Supreme Court has held that Congress may not "commandeer the legislative process of the States by directly compelling them to enact a federal regulatory program." *New York v. United States*, 505 U.S. 144, 161 (1992) (relating to solid waste disposal). *See also Printz v. United States*, 521 U.S. 98 (1997) (the Federal government may not compel the States to enact or administer a federal program, relating to regulation of guns). Thus, Congress cannot compel a State to implement the Bay TMDL.

Congress can authorize citizen suits against EPA for failure to carry out any provision of the Act. While EPA does retain the discretion to choose where and how to utilize most of its new authorities, if a citizen believes that EPA's actions are not sufficient to meet the goals of the TMDL, then that person can file suit in federal court to compel action. In deciding the case, the federal court will not be able to balance competing interests. Implementation of the load allocations in the TMDL could be ordered, no matter what the impact is on communities or individuals.

S. 1311, the Gulf of Mexico Restoration and Protection Act

S. 1311, the Gulf of Mexico Restoration and Protection Act would amend the Clean Water Act to add section 123 to formally establish a Gulf of Mexico Program office, to be located in a Gulf

[10] The Supreme Court has gone back and forth in recent years regarding whether Congress can waive State sovereign immunity through the exercise of Article I authority. *Compare Seminole Tribe of Florida v. Florida*, 517 U.S. 44 (1996) (Congress cannot abrogate State sovereign immunity under Article I), *with Central Virginia Community College v. Katz*, 546 U.S. 356 (2006) (the Bankruptcy Clause of Article I abrogates State sovereign immunity).

Coast State.[11] The Program Office is to coordinate and carry out activities to improve the water quality and living resources in the Gulf of Mexico. These activities may include research, monitoring, modeling, education and outreach, and providing information. The Program Office also is to be a liaison with counterparts in Mexico.

S. 1311 authorizes grants to non-profits, State and local governments, colleges and universities, interstate agencies, and individuals for monitoring, research, addressing water quality and living resource needs, habitat restoration, and reducing point source discharges of pollutants. The grants have a 25 percent local cost share and a 15 percent cap on administrative costs. The bill also requires periodic reports and, in coordination with the Gulf of Mexico Executive Council, periodic assessments of the state of the Gulf of Mexico ecosystem and implementation of the Program. The bill authorizes $10 million in 2010, $15 million in 2011, and $25 million in each of 2012 through 2014 to carry out the Program.

The bill defines the Gulf of Mexico Executive Council as "the formal collaborative Federal, State, local and private participants in the Program" but does not establish the Council or specify how people become members of the Council. If the Council includes private citizens, it can be advisory only. The only function provided for the Council in the bill is to coordinate with EPA on the assessment of the ecosystem and the Program that must take place every five years. It is unclear what other functions, if any, the Council is intended to perform. Currently, there is a Gulf of Mexico Alliance that is a partnership of the States of Alabama, Florida, Louisiana, Mississippi, and Texas. There also is a Citizens Advisory Committee, a Policy Review Board that includes public and private entities, and a Management Committee that includes public and private entities. It is unclear how the efforts of these existing organizations are intended to be integrated. It also is unclear how existing efforts, such as the Governors' Action Plans developed by the Gulf of Mexico Alliance, will be supported.

In new section 123(b)(1)(C)(iii), the bill authorizes the Program Office to implement State-led and community-led restoration plans and projects, and facilitate science, research, modeling, monitoring, data collection and other activities to support the program. As drafted, it appears

[11] The existing Gulf of Mexico Program Office is located at the Stennis Space Center in Mississippi.

that this provision would be carried out using contract authority. If it is intended to be carried out using grants, it should cross-reference subsection (d), authorizing grants.

Among the purposes of the grants authorized under subsection (d) is to eliminate or reduce point sources of pollutants, including eliminating leaking septic systems. Septic systems are nonpoint sources, not point sources.

Environment and Public Works Committee Hearing
November 9, 2009
Follow-up Questions for the Record
Submitted to Susan Bodine

Senator Inhofe:

Q1. I am concerned with the shifting balance of State authority over waters to increased EPA involvement in water pollution controls. Do you think that this bill will increase EPA's authority over waters in the 6 states in the Chesapeake Bay watershed?

A1. Yes, the bill amends the Clean Water Act to provide EPA with greatly expanded authority over waters in the 6 States in the Chesapeake Bay watershed. Under the current Clean Water Act, federal authority is limited to a discharge of a pollutant from a point source to a water of the United States. This structure protects waters of the United States from pollution while preserving traditional State authority over land use. In contrast, S. 1816 give the federal government the authority to issue any permit or promulgate any regulation that EPA decides is necessary to meet water quality goals. This means that federal authority would no longer be limited to the point source discharge of pollutants. Instead, the federal government could require Clean Water Act permits for any activity that they believe affects water quality. This could include any air deposition and any activity that disturbs the land. Under this authority, EPA could assert regulatory control over all public and private infrastructure development in the 6 States in the Chesapeake Bay watershed. This language also would overturn case law that says that EPA regulates discharges only, not sources. As a result, EPA could assert the authority to tell manufacturers how to manufacture, builders how to build, and farmers how to farm.

Q2. I am particularly troubled by the expansion of Sec. 402 permits to be for "any pollution source that a state deems necessary." Do you think this could lead to Clean Water Act permits being used for things outside the scope of the clean water act such as air pollution or non-point source pollution?

A2. Yes, the language of S. 1816 clearly gives both States and EPA the authority to regulate things outside the scope of the current Clean Water Act. By using the term "pollution" instead of the existing statutory term "pollutant" the bill gives States and EPA authority over the flow of water, not just the pollutants in water. By using the term "source" instead of "point source," S. 1816 gives States and EPA the authority to regulate activities and land use, not just a discharge into water. A "source" of "pollution" would include both non-point sources and air deposition. Given that the airshed for nitrogen oxide deposition into the Bay is 570,000 square miles, including all of OH, WV, VA, MD, DE, PA and NY, and parts of IN, MI, KY, TN, NC, NJ, and VT, S. 1816 gives States and EPA broad authority to issue Clean Water Act permits for utilities and other sources of nitrogen oxide that goes far beyond the six States of the Chesapeake Bay watershed.

Q3. Are there any cost-containment measures in S. 1816 to ensure that the most cost effective control measures are being used?

A3. S. 1816 does not include any cost-containment measures. In fact, the bill would remove a "safety valve" in existing Clean Water Act regulations. Under current law, a State has the ability

(following EPA review and approval) to change its water quality standards if meeting the current standards "would result in substantial and widespread economic and social impact." 40 CFR 131.10(g)(6).

EPA has provided little information on the total cost of proposed restoration efforts for the Chesapeake Bay watershed, providing estimates only for the cost of retrofitting existing municipal separate stormwater sewer systems (MS4s) and upgrading municipal and industrial treatment plants to add advanced nutrient removal technology. EPA estimates that the cost of retrofitting developed sites in existing MS4 areas would be **$7.9 billion a year.** EPA estimates the cost of adopting advanced nutrient removal technology would be **$6.8 billion**. *See* "The Next Generation of Tools and Actions to Restore Water Quality in the Chesapeake Bay: A Revised Report Fulfilling Section 202a of Executive Order 13508," dated November 24, 2009, at 24, 32.

In contrast to the estimated cost of just two activities under S. 1816, the bill authorizes a total of $2.149 billion, resulting in an enormous unfunded federal mandate, even if the full amount authorized is ever appropriated.

The financial burden of the investments that would be required under S. 1816 may result in "substantial and widespread economic and social impact." Under current law, a State could then change its water quality standards. However, S. 1816 instead codifies the required pollutant load reductions in the statute, so it would take an Act of Congress to change water quality goals, no matter what the impacts.

Q4. Do you have any concerns with the predevelopment hydrology provisions in S. 1816? What are those?

A4. Yes. Under S. 1816, EPA would issue regulations requiring States to regulate development that results in impervious surfaces over a certain size by requiring the sites to maintain or restore predevelopment hydrology, to the maximum extent feasible. In understanding the scope of this provision it is important to note that EPA considers roads, rooftops, lawns, recreational fields, golf courses, and parking lots all to be impervious surfaces. *See* "The Next Generation of Tools and Actions to Restore Water Quality in the Chesapeake Bay: A Revised Report Fulfilling Section 202a of Executive Order 13508," dated November 24, 2009, at 21-22.

This provision may mean that the owner of property must control virtually all runoff from the property, whether or not the water flows into a water body, and if it does reach a water body, whether or not there are any pollutants in the runoff, and if there are pollutants, whether or not there is any impact on water quality. This provision gives EPA authority to control development and land use. Under current law, pollutants that are channeled into a point source and are discharged into a water of the United States are subject to regulation. Under this provision of S. 1816, rain water falling on any piece of property that is undergoing development would be regulated. By using the term "maximum extent feasible," the bill makes this requirement applicable if it is technically feasible, no matter the cost.

Q5. I am very interested in the trading program. I believe that a trading program, if done well, could work to achieve some of the goals of the program. Do you have any concerns with the way the trading program is out lined in S. 1816?

A5. I am concerned that under S. 1816, trading opportunities may be limited. The bill appears to allow trades only among entities that are regulated under the Clean Water Act ("points-of-regulation"). If that is the case, there will be few excess reductions to trade because all regulated entities will already be required to make significant reductions in nutrients and sediments. The testimony of Peter Hughes, of Red Barn Consulting, appears to miss this point. His testimony describes trading in Pennsylvania under current law where regulated entities can fund pollutant reductions by unregulated entities (typically farms). Those trading opportunities will not arise under S. 1816, because all sources of pollution, including non-point sources such as farms, will become regulated so they will not have excess reductions to trade.

There would be more opportunities for trading if activities not regulated under S. 1816, such as wetlands restoration, nutria eradication, or increasing the number of filter feeders such as oysters, also could generate credits. It also is unclear if trading can occur with sources of air deposition.

However, even if unregulated sources are able to generate credits, regulated sources may not be able to use the credits if the language on page 30 of S. 1816 prohibiting any net increase in pollutant loadings from various sources remains in the bill.

As introduced, the only source of credits under S. 1816 may be the retirement of agricultural land, driving agriculture from the watershed. The May 2009 plans put forth by States to meet their 2011 milestones for reducing nitrogen and phosphorus already assume the retirement of 81,676 acres of land.

Q6. Are there any additional comments you have on either S. 1816 or S. 1311?

A6. Yes, thank you. I would like to raise concerns over the citizen suit provisions of S. 1816. I believe many people do not appreciate the significance of these provisions. For example, in her testimony, Ann Swanson, Executive Director of the Chesapeake Bay Commission, states that:

> Critical to the design of the bill, each state would be provided with the flexibility to develop and implement its own plan to meet its share of the watershed goal. Each jurisdiction faces a different set of challenges dependent upon the land use, climate, topography and socioeconomic and physiographic characteristics of their jurisdictions.

This statement ignores not only the EPA authorities provided in the bill, but also the fact that under the citizen suit provisions of S. 1816, an environmental group could second-guess both the State and EPA and file a suit seeking a court to impose a different plan. This is the result of using the word "shall" when describing state and EPA activities. The word "shall" creates a nondiscretionary duty, and at page 61 of the bill, most of those duties are made enforceable by citizen suits.

Senator CARDIN. Well, thank you very much for your testimony. Again, I thank all of our witnesses for their testimony.

Ms. Bodine, let me first tell you I think I disagree with some of your interpretations, but we appreciate that and we can certainly tighten up the language to make sure that it carries out its intent. It is certainly my intent that there would be updates on the standards based upon science. So we will make sure that is clear. We thought it was clear, but obviously there has been some issues raised on that. So that is clearly our intent.

And let me just make one more observation, and I appreciate your observations about the collaborative effort of the Chesapeake Bay Program. It has been a success since day one. I have always been impressed by the States that do not border the Chesapeake Bay, with their commitment and understanding how important their freshwater supply to the Bay is, and willing to be part of the Chesapeake Bay Program, and willing to implement policies in their State in order to protect the Bay. So it has been a collaborative effort.

I mention that because the impetus for this reauthorization bill comes from the States and our partners. It does not come from the Federal Government. It really comes from our States. And they recognize the reality that we have missed the targets substantially in recent years and that there is need to reenergize a process that will accomplish the goals that are set out based upon good science and based upon the States having the tools, the partners having the tools to accomplish what is the goals that are established internally by this collaborative effort based upon good science.

And that is the whole framework of the reauthorization bill. It is not something that was developed by the Federal Government. It was actually developed by the partners which we have worked with to be able to achieve the results.

But I think your comments are extremely helpful, and we look forward to working with you on that. The bottom line is the Bay is in trouble today, and we have got to do a better job. I think all of our partners understand that and are looking for a framework to take the Bay Program to the next level.

Dr. Boesch, I would just, if I could ask you first, dealing with the ecological significant of both bodies of water, the Bay and the Gulf, there are a lot of similarities. There are some differences, obviously the jurisdictional differences I would point out. Both are losing wetlands. Both are dealing with dead zones.

How similar are the problems in these two bodies of water?

Mr. BOESCH. Well, I think that they are very similar——

Senator CARDIN. Is your microphone on?

Mr. BOESCH. There is habitat loss, as you said, with respect to wetlands, submerged aquatic vegetation. There are problems of water quality. Largely, now that the Clean Water Act was successful in reducing toxic inputs and the like, now the focus is in most of the estuaries along the Gulf Coast. The No. 1 water quality problem is nutrients, excess nutrients, much like the Chesapeake Bay.

And also, all of these systems are contending with the limits of living resource utilization, over-fishing issues, habitat losses, bycatch issues in the Gulf of Mexico. So in some sense, they are all very closely related.

The difference, as I pointed out, is that we in the Chesapeake have been trying to do this in a coordinated way of one drainage basin went to one estuary. Whereas, the Gulf of Mexico has the problem of having to deal with a whole variety of different coastal bodies, bays and estuaries all over the coast and be sensitive to the differences of Texas to Florida, and the kinds of environments, the kinds of organisms, and the kinds of human issues and problems.

As I said earlier, I would predict that you will see eventually an evolution of the Gulf of Mexico Program so it takes some of the same kind of approaches that you have in your bill with respect to requirements, deadlines, goals and so on moving forward.

Senator CARDIN. You also mentioned the fact that the Bay legislation calls for the formal incorporation of adaptive management. And you were explaining that, and I want you to get more into the record on that because you were also explaining how the Bay Program incorporates some of the BayStat that the Governor had for accountability. Could you just go into more detail as to what this means?

Mr. BOESCH. Sure. Well, adaptive management is an approach that has been developed in a wide variety of natural resource management circumstances. And basically, it involves learning by doing. So it is based on the understanding that at the end of the day we don't always have the exact prescription about what it is going to take to restore a system to health, or even what that health may look like, but that we learn progressively by doing restoration.

And so we have in the Chesapeake Bay Program, for example, world class modeling capability that models the water and the nutrients flowing off the watershed and delivers them into the Bay, and then the Bay responds, its production is affected and dead zones are created, etc. And these models are used to develop our management goals.

And as you recall, a few years ago the GAO and others brought light to the question that models are fine for identifying goals, but you can't be relied on to count progress simply on the basis of model projections. You have to actually verify that progress.

We have on the other hand a very effective monitoring program, a very substantial, sophisticated monitoring program in the watershed and in the Bay. And so we are able to observe the outcomes of our efforts. Adaptive management requires bringing those together. How well do the observations fit your forecast, if you will, by the models?

And so adaptive management will help us understand right away, if we apply it diligently, how effective the various management practices are, so we can then improve both the practices and the models. We can improve those practices. And then ultimately, comparing the observations with the model projections allows determination of how well the patient is doing and what is the prognosis for recovery.

So this is this adaptive approach that really pulls it together. And as I indicated, in many other ecosystem restorations, the Everglades is a good case, this adaptive approach is being applied. The important thing to recognize is it isn't just an exercise for the scientists and engineers. This is an exercise for decisionmakers.

So in Maryland, as you know, Senator, Governor O'Malley has developed, from day one of his coming into office, a model that he used in governing the city of Baltimore of management by accountability measures, taking that approach to Bay restoration, which he termed BayStat. So he as the senior decisionmaker in the State is actually asking these questions. What do the models show? What do the observations yield? In a way, BayStat is forcing us to integrate models and outcomes to produce adaptive decisionmaking that affects, for example, his decisions on allocation of budget priorities to the most cost effective approaches and so on.

So it is a powerful concept. It is not the easiest thing in the world to do. It involves a lot of hard work, but ultimately I think it will yield better results and more efficient progress toward the restoration goals.

Senator CARDIN. I wanted you to go through that because, Senator Crapo, we are very proud of Governor O'Malley's management system that really holds departments accountable for certain specific results, and then the Governor literally can see on a regular basis whether they have achieved those results. And it very much affects his budget, so there is a clear accountability here.

There is currently a subcommittee working on the Budget Committee looking at ways that we can deal with accountability in Federal budgeting. And I have called to their attention the Maryland model, originally the Baltimore City model because I do think accountability is going to be a very, very important part of the Bay Program. We have got to use the best management practices. We have to figure out a way that we can hold people accountable. I know Governor O'Malley is very much committed to doing that, and we are trying to adopt that in the overall framework, which I think all of us want to see done.

Senator Crapo.

Senator CRAPO. Well, thank you very much, Mr. Chairman.

And I also agree with the need for accountability in trying to achieve some of these national policy objectives that we establish. And I just want to make sure that in the process that we maintain the viability of State and local and private sector stakeholders, and really the strength of the collaborative process. And I am not suggesting that you are not. I just want to be sure that we do do that.

And Ms. Swanson, I am not going to ask you a question, but I want to thank you, first of all, for your acknowledgment of your Idaho ties, and frankly, for your commitment to collaboration in the area. I am a completely strong believer that those who live where the issues are and where the problems are, and who are willing to roll up their sleeves and get together and collaborate are the ones that can come up with the kinds of creative solutions that will help us achieve success in these endeavors. So thank you for your commitment to that.

Mr. Hughes, I do want to ask you a question. I thank you for your Idaho ties as well, and I appreciate you mentioning the University of Idaho, not only in the context of your wife graduating from there, but also in your mention of land grant universities. You indicated that programs that are operated through groups like land grant universities or local soil conservation districts and other pri-

vate sector voluntary efforts are very significant and very important in terms of dealing with non-point source issues.

Could you elaborate on that a little bit?

Mr. HUGHES. I sure can. It is critically important for the technical service, for the technical knowledge that is provided by soil conservation service, by the natural resource conservation districts. These are the people that farmers rely on for their information. These are the people that farmers rely on to know what are the right land practices to do.

Historically, we have even moved our office to the local county conservation district because of the amount of farms that come and receive technical service through the farm service agency and the local conservation districts. Penn State University Extension is also there.

Farmers don't do a very good job about talking with each other about what is working and not working on their farm. But they will go to land grant universities, to technical service providers who see a wide variety of different practices that are done on farms and adopt those themselves. It is critically important that we support land grant universities. I am a graduate of a land grant university. And we have to make sure that the money is being put in the right area of emphasis.

Senator CRAPO. Well, I appreciate your effort and your focus there.

And just one more question. I am changing topics completely here a little bit, but it is a quick question also. Senator Cardin's bill discusses a framework for trading phosphorus and nitrogen. And I was curious, I understand sediment is also an issue in the Bay area. Does Pennsylvania's trading program deal at all with sediment?

Mr. HUGHES. It does deal with sediment. There really right now is not a market for sediment, though there are many, you know, pounds of nitrogen and phosphorus that are tied to that soil particle within sediment. We really have from a waste treatment plan, NPDES needs of nitrogen being the gold standard. Phosphorus, I would say being the silver standard as far as meeting their compliance.

So although it is recognized within our nutrient credit trading program, I would say the No. 1 nutrient of need is nitrogen, followed by phosphorus. And we are still looking for a sediment market to take place.

Senator CRAPO. All right. Thank you.

And Susan, I appreciate seeing you again and having you here. I would like to ask you to elaborate, if you would a little bit, on a couple of points that you made. You indicated that the legislation as currently drafted would really allow the regulation of any pollution source without geographic limitation or even topical limitation, and also that it would allow the EPA to require permits for virtually, if I understood you correctly, virtually any kind of activity, like the siting of highways or construction and development activities or the like.

Did I understand you correctly there? And could you just elaborate a little bit on that?

Ms. BODINE. Yes, thank you, Senator Crapo. That is exactly what I said, and I guess I would point out that, you know, the State authority, it is on page 39 of the introduced bill, it literally says States can issue permits under 402 for any pollution source the State determines is necessary to achieve the goals in their implementation plan.

There is no limit on that, and any source, again, can be upland of the Bay. It can be, as I said before, air deposition. It could even be in another State. I don't know how they would actually enforce it, but that is technically how the bill is drafted in terms of expanded State authorities.

And then similarly, if you look at page 49 of the bill, it says, "EPA shall promulgate such regulations or issue such permits as EPA determines is necessary to meet the pollution goals."

That is without limit. There are no caveats on that authority. It is unfettered authority to literally do anything to meet pollution goals and recognize that that goes, then, very far upstream and you are talking now about land use. You are talking about highways. You are talking about buildings. You could be talking about whether or not you would be requiring green roofs or requiring gutter extensions. I mean, it can get into a level of detail, again, the authority is there that has never been seen before in terms of Federal authority over people living in the watershed.

Senator CRAPO. All right. Thank you very much.

I notice I have gone over my time.

Senator CARDIN. With Senator Crapo's permission, we will do a second round. I have just a couple of questions I would like to ask, and will not be too long.

Ms. Swanson, if we could follow up on the point that Ms. Bodine is talking about. Some of this language is standard language that we include to make sure that is regulatory authority to implement the terms of the Act, but they are limited by the terms of the Act. What we are doing here, though, is giving the States the necessary authority to be able to respond to the challenges that are there, fully mindful that States need to operate within their framework, consistent with the requirements of their own laws, but also this national program.

Could you just review for us how the authority as you see it in this bill would operate, and how the collaborative effort among the States works in this regard?

Ms. SWANSON. Yes. And I am very glad to answer this question because it is something that the 5 minutes didn't allow me to do, but it is certainly in my testimony is really emphasize how important that State flexibility is. And in fact, the Chesapeake Bay Commission's support of this legislation is largely due to that flexibility.

Essentially, what the legislation does is at the Federal level it does indeed codify that load allocation. I fully agree with the witness that that load allocation should be able to be not just the total cap allocation, which would include both the waste load allocation and the load allocation.

But the point is that pollutant cap, that allocation load, should be set by the Bay Program. And so right now, the legislation does indeed reference the current load allocation, but that could change as the models change, and it should because those models are

based on monitoring. They are based on State reporting. They are based on State information.

So the Federal legislation would basically set that cap, which would allow for trading, as Peter Hughes has described. The second thing it would then do is also guide the development of State watershed implementation plans. Those watershed implementation plans are designed to then numerically reach the cumulative sum of those caps.

Importantly, what the States would basically have to do is pick and choose. If septic systems, if waste treatment facilities make sense in a certain State in terms of how they are going to meet those allocation goals, they can choose for those practices. In other areas, agriculture by far and away dictates their loads. A place like Pennsylvania is surely going to reach largely for agriculture, as opposed to, say, septic systems where there are 759,000 septic systems in the watershed. So they are going to reach to the place that makes the most sense to cost effectively reduce.

The other thing that the bill does is it does require a process. It does require that every 2 years, you would have to essentially report in on what your plan is, and also if you began to slip, what you intent is to fill that gap. That is something that the Bay jurisdictions, regardless of the collaborative effort, they have never had that level of accountability.

And you know, accountability changes the way government behaves. Certainly, as a government employee, it changes my behavior. You know, if I have to report on something, I make pretty damn sure that I have done it. So it does that.

The other thing the bill does is it sets a halfway point, where it says by halfway through this activity through 2025, you should have basically in place 60 percent of those programs designed to reach those reductions. Those can be regulatory or those can be otherwise binding, contracts with farmers, aggregators such as Red Barn could be really effective in the process.

So to me, that is what the bill does. If it exceeds its reach in terms of that flexibility, then I am not sure that that is what was intended, and I know the Commission would be happy to work with legislative staff to correct it.

Senator CARDIN. Thank you very much.

Mr. Hughes, I just really wanted to compliment you on your program, compliment you on your testimony. We are looking for revenue sources for farmers. I mean, the tough markets here, and the trading program we look at as being one of the real pluses for the agricultural community.

We also have a set aside of 20 percent for technical assistance to help farming because we know they also don't have the dollars available to implement the best practices, and we want to give them the ability to accomplish that. So we did take to heart your experiences in Pennsylvania in crafting this bill, and we look forward to your additional comments to make sure it is effective in helping the agricultural community.

Senator Crapo.

Senator CRAPO. Thank you, Mr. Chairman.

I don't really have any more questions, so if you want to do another round, or not.

Senator CARDIN. I think I am going to suggest that the record is open, and Ms. Swanson's last point is very much in order. We are looking for ways to make sure the bill does what it is intended to do. We certainly don't want to give a State the authority to issue permits of operations in another State, so that will clearly be, I can assure you that is not, first, I don't think legally we could do it. We couldn't enforce it, but it is certainly not the intent.

And as Ms. Swanson pointed out, the intent here is to give the partners the authority they need, consistent with their plans, which have to be approved. So there is accountability here. They just can't do things that are inconsistent with the plans that have already been approved by the Federal, but we are working with EPA.

Ms. SWANSON. Senator Cardin, that is a very important point, that EPA oversight of those plans, because the States must submit plans that are approved. They have to be sufficient to meet the water quality standards. They have to be defined in that WIPP. So it is that back and forth, that iterative process that is so important to the Chesapeake.

Senator CARDIN. And of course, every 2 years, we do have a chance to adjust that, and we certainly want to be judged by best science, so we will make sure that is the case.

I would like to just take a moment to thank the two legal interns from the University of Maryland School of Law, my alma mater, who helped in this, Sylvia Chai and Matt Peters, for their help in preparing for this hearing, and with their drafting of the Chesapeake Clean Water and Ecosystem Restoration Act.

I think everyone knows here that the University of Maryland is the top environmental law program in the Nation. I am not sure I am going to get in trouble with my colleague on that, but we are very proud of the students who helped us in this effort.

And with that, the record will remain open for additional questions that may be asked. And again, I thank the witnesses and I thank Senator Crapo for the arrangements that this hearing could take place on a Monday.

Thank you very much.

Senator CRAPO. Thank you.

Senator CARDIN. The hearing is adjourned.

[Whereupon, at 4:25 p.m. the subcommittee was adjourned.]

[An additional statement submitted for the record follows:]

STATEMENT OF HON. DAVID VITTER,
U.S. SENATOR FROM THE STATE OF LOUISIANA

Madam Chair, I would like to thank you for the opportunity to discuss legislation before this committee on America's great water bodies, in particular the Gulf of Mexico. I am a cosponsor of this legislation and am hopeful for its successful implementation.

The bill would amend the Clean Water Act to statutorily establish the Program Office of the Gulf of Mexico Program as an office within the EPA. Given that the office and director already exist at EPA, this legislation would codify into law the program.

S. 1311 requires the office to coordinate EPA and Federal action with State and local authorities, assist in developing specific action plans to carry out the program, foster stewardship and community outreach, disseminate information about the Gulf and focus on activities that will result in measureable improvements in water quality. It also allows EPA to enter into interagency agreements and give grants for monitoring the water quality and ecosystem, researching the effects of environ-

mental changes on such water quality, developing cooperative strategies that address the water quality and needs of Gulf resources. This legislation would authorize $10 million for fiscal year 2010, $15 million for fiscal year 2011, and $25 million for fiscal years 2012–2014.

Unlike the other great water body programs such as Great Lakes and Chesapeake Bay, the Gulf of Mexico Program has never been established in legislation under the Federal Water Pollution Control Act. The Gulf States Governors' Alliance considers the EPA Gulf of Mexico Program's unique technical and collaborative management capacities as essential to their future success in addressing the priority environmental issues that threaten the ecological and economic sustainability of the coastal region.

I am hopeful that this grant program will provide the opportunity for further interagency collaboration for the benefit of the Gulf of Mexico and Louisiana's water resources. I am also cognizant that the EPA should not be under the impression that this legislation expands EPA authority over Gulf of Mexico resources in any manner that would increase permitting or regulatory authority. This legislation is meant as a partnership and investment in Gulf of Mexico resources. I look forward to its proper implementation.