



Natural Resources Conservation Service
P.O. Box 2890
Washington, D.C. 20013

FEB 19 2003

The Honorable James Watkins
Chairman
U.S. Commission on Ocean Policy
Suite 200 North
1120 20th Street, N.W.
Washington, D.C. 20036

Dear Mr. Chairman:

Thank you for your letter of December 9, 2002, requesting the opportunity to provide responses to questions from the U.S. Commission on Ocean Policy. We are pleased to provide the additional information you requested regarding the Department of Agriculture and specifically, the Natural Resources Conservation Service.

We appreciate the opportunity to provide the information and will be available to work with the commission as appropriate. If we can be of further assistance, please do not hesitate to contact us.

Sincerely,

A handwritten signature in dark ink, appearing to read "Bruce I. Knight", written over a large, light-colored oval scribble.

BRUCE I. KNIGHT

Enclosure

The Farm Bill contains many incentives to encourage setting aside land for environmental benefits and restoring wetlands. Most of these agreements appear to be made with individual farmers. We have heard in past hearings of the benefits of approaching management on a "watershed" basis.

Question 1: What process, if any, is in place to ensure that programs designed for individual farmers fit into a larger plan for picking those watersheds that need the most attention?

Answer: Priorities for the Farm Bill and other Natural Resources Conservation Service (NRCS) programs are established for each State by the NRCS State Conservationist with advice from the State Technical Committees that include representatives from Federal and State agencies, conservation districts, and other conservation partners. Applications by individual farmers for each program are reviewed by local committees and prioritized using information on State and local resource concerns for water quality, erosion, endangered species, and fish and wildlife habitat. Other considerations identified in watershed plans may serve as the basis for addressing concerns.

Question 2: What process is there to join these individual programs into larger watershed management planning on the local, State, or even regional levels, depending on the size of the watershed?

Answer: The Watersheds Surveys and Planning Program provides this type of process for broader watershed management planning. This program, as well as the P.L.566 Small Watersheds Program, assists Federal, State, local agencies, local government sponsors, tribal governments, and program participants to develop plans to protect and restore watersheds from damage caused by erosion, floodwater, and sediment. The program also helps to conserve and develop water and land resources, and solve natural resource and related economic problems on a watershed basis. The program provides technical and financial assistance to local people or decision makers, builds partnerships, and requires local and State funding contribution.

Resource concerns addressed by the program include watershed protection, flood prevention, erosion and sediment control, water supply, water quality, opportunities for water conservation, wetland and water storage capacity, agricultural drought problems, rural development, municipal and industrial water needs, upstream flood damages, water needs for fish, wildlife, and forest-based industries, fish and wildlife habitat enhancement, wetland creation and restoration, and public recreation in watersheds of 250,000 or fewer acres.

The program also offers a wide range of practices including reduced fertilizer application, seasonal adjustments in application (spring rather than fall), and many other actions to reduce the impact of nitrogen, sediments, and other watershed containments.

Question 3: What programs and incentives does the Department of Agriculture (USDA) have in place to encourage these practices?

Answer: A number of programs are available that encourage the implementation of conservation practices that reduces the impacts of nutrients and sediments on watersheds. The Environmental

Quality Incentives Program, Agricultural Management Assistance, Wetlands Reserve Program, Wildlife Habitat Incentives Program, and the Conservation Reserve Program offer financial assistance to land users to encourage them to use these practices. In recent history, much of the agency's technical assistance to land users has been directed towards water quality improvement efforts.

Question 4: What is USDA's investment in outreach and education to bring this message to the farmers?

Answer: USDA has two key outreach and extension programs funded through the Cooperative State Research, Education, and Extension Service (CSREES) that promote improved nutrient and sediment management for farmers, ranchers, and private woodlot operators. The first program is the National Integrated Water Quality Program (NIWQP) that provides integrated research and outreach/education programs aimed at improving the quality of the Nation's water resources. The second program is the Sustainable Agriculture Research and Extension (SARE) Program that promotes agricultural management of nutrients and sediment that leads to sustainable production practices. Approximately \$4 million in funding from the NIWQP and approximately \$1 million from the SARE program are used for nutrient and sediment management.

Question 5: What new programs or incentives would you recommend to strengthen this effort?

Answer: The 2002 Farm Bill and the Farm Security and Rural Investment Act of 2002 provide a wide array of excellent programs to strengthen this effort; therefore, we should be focused on securing the financial and technical assistance funds authorized in the legislation.

Another key to strengthening this effort is to provide funding for the fundamental science needed to make informed decisions regarding management of sediment and nutrients on croplands, grazing lands, and forest lands. Successful outreach and education programs are built upon sound science. A second key to strengthening this effort is to use funding available for NIWQP and SARE to forge multi-agency partnerships that will link watershed-based water quality issues with coastal water quality issues. The basic research activities for natural resources management and environmental issues taking place in the Agricultural Research Service (ARS), CSREES, the Economic Research Service (ERS), and the Forest Service (FS) need to be strengthened to allow for partnerships with other Federal agencies such as the National Oceanic and Atmospheric Administration (NOAA), the National Aeronautics and Space Administration (NASA), the National Science Foundation (NSF), and the Environmental Protection Agency (EPA). USDA supports partnerships announced in Johannesburg, South Africa at the recent World Summit for Sustainable Development (2002), calling for multi-agency programs to address the "White Water to Blue Water" initiative. With increased funding, USDA research activities focused on integrated watershed water quality issues (White Water) that could be linked to other Federal programs (NOAA, EPA, NSF) aimed at improving coastal water quality (Blue Water).

Question 6: Please explain the mechanism of incentive payments.

Answer: Incentive payments are a form of financial assistance provided to landowners to encourage the adoption of specific conservation practices including new and innovative practices. They are usually made for multiple years and carried out through an agreement.

The Farm Bill also sets aside a very large amount of money to encourage sound environmental practices.

Question 7: What is the scope of USDA research and science programs?

Answer: ARS and CSREES are the primary agencies responsible for conducting and/or funding research within USDA. ARS research is organized into 22 national programs. The programs fall under three categories: 1) Animal Production, Product Value and Safety; 2) Natural Resources and Sustainable Agricultural Systems; and 3) Crop Production, Product Value and Safety.

Within these categories, the research programs, which may be of particular interest to the Ocean Commission, include Aquaculture, Water Quality and Management, Air Quality, and Global Change. A full description of these programs and program leaders can be found at <http://www.nps.ars.usda.gov/>.

USDA has a broad portfolio of science and research that addresses issues related to natural resources and environment. Intramural research on watershed based water quality conducted by ARS and FS, complement extramural research programs funded primarily at land grant colleges and universities by CSREES. Similarly, intramural research efforts by ERS characterize costs and benefits of Federal environmental programs and policies and the economic impacts of these programs and policies on farmers, ranchers, and private woodlot managers. Research and science programs of USDA do not directly impact coastal water quality. Rather, impacts to these coastal waters occur indirectly through improvements in watershed based water quality.

Question 8: How much money is invested in advance science-based planning to ensure that this investment provides the greatest environmental benefit in any particular watershed?

Specifically, please provide the budgetary allocation of USDA activities dedicated to ocean and coastal services and science.

Answer: USDA does not have programs dedicated to ocean and coastal services and science. However, each of the watershed-based water quality research programs (ARS, CSREES, ERS, and FS) has considerable indirect impacts on coastal resources. USDA estimates approximately \$35 million in research for watershed based water quality programs in ARS, CSREES, ERS, and FS.

The attached spreadsheet (provided by OBPA) is not for publication or public consumption, but rather for internal Ocean Commission use only.

Please reference the attached spreadsheet regarding budgetary allocations of USDA activities dedicated to ocean and coastal services and science. The 1998 data is accurate and updated in

1999. However, 2000 through 2004 data presented in the spreadsheet was estimated and would need to be updated should the commission wish to include this information in a report.

Question 9: What is the level of monitoring and evaluation to determine the success of the various environmental programs to identify “best practices” and greater benefits among the various programs?

Answer: NRCS does review program implementation to ensure that the different programs are accomplishing congressional and national program objectives. NRCS has not routinely used funds from the individual programs to monitor and evaluate affects of the individual practices or the benefits among the various programs. Monitoring and evaluation are an integral part of program management.

Question 10: Is USDA open to supporting additional investments in science?

Answer: USDA strongly supports additional investments in science that will foster improved partnerships between Federal agencies that address watershed based and coastal water quality. USDA recognizes the need for fundamental research and applied research that address physical, biological, and social concerns arising from watershed or coastal water quality issues. USDA also recognizes a need to have research results used in the public decision-making process. Informed decision-making best results from appropriate technology transfer (NRCS), outreach, and education (CSREES).

Question 11: Does USDA believe that the concept of regulations based on total maximum daily loads (TMDL) is effective? If so, why?

Answer: For impaired waters where sound science-based water quality standards are in place, the identification of a TMDL, as specified in the Clean Water Act §303 (d), can be beneficial to the overall process of meeting these standards because the TMDL establishes the measurable goal. The Clean Water Act does not contain provisions that allow permitting of non-point sources. USDA has a long history of working closely with communities and landowners through voluntary, incentive-based approaches to help them achieve these measurable goals, including TMDLs.

Question 12: How does USDA view its ability to properly measure TMDL (i.e. does the Department measure frequency and geographically diverse enough, and does it measure the right single and multiple constituents)?

Answer: USDA does not have the legal authority or responsibility to implement, enforce, or measure TMDLs. That authority was given to EPA and the States in accordance with the Clean Water Act §303 (d).

Question 13: Please provide an analysis of how USDA is coordinating with EPA on dealing with non-point source pollution, including analysis of the TMDL strategy for water quality.

Answer: USDA works with EPA on a close and continuing basis on nonpoint source pollution (NPS) that may result from agricultural and silvicultural operations. USDA conducts research on NPS, including identification of new methods and technologies to reduce NPS pollution, and shares the findings with EPA. USDA provides information, education, and technology transfer to farmers, ranchers, and woodlot owners on NPS and often collaborates with EPA in these efforts. USDA and EPA collaborate at the national and regional level on NPS activities and development of guidance to States, territories, and tribes. For instance, USDA recently assisted EPA in the development of an EPA guidance document on management measures for controlling NPS on agricultural land.

Question 14: Please identify the best mechanisms for interagency coordination, or better ways to coordinate than offered by memorandums of understanding and task forces.

Answer: USDA believes that the best way to facilitate interagency coordination is to have frequent, on-going communication between agency leaders, between middle- and lower-management levels, and between scientists. In this way, the lines of communication are always open and a mutual trust and working relationship is developed among all parties. A good example of this approach is the USDA-EPA bi-monthly coordination meetings that are held by USDA's Under Secretary for Natural Resources and Environment, EPA's Assistant Administrator for Water, EPA's Assistant Administrator for Air and Radiation, EPA's Assistant Administrator for Prevention, Pesticides and Toxic Substances, and EPA's Counselor to the Administrator on Agricultural Policy. Topics discussed at these meetings run the gamut of point and non-point source water pollution, water quality trading, pesticide assessments and regulation, agricultural air quality improvement, and many other topics. This concept has been used effectively by USDA and EPA in regular meetings with the Association of State and Interstate Water Pollution Control Agencies (ASIWPCA) and there are initial plans to do something similar with the National Association of State Departments of Agriculture (NASDA).

Question 15: Within USDA, is there any investment to address environmental effects of aquaculture in coastal zones?

Answer: The potential environmental impacts of aquaculture to aquatic ecosystems is important to USDA. Several agencies in USDA, notably CSREES and ARS, have aquaculture-oriented programs and utilize various funding authorities that support research related to aquaculture and the environment. The USDA-CSREES Regional Aquaculture Center program has directed more than \$2 million to research related to environmental issues and continues to address this subject based upon regional priorities and funding limitations. Recent work in the Pacific Northwest has involved coastal ecological issues related to molluscan shellfish farming and salmon habitat. Potential environmental effects will become more important as new sites in coastal zones are sought for commercial aquaculture development. USDA is interested in the development of production systems and management practices that minimize potential environmental threats or concerns to coastal zone areas where multiple uses of this valuable natural resource require compatible integration of commercial uses into coastal landscapes. The Federal interagency coordinating body, the Joint Subcommittee on Aquaculture, chaired by USDA and in equal partnership with the Department of Commerce (DOC), the Department of the Interior, and other Federal agencies, supports several broad stakeholder task forces employing participatory

approaches to address environmental issues associated with coastal zones including the Shrimp Virus Task Force chaired by NOAA-NMFS and the Aquaculture Effluents Task Force co-led by USDA-CSREES and NOAA-NMFS. The future growth of aquaculture in the U.S. requires the recognition of environmental issues and concerns and support for research to develop science-based policies to strategically guide aquaculture along pathways leading to long-term sustainable growth and global competitiveness.

Question 16: Where is USDA going with regards to aquaculture (i.e., is USDA authority limited to land or pond aquaculture while NOAA should be strictly for marine aquaculture), and should the Nation think differently about how to handle aquaculture jurisdiction than the current three-agency split?

Answer: USDA has broad responsibilities for private sector aquaculture in both the freshwater and the marine environment. USDA also recognizes that several Federal agencies and departments have statutory authorities and responsibilities related to aquaculture development in the Exclusive Economic Zone (EEZ) and that national goals can best be achieved by these agencies working together in a cooperative and collaborative mode.

USDA recognizes that other Federal agencies have strong programs and interests that support both private and public aquaculture. If U.S. aquaculture is to achieve its full potential to create jobs, to provide alternative economic opportunities for rural Americans, and to become an internationally competitive, sustainable industry, we must maximize efficient use of all Federal programs and resources that can support aquaculture. USDA strongly supports cooperation and collaboration with other agencies in the development and implementation of programs and policies that can support the development of U.S. aquaculture. USDA is committed to fostering teamwork among Federal agencies, through the Federal Joint Subcommittee on Aquaculture (JSA), to stimulate development of the U.S. aquaculture industry.

USDA recognizes NOAA's initiative in support of aquaculture development in the EEZ. USDA has agreed to cooperate and collaborate with DOC in the development and implementation of programs in support of private sector aquaculture in the marine environment. USDA recognizes the leadership role of DOC for public sector aquaculture in the marine environment in support of stock enhancement. Both Congress and the Administration recognize that DOC and USDA provide leadership for programs in support of private sector aquaculture in the marine environment (shared leadership). There is also a history of interdepartmental cooperation and collaboration in the support of private sector aquaculture in the marine environment between the two Departments. USDA also recognizes that there are programs within DOC that support all sectors of private sector aquaculture without regard to salinity.

USDA will cooperate and collaborate as partners in the development and implementation of programs in support of private sector aquaculture in the marine environment, and that the JSA will serve as the primary vehicle for this interdepartmental cooperation and collaboration.

Question 17: Beyond the education and outreach to farmers mentioned above, are there additional educational activities within NRCS?

Answer: There are many educational activities that are carried out by NRCS and its partner and volunteers.

These are a few examples:

National Association of Conservation Districts (NACD)

The NRCS has a strong partnership with the National Association of Conservation Districts (NACD), and its membership, which is made up of 3,000 local conservation districts that manage soil and water conservation program on private lands in every community. Education is the first step towards conservation of our land and resources. Therefore, NACD and NRCS help districts design and implement educational programs in their communities.

Resource Conservation and Development (RC&D) Program/Councils

The purpose of the Resource Conservation and Development (RC&D) Program/Councils is to accelerate the conservation, development and utilization of natural resources, improve the general level of economic activity, and to enhance the environment and standard of living in designated RC&D areas. It improves the capability of State, tribal and local units of government and local nonprofit organizations in rural areas to plan, develop, and carry out programs for resource conservation and development. The program also establishes or improves coordination systems in rural areas. Current program objectives focus on improvement of quality of life achieved through natural resources conservation and community development, which leads to sustainable communities, prudent use (development), and the management and conservation of natural resources. RC&D areas are locally-sponsored areas designated by the Secretary of Agriculture for RC&D technical and financial assistance program funds.

Earth Team Volunteers:

Volunteers help on the land with professional conservationists who are working directly with farmers and ranchers; in schools with elementary and high schools, college and university students; and with organizations such as youth groups, professional societies, or civic groups that sponsor water quality education campaigns, community beautification, and erosion control projects. Earth Team efforts can help solve many natural resource problems.

Question 18: Can you offer any recommendation for facilitating the education of the American public in ocean-related issues?

Answer: Although many USDA agencies have an education and outreach component, CSREES has a major role on facilitating public education.

The U.S. Coral Reef Task Force (CRTF) has formed several subcommittees to address various issues associated with coral reefs. Education and outreach for coral reefs were identified as a major concern that needed to be addressed in order to generate more support for protecting or enhancing coral reefs. This same education and outreach subcommittee of the CRTF, with its extensive list of contacts, could be utilized in the ocean effort, as well.

The best mechanism to facilitate education of the American public on ocean and coastal-related issues is to fully utilize the capacity of the land grant universities (CSREES watershed-based

water quality) and sea grant universities (NOAA coastal water quality). A strong partnership between land grant and sea grant programs will foster greater awareness among the American public of the linkages between watershed water quality and coastal water quality. Increased funding to advance the land grant-sea grant partnership is critical to the success of these education programs. Land grant/sea grant outreach and education programs must be based on sound science; hence, there is a great need to support basic research activities through ARS, CSREES, ERS, and FS. Finally, sustaining land management changes needed to improve watershed and coastal water quality require Land grant/sea grant continued support for technology transfer (NRCS) and education programs for landowners to maintain and sustain these practices (CSREES).