



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS  
WASHINGTON, D.C. 20314-1000

MAR 4 2003

REPLY TO  
ATTENTION OF:

Operations Division  
Navigation and Operations Branch

Admiral James D. Watkins  
U.S. Navy (retired)  
Chairman  
U.S. Commission on Ocean Policy  
1120 20th Street, NW, Suite 200 North  
Washington, D.C. 20036

Dear Admiral Watkins:

*Sir*

This is in response to your letter dated December 9, 2002, requesting additional information about U.S. Army Corps of Engineers programs and issues. I appreciate this opportunity to address these questions.

I have enclosed the answers to your additional questions. Also enclosed is a copy of the September 2002 public review draft of the Corps Civil Works strategic plan. We have submitted a final strategic plan, dated January 2003, to the Office of Management and Budget for final review. We hope to release the final strategic plan in the very near future. I look forward to continued cooperation with the Commission.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert H. Griffin".

Robert H. Griffin  
Major General, U.S. Army  
Director of Civil Works

Enclosures

FOLLOW-UP QUESTIONS AND ANSWERS  
FOR  
U.S. COMMISSION ON OCEAN POLICY

1. USACE is one of the more important Federal agencies in permitting and managing activities in our coastal areas. Yet, in recent years, the Corps general methodology and economic and environmental analyses for major projects have been criticized by the National Academy of Sciences, the General Accounting Office, and the Pentagon's Inspector General's office. Will you please tell the Commission the extent to which the Corps agrees with, and is addressing, the concerns raised by these institutions? For example, last July, the National Research Council recommended that an independent panel of experts perform peer review of all complex and major projects of the Corps. What is the position on this recommendation?

The Corps has recognized that improvements are needed. The Corps has assessed its planning capability and begun making some improvements. We are enhancing regional planning, using our area experts to review important study features. Also, we are adding and re-emphasizing training. The President's Fiscal Year 2004 budget proposal includes funds to initiate an independent review process.

With respect to the NRC report on review, it was prepared for Congress. The Corps is very appreciative of the panel's work. The Chief of Engineers is optimistic that the recommendations will provide us with a road ahead on this issue. Generally, we believe that independent reviews can help us serve the nation's needs better, though we must always be mindful of taxpayers interests, carefully considering time and cost constraints

2. The Water Resources Development Act of 1999 called upon the Corps to initiate a national Shoreline Management Study. What is the status of the Study? Is there any information that you will be able to share with us over the next few months as we write our Report?

The Corps has initiated the National Shoreline Management Study. Phase one activities include assembling the Project Delivery Team and Developing a Project Management Plan (PMP). In addition, we are identifying other agency participants, reviewing prior studies and existing information, initiating various policy and technical studies, and developing the protocol for conducting an assessment of state of shoreline. The following are products available or expected soon:

Reports

*The Hurricane Fran Report* (IWR Report 00-R-1). The National Shoreline Management Study has printed out copies of a main report that was never printed. The report compares two urban beach areas protected by Corps projects and two urban beach areas that were not protected by Corps projects during Hurricane Fran in 1996. The report (IWR Report 96-PS-1) is on the web at <http://www.iwr.usace.army.mil/iwr/products/reports.htm> and copies of the Executive Report were printed.

(Expected February 2003) *"The Corps of Engineers Shore Protection Program: History, Projects, Costs"*. A description of the major storms over the past 100 years is chronologically tied together with subsequent authorizations and projects that followed those authorizations. This report also provides a current list of Corps major shoreline protection projects and updated costs.

(Expected March 2003) *"Addressing Economic Considerations in Shoreline Protection: Proceedings of an Economics Workshop"*. The economic implications of shoreline erosion and protection were considered in an economics workshop at George Washington University (GWU), Washington, D.C. on 23-24 July 2002. Six national experts on economics of shoreline erosion and protection addressed the one-and-half-day workshop held by IWR and co-sponsored by the GWU Center for Economics Research. The workshop discussions and breakout sessions identified and discussed key issues relating to the economics of shoreline erosion and shoreline protection measures as a first step towards development of methods and criteria for conducting the national study analysis of the economic implications of shoreline change.

(Expected April 2003) *"Economic, Social, and Development Patterns Along "Critically Eroding Shorelines" since 1971 National Shoreline Study"*. 1971 National Shoreline Study found that 3 percent of the U.S. shoreline was experiencing critical erosion. This effort will look at what has happened along those coasts in terms of population growth and various socio-economic indicators using US Census data.

#### Papers

Shoreline Change Conference, May 2002, *Summary* prepared by the Corps Coastal and Hydraulics Laboratory. The Conference was organized and sponsored by the Coastal Services Center, National Oceanic and Atmospheric Administration

*The Use of Shoreline Change Mapping in Coastal Engineering Project Assessment*. Presentation by Dr. Donald Stauble (CHL) at the Shoreline Change Conference, May 2002

(Expected May 2003). *"Influence of History, Demographics, and Geology on Corps Coastal Projects"*. This report summarizes types and locations of Corps coastal projects, reviews history of Corps participation, examines coastal geology and influences on projects, and reviews demographic and economic trends to project future coastal activities.

#### Other

(Expected February 2003). *National Shoreline Management Study webpage*. Description of study, products, and topical links to other studies, agencies, etc.

3. What is the Administration's position regarding continued Federal funding and operational involvement in beach restoration efforts?

The Administration supports Hurricane/Storm Damage Reduction (HSDR). This includes Federal participation in the initial construction as well as periodic nourishment (considered continuing construction). Operation and maintenance is a non-Federal responsibility. The Administration is considering proposing changes to the cost sharing for HSDR projects.

4. Please provide the following: 1) a hard copy of the new U.S. Army Corps of Engineers strategic plan; 2) information on the size of the USACE annual budget for dredge surveys and hydrographic/safety of navigation surveys and on who does these surveys (i.e. contractors, government employees, or government vessels); 3) a description of the systems or collection of efforts used by USACE to monitor water in a USACE-maintained waterway, including flow, water level, water quality, and sediment load constituents, and a description of how those data could be brought into a national system for measuring water quality (this includes a description of how data are archived and distributed).

1) A hard copy of the draft Civil Works strategic plan is enclosed. 2) Annual cost of hydrographic surveys: \$50 million, 1/3 contract, 2/3 in-house, and some of the contracts are on government vessels. 3) For flow and water levels, most of the data from more than 9000 gages needed by the USACE are used to monitor and regulate USACE controlled projects. We cooperate with many (more than 30) Federal, State and local agencies in sharing data. All USACE data are used by other agencies. Some 53.5 percent (5,000) of the gages are financed in whole or in part by the USACE. USACE personnel operate only 24 percent (2250) of the gages.

Water quality, to include sediment load constituents, is monitored at the district level in a project-based context for USACE-maintained waterways and projects. Long-term data collection is done for the waterways, whereas short-term monitoring is typically conducted for individual projects. While notable efforts to develop regional data bases for sediment (at the Mobile District) and for both water quality and sediment (at the Northwestern Division) are underway, the data are largely archived and managed at the District level.

USACE field offices use a software package called "Corps Water Management System" that has archiving capability. Data are processed, used, and archived at the local USACE office (about 40 sites). Continuity of Operations Plan is expected to be in place in 2004. This will bring all CWMS data to one central location to be used as backup to regulate projects from a remote location in the event of a national disaster. The data will be kept in an array of databases reflecting the office of origin.

Q: A description of how those data could be brought into a national system for measuring water quality (archived and distributed).

Currently, each non-USACE agency that provides data to the USACE database is responsible for archiving its own data. Both the USGS and NOAA maintain large archiving systems. Some USACE data are archived by these agencies. Because gaging needs and gaging efforts are spread over at least ten Federal water-related agencies, a national system would require the cooperation of all water related agencies and should include State and local agencies. *Currently, no such program exists for developing a national system for water quality assessment, with its associated substantive initial and ongoing annual funding and staffing requirements.*

## **Proposed Conceptual Approach for Developing An Inter-agency National Water Quality Database**

**Note:** Currently, no such program exists for developing a national system for water quality assessment. Assuming the associated substantive initial and ongoing annual funding and staffing requirements were provided, the following conceptual approach could be implemented.

Assuming an inter-agency national system for assessing water quality is the ultimate objective, the following conceptual tiered approach is suggested:

- To ensure cost-effective inter-agency system compatibility, development of a national inter-agency database architecture would logically precede individual agency efforts. This objective would initially require intensive inter-agency coordination and cooperation, leading to the development of a standardized data management approach. Once this approach was universally developed and adopted, a tiered approach within the Corps would be required to bring their numerous disconnected databases into compliance with the national inter-agency standard.
  
- The first tier would consist of consolidating the existing District level databases, by Division, and assembling them into a standardized regional management system consistent with the adopted inter-agency standard. This step would be instituted Agency-wide, across the regions.
  
- Once a standardized system was regionally established at each Division level, regional data would then be imported into the second tier: a fully-standardized Corps National Data Management Center for Water Quality Assessment.
  
- The next tier nationally, would involve the development of an inter-agency water quality database management center. Each participating agency would submit their standardized databases for import into the Inter-agency National Data Management Center for Water Quality Assessment. Each participating agency would have access to information contained within the Inter-agency Center and be responsible for maintaining and periodically importing their respective agency's data.