

**Statement of Bruce I. Knight
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United States Department of Agriculture
Before the U.S. Commission on Ocean Policy
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Thank you for the opportunity to appear today on behalf of the United States Department of Agriculture (USDA). I am Bruce Knight, Chief of the USDA Natural Resources Conservation Service (NRCS).

I want to take this opportunity to commend the work of the Commission and thank you for conducting this meeting here today. It has been just two years since the enactment of the Oceans Act. We, at USDA, are pleased to cooperate and contribute to your efforts. This summer, we reviewed and provided input on the Biennial Report to Congress on Ocean Activities. This involvement reflects the priority that we are placing on the work of the Commission, and ultimately, on the health of ocean resources.

We, at USDA feel that we share many common goals and objectives with the Commission. One year ago, Secretary Veneman published, *Food and Agriculture Policy: Taking Stock for the New Century*. A central portion of this document dealt with the future of conservation policy and pointed out the inextricable link between water and agriculture policy. In one year, we have seen enactment of a truly significant piece of private lands conservation legislation, in the form of the 2002 Farm Bill. At the same time, continued and emerging water-related challenges are ever present, in the form of water availability and water quality. We also are keenly aware that what flows from the land into our streams and rivers will eventually influence estuaries, the Great Lakes, the coastal oceans, and the sea.

A Broad View of Ocean and Coastal Resources

One might expect that the Farm Bill would be the main subject of discussion here today. After all, it provides us with unprecedented opportunities, and successful implementation of the Act is the core focus of NRCS and other agencies here in the Department. However, I want to first speak of an overall vision of natural resources and our approach to conservation. So often here in Washington, D.C and around the country, I hear people speaking of programs and how funding is going to make a difference. While this is true to a certain extent, I fear that all too often we allow our programs to drive resource solutions, rather than allow sound conservation planning to orchestrate utilization of appropriate program tools.

A very popular mantra in the conservation community is, "Think globally - act locally." This slogan appears on bumper stickers and buttons from Long Island

New York to Grand Island, Nebraska. As a matter of fact, over the better part of six decades, NRCS, along with its conservation partners have embodied “act locally”. We have responded and continue to respond to the natural resource conservation needs and goals of the local communities and, most importantly the objectives and needs of individual farmers, ranchers, and other private landowners. In this effort, we have had great success.

Collectively, however, our attempts to think globally have been limited in scope by political borders, watershed boundaries, and a general lack of understanding by others of our technical capabilities.

Less than a decade ago, the notion of “ecosystems-based planning” and the “watershed approach” became popularized and established a scope and mindset for conservation planning. But I would suggest that we are still missing the mark as the watershed boundary for conservation planning often stops at the mouth of the river, or at the border crossing. If anadromous fish migrate into “our” watershed, they are factored into conservation planning and related activities. But is this approach really getting to the core conservation issues that we face?

Today, NRCS is looking at the bigger picture - to explore whether we are currently thinking globally or just inside the box. In the coming months I am going to ask our experts responsible for science and technical tools to provide me with recommendations on how we build upon existing partnerships. One specific action that I will be initiating is to jointly develop, with the Administrators of both the National Marine Fisheries Service and the National Oceanic and Atmospheric Administration, a Memorandum of Understanding that will reflect new directions in baseline information gathering on coastal and estuary resources.

To support this effort, I am going to look at using our National Resources Inventory (NRI) to quantify and analyze how changes to the land, such as development of farmland, loss of topsoil to erosion and even conversion of wetlands impact oceans. We know that where water meets the land, there exists a fundamental gap in our understanding of how our investment on working lands is translating into the health of aquatic resources. We know it’s happening, but anecdotal evidence isn’t enough. As a first step, we need to begin to see and coordinate data in order to fully understand how our actions in the headwaters of the watersheds are affecting marine life and aquatic habitat. In turn, we need to better understand, among other things, nutrient fate and transport mechanisms, beach erosion, and shoreline protection. The Commission’s support for investing new resources in conservation technology would ultimately benefit all of the Nation’s aquatic resources. Your report to the Congress and the President should specifically refer to the need for investment in conservation technology to help develop and evaluate conservation practices to ensure that the best science available is being

utilized to address natural resource concerns. We will be furthering these objectives through our participation on both the Hypoxia Task Force and the Coral Reef Task Force.

USDA also believes that greater international cooperation in conservation of natural resources can accomplish a great deal for protecting and improving oceans and the marine environment across the globe. NRCS, Agricultural Research Service, Forest Service, Foreign Agriculture Service and the Cooperative State Research, Education and Extension Service have assisted many other countries through research and technical exchanges on a broad range of resource management activities -- from soil surveys to technical standards for practice application to technology infrastructure and the programs we carry out.

Examples of Resource Protection

USDA Farm Bill programs provide a significant amount of resources to help attain improved voluntary conservation on the landscape through multi-purpose resource planning and application of conservation systems. Note that even the \$5.6 billion Congress provided through Fiscal Year 2007 in the 2002 Farm Bill for the Environmental Quality Incentive Program (EQIP) is only a modest percentage of the total need for natural resource conservation across the U.S., including commonwealths in the Pacific Basin and the Caribbean Area. It is not realistic to expect that a huge amount of funding can be channeled into any one resource concern, such as marine resources. However, EQIP and other farm bill programs can *help* address the problem through encouraging adoption of suitable conservation systems. Over time, that will help improve the condition of marine resources as well as address the other resource issues of concern that have been identified at the local level.

I would like to share several examples on how USDA is already working to help protect and improve the marine environment. The NRCS activities are being conducted through a broad range of conservation program activities at the state and local level that allow our system to be adaptable to multiple needs.

Florida:

Allapattah Ranch is a large scale \$30 million Wetland Reserve Program Project that will restore the natural hydroperiods affecting the St. Lucie Estuary.

NRCS is currently working on a P.L. 83-566 Project in the Lower Kissimmee River and the Taylor Creek-Nubbin Slough Watershed which will implement land treatment practices in an effort to achieve a TMDL target for Lake Okeechobee for phosphorus concentrations. Lake Okeechobee is the "liquid heart" which supplies water to the Florida Everglades National Park and eventually into the

marine ecosystem of Biscayne Bay. Biscayne Bay supports the largest coral reef system in the United States.

Michigan:

The Keweenaw Bay Indian Community (KBIC) located on Lake Superior's Keweenaw Bay in Michigan's Upper Peninsula has just completed a USDA Tribal EQIP contract which funded a large arched culvert. The culvert now allows fish passage into Zeba Creeks 3.2 sq. mile upper watershed area. The eight foot tall aluminum culvert's installation was a product of collaboration by many partners and will allow the Tribe's stocked fish as well as the indigenous fish species access to Lake Superior, greatly enhancing the support fishery in Keweenaw Bay.

Louisiana:

In Louisiana, NRCS is working in the selection of coastal wetlands protection. This work includes the collection and improvement of plant species that protect coastal wetlands from erosion of the vegetated coastal wetlands. The program helps to find and develop plants that work in various salinity conditions and tidal or wave energies to hold sediment in place.

NRCS has also been working on four river basin studies that focus on coastal vegetative wetland creation, protection, and enhancement. The linkage of vegetative wetlands to marine resources is due to the detritus from decaying marsh plants to provide for growth of estuarine species in the early part of their life cycle. We have also worked on several watershed plans for protection of coastal marshes and on program neutral plans for protection of coastal marshes.

The Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) has also provided over \$40 million annually since 1992 to a trust fund to plan and install projects to restore, protect, and enhance coastal wetlands and provide for the protection and enhancement of dependent fish and wildlife resources. To date over 200 projects have been selected at a cost of over \$500 million. The legislation provided that the Secretary of Agriculture be on the Task Force for carrying out this program, along with five other federal agencies and the State of Louisiana. NRCS presently has about 50 projects with value in excess \$200 million that are in various stages of engineering and design, construction, and operation, maintenance and monitoring.

I would like to briefly discuss two USDA - Forest Service (USFS) projects that also serve to enhance water quality and marine resources.

Oregon and Washington:

The USFS is a major partner in the Pacific Coast Watershed Partnership. The partnership, located in the coastal watersheds and estuaries of western Oregon and Washington is designed to restore and link key estuaries, wetlands and upland habitats in order to recover and protect aquatic and terrestrial habitats for wild salmon and migratory birds. Over 23 federal, state, and private partners are working together to demonstrate visible and measurable results. To date, over 6,720 acres of key wetlands, estuaries, riparian areas and upland habitats have been restored.

Georgia, North Carolina and South Carolina:

The Chattooga River Watershed Project is located within a 180,000 acre watershed with 3,000 miles of streams. Water quality improvement is the focus of the project. To date there have been 50 completed soil and water projects within the watershed. Partners in the US Forest Service-led project include States, counties, universities, EPA, NRCS and water conservation districts.

Chesapeake Bay:

USDA has been active in conservation efforts in the Chesapeake Bay watershed for many years. The USDA has a Conservation Reserve Enhancement Program in both Maryland and Virginia, aimed to improve water quality in the Bay. Through leveraging state funding, both programs are providing enhanced incentives for farmers to install conservation buffers. We are pleased with the results and note that the goal of establishing 2,010 miles of conservation buffers by the year 2010 will be completed this year - eight years ahead of the target! In addition to CREP, USDA has provided assistance in areas of nutrient management and assisting farmers with timing and application practices of nutrients in the Chesapeake Bay Watershed.

Related Resource Issues

While we are thinking globally, I would like to discuss the topic of climate change. Without question, ocean and coastal conservation issues are closely linked to climate change. Better assessing the scope and timing of climate change and climate variability at regional scales will help us get a better understanding of potential impacts on oceans but also the ramifications for agriculture and other land resource management systems, as well.

This area is a clear priority for this Administration. The President's plan sets a goal of 18% improvement in Greenhouse Gas efficiency. This will result in a reduction of more than 100 million tons of carbon equivalents. The plan will provide credits for real reductions with actions recorded by the Department of Energy. From the standpoint of USDA, we have a substantial contribution to

make in this new system. We will develop guidelines for quantifying carbon storage capacity of forest and soils and reduction of volatile greenhouse gasses such as methane. Specifically, NRCS has the lead for the US Government in developing new guidelines for reporting agriculture greenhouse gas offsets.

The Administration's plan stresses agreements among business sectors that recognize and encourage the benefits of greenhouse gas sequestration. The President has directed USDA to identify new targeted incentives for sequestration. As a result, we will be looking for opportunities as we implement new and expanded conservation programs to further greenhouse gas sequestration.

In addition, the Administration is seeking to invest in new technologies and improve our scientific understanding of climate change, including improving our observation system by developing additional decision support tools. Significant gaps exist in our understanding of ocean-atmosphere-land interactions. Climate variability and the El Nino phenomenon play a major role in the production and management of agricultural crops, forests, and fisheries. A coordinated research effort is needed to improve our knowledge of these complex relationships in order to help mitigate their impact and to promote adaptation strategies at the regional level. And we will continue to develop tools to cope with uncertainties of climate change, including mechanisms to manage water and pests, and adapt to changes in growing seasons.

Emerging Opportunities

Shifting gears, I would like to highlight some of the program tools that are going to help private landowners achieve their conservation objects. The 2002 Farm Bill presents all of us with tremendous opportunities to improve health of ocean and coastal natural resources. These opportunities take the form of a broad range of technical tools, including financial, technical, and educational assistance, along with conservation easements and incentive payments to farmers and ranchers. I want to outline just a few of the new or expanded programs.

The 2002 Farm Bill provides \$5.6 billion in Environmental Quality Incentives Program cost-share and technical assistance through FY 2007 that will be available to farmers and private landowners to improve soil, water, and air quality. For the first time in three decades, farmers and ranchers will have a level of voluntary-incentive based conservation opportunities that is commensurate with the regulatory challenges that they face. As a result of this assistance, work on erosion reduction and sediment control, as well as nutrient management and wildlife habitat development will have tremendous positive benefits for ocean and coastal natural resources.

As a subset of EQIP, Congress also established a new Ground and Surface Water Conservation Program and authorized funding of \$310 million through Fiscal

Year 2007. Work under this program will include irrigation improvements, conversion to less water-intensive crops, and dryland farming, ultimately resulting in improved water quantity and quality. At the direction of Congress, this program was initially offered in the eight states which comprise the High Plains Groundwater Aquifer.

In other areas of the Farm Bill, the Wildlife Habitat Incentives Program is providing \$360 million in funding. Resources are also directed to help private landowners provide habitat for essential wildlife, such as threatened and endangered species.

Also, the Wetlands Reserve Program was expanded in the Farm Bill to restore, enhance, and protect more than 1 million acres of additional wetlands. This program enrollment will represent an area roughly the size of the entire state of Delaware. In addition, the popular Conservation Reserve Program was expanded in the bill with a continuation of conservation buffer enrollment and the farmable wetlands provisions. Of specific direct interest to coastal areas, the Farm Bill established a new Conservation Corridor Demonstration Program for the Eastern Shore of the Chesapeake Bay, provided \$50 million in assistance for the resource concerns in the Klamath Basin and also established a new Great Lakes Conservation Initiative.

Conclusion

As the U.S. Commission on Ocean Policy continues its work to develop and implement a coherent, comprehensive, and long-range national policy on ocean and coastal resources, you have a ready, willing and able partner in USDA. The Department of Agriculture supports the efforts to protect our oceans and coastal resources. On a wide range conservation issues we have begun or seek to enhance our knowledge, technical tools, and assistance to improve overall ecosystem health. Without question, the actions that we promote on the land, are having a profound impact on ocean and coastal resources. As we proceed, we want to ensure that we can capture and quantify our gains and better understand the emerging challenges as well.

Thank you again for the opportunity to appear here today. I understand that the major portion of this spot on the agenda is to allow for questions from Members of the Commission. I welcome your comments and would be happy to respond to any questions that you might have.