



DEPARTMENT OF THE ARMY

U.S. Army Corps of Engineers  
WASHINGTON, D.C. 20314-1000

REPLY TO  
ATTENTION OF:

05 NOV 2001

CECW-PM

MEMORANDUM FOR Commander, Mississippi Valley Division (CEMVD-MD-P)

SUBJECT: Implementation Guidance for Section 403 of the Water Resources Development Act of 2000 (WRDA 2000) – Upper Mississippi River Basin Sediment and Nutrient Study

1. Section 403 authorizes the Secretary, in conjunction with the Secretaries of the Interior and Agriculture, to study the sources, movement, and fate of sediment and nutrients in the upper Mississippi River basin. Section 403 authorizes the development of sub-watershed and basin computer models to quantify the sources of sediment and nutrients and to evaluate alternative management measures. Section 403 authorizes research on sediment and nutrient transport and losses, and related river hydrodynamics. Section 403 authorizes the release of study information for use in sediment and nutrient reduction programs. Section 403 requires a preliminary report outlining the work to be submitted to Congress by 11 December 2002, followed three years later by a final report describing the results, findings and any recommendations. Section 403 authorizes an appropriation of up to \$4 million annually through 2005 and specifies the Federal cost-share as 50 percent. A copy of section 403 is enclosed.

2. This section may be considered for implementation, if requested by an appropriate non-Federal sponsor, and if consistent with current program and budget priorities in effect at the time of consideration. Although execution of this study is authorized, no funds have been appropriated to do so. Consequently, no action should be initiated to implement this provision until Congress provides funds. In the event that funds are appropriated and allotted for this study, up to \$200,000 of Federal funds may be used to prepare a preliminary reconnaissance-level report that outlines the study components, prepare a project management plan, and negotiate a Feasibility Cost Sharing Agreement (FCSA) with a non-Federal partner. The reconnaissance report should assess the Federal interest, and the sponsor's capability and willingness to proceed with the detailed studies and final report. The preliminary and detailed efforts will be collaborative with the cited Federal agencies, and other interested resource agencies and groups. Proceeding with the next phase will be subject to HQUSACE approval of the preliminary report and execution of a FCSA. The activities included in the FCSA will be cost shared 50/50. In-kind services are not authorized.

3. If funded, the efforts for the final report should be integrated with the Upper Mississippi River and Illinois Waterway System Navigation Study to ensure that the

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efforts are consistent and complementary, and that they further contribute towards a holistic and comprehensive study of the basin. The final report will address the sediment and nutrient analyses, models, and recommendations cited in section 403. The final report will be submitted to HQUSACE for review and processing to the Assistant Secretary of the Army (Civil Works) and Congress as appropriate. Any potential Corps of Engineers projects identified for further study or implementation in the report may be pursued through the normal authorization and budgeting processes.

FOR THE COMMANDER:



JAMES F. JOHNSON  
Chief, Planning and Policy Division  
Directorate of Civil Works

Encl

## SEC. 403. UPPER MISSISSIPPI RIVER BASIN SEDIMENT AND NUTRIENT STUDY

(a) IN GENERAL- In conjunction with the Secretary of Agriculture and the Secretary of the Interior, the Secretary shall conduct a study to--

- (1) identify and evaluate significant sources of sediment and nutrients in the upper Mississippi River basin;
- (2) quantify the processes affecting mobilization, transport, and fate of those sediments and nutrients on land and in water; and
- (3) quantify the transport of those sediments and nutrients to the upper Mississippi River and the tributaries of the upper Mississippi River.

### (b) STUDY COMPONENTS-

(1) COMPUTER MODELING- In carrying out the study under this section, the Secretary shall develop computer models of the upper Mississippi River basin, at the subwatershed and basin scales, to--

- (A) identify and quantify sources of sediment and nutrients; and
- (B) examine the effectiveness of alternative management measures.

(2) RESEARCH- In carrying out the study under this section, the Secretary shall conduct research to improve the understanding of--

- (A) fate processes and processes affecting sediment and nutrient transport, with emphasis on nitrogen and phosphorus cycling and dynamics;
- (B) the influences on sediment and nutrient losses of soil type, slope, climate, vegetation cover, and modifications to the stream drainage network; and
- (C) river hydrodynamics, in relation to sediment and nutrient transformations, retention, and transport.

(c) USE OF INFORMATION- On request of a Federal agency, the Secretary may provide information for use in applying sediment and nutrient reduction programs associated with land-use improvements and land management practices.

### (d) REPORTS-

(1) PRELIMINARY REPORT- Not later than 2 years after the date of enactment of this Act, the Secretary shall transmit to Congress a preliminary report that outlines work being conducted on the study components described in subsection (b).

(2) FINAL REPORT- Not later than 5 years after the date of enactment of this Act, the Secretary shall transmit to Congress a report describing the results of the study under this section, including any findings and recommendations of the study.

### (e) FUNDING-

(1) AUTHORIZATION OF APPROPRIATIONS- There is authorized to be appropriated to carry out this section \$4,000,000 for each of fiscal years 2001 through 2005.

(2) FEDERAL SHARE- The Federal share of the cost of carrying out this section shall be 50 percent.