

DRAFT

Plan of Action

**Restructured Upper Mississippi River
System**

Navigation Feasibility Study

09 November 2001

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Restructured Upper Mississippi River-Illinois Waterway System Navigation Feasibility Study

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I. Purpose

The purpose of this Plan of Action is to present a general approach and schedule for restructuring and resuming the Upper Mississippi River System (UMRS) Navigation Feasibility Study.

II. Study Scope

The restructured feasibility study will focus on the authorized Federal navigation projects on the Mississippi River above Cairo, Illinois and the Illinois Waterway System and the ecological and floodplain resources that are affected by these navigation projects.

III. Feasibility Study Objectives

The objectives of this feasibility study are to relieve lock congestion, achieve an environmentally sustainable navigation system, and address ecosystem and flood plain management needs related to navigation in a holistic manner. The restructured navigation study seeks to ensure that the rivers and waterway system will continue to be an effective transportation system and a nationally treasured ecological resource. This feasibility study has been restructured to incorporate recommendations from the recent National Research Council review and the Federal Interagency Principals Group. The restructured study will: (1) further identify the long-term economic and ecological needs, and potential measures to meet those needs, through collaboration with interested agencies, stakeholders and the public; (2) evaluate various alternative plans to address those needs; (3) present a plan consisting of a set of measures for implementation that will achieve the study objectives; (4) identify and address issues related to the implementation of the recommended plan; and (5) possibly recommend interim measures to partially achieve the above objectives while feasibility study is being completed.

IV. Feasibility Study Products

The feasibility study will produce an interim report in July 2002 followed by a final report two to three years later. These two reports are described below.

A. Interim Report

The needs and opportunities for navigation improvements and related ecosystem restoration and flood plain management will be identified in the Interim Report. An assessment of the need for and potential contents of a comprehensive plan for meeting those needs shall also be presented. The comprehensive plan will be based on available results of scenario-based evaluations of measures proposed to meet the identified needs. The Interim Report may also identify additional opportunities, partnerships, and/or authorizations that may be advisable to preserve, protect, or restore critical elements and functions of the ecosystem. Sponsorship, partnerships, leveraging, and cost sharing issues will also be evaluated. The Interim Report will be developed collaboratively with Federal and State agencies, non-governmental organizations, key stakeholders, and the public. Existing coordination activities with the Governor's Liaison Committee (GLC), Navigation Effects Coordinating Committee (NECC), Economic Effects Coordinating Committee (EECC) and the Upper Mississippi River Basin Association (UMRBA) will be continued. The Interim Report will include, but will not be limited to, the following items:

- a) Responses to comments contained in the NRC review report, papers from the Federal Interagency Principals Group, issue papers developed by the Regional Interagency Work Group, and Corps of Engineers headquarters policy review comments received in 2000.
- b) A summary of study activities completed to date.
- c) Descriptions of future scenarios and the results of any completed analyses of alternative measures utilizing these scenarios.
- d) An assessment of the need for, general contents of, and development approach for a comprehensive plan to address the multiple water and land resources needs of the Upper Mississippi River System.
- ~~e)~~ e) Preliminary results of a systematic evaluation of O&M practices for the existing navigation project, including potential changes that might be implemented immediately to help address critical needs. Potential funding and implementation options will be addressed for such modifications.
- f) A preliminary assessment of authorization and funding options to meet ecosystem needs that cannot be achieved through existing programs and projects.
- ~~h)~~ g) Other recommendations, as appropriate, for additional future actions or programs of the Corps or other agencies to address water resources needs in the watershed.

B. Final Report

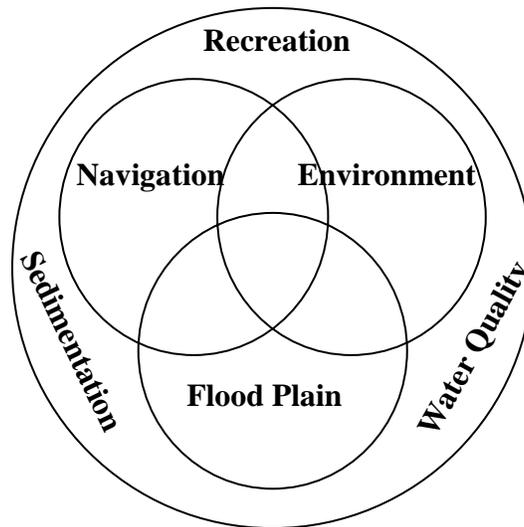
The final feasibility report will recommend a detailed plan for modifying the Federal navigation system to relieve lock congestion, achieve environmental sustainability, and address related ecosystem needs. The final report will present the results of scenario-

based analyses, including feasibility-level evaluations of alternative plans, in a manner that will allow decision-makers to consider the relative impacts and risks of the competing plan. Depending on results of the Interim Report, the final feasibility report may contain a comprehensive plan for water resources planning in the UMRS or the comprehensive plan may be developed as a separate study.

V. General considerations for a comprehensive plan

There are numerous considerations in developing system needs and a comprehensive plan to meet those needs. These considerations will be addressed to the extent practicable in the Interim Report and, based these initial results and information, will be further evaluated in the final report or as a separate effort, as needed. Some of these considerations are presented in the following narrative.

The development of a comprehensive plan will use a holistic, adaptive approach with an emphasis on balancing the sustainability of the river's environmental, navigation, and flood plain resources and capabilities. Recreational uses of the river system will also be integrated into this structure. The inter-relationships of the various aspects of the system are shown in the following diagram.



Inter-relationships of UMRS Water Resources Needs and Problems

The problems of soil erosion and related fluvial sediment processes and water quality (including nutrients) significantly affect the three primary system components of interest here. Therefore, soil erosion, river sediment processes, and water quality will, at least initially, be addressed generically at the watershed level. Consideration of these processes and resources could involve integration of existing Federal and State programs

and additional legislative authorities. In addition a workable, collaborative definition of environmental sustainability will help tie these components together. As mentioned above, the needs for sustaining environmental resources, and at what levels, as well as improving specific ecosystem, navigation, and flood plain management features or characteristics will be defined. The final, comprehensive plan could recommend the programs and projects needed to meet the identified needs and study objectives. These recommendations could include modification of existing projects and studies as well as new project and study authorities. Additional opportunities for modifying the operation and maintenance of existing Federal water resources projects to improve environmental outputs may be identified. Three primary aspects the study include navigation, environment, and flood plain management.

Navigation. Management of all activities that are related to the existing Federal 9-foot navigation channel project including long range navigation planning, operation and maintenance activities, recreation, traffic management and infrastructure rehabilitation would be evaluated. This includes the long-term capital needs to improve the efficiency and effectiveness of the navigation system. It also includes day-to-day operations and maintenance activities, including water level management, dredging, wing dam repairs, lockage processes, marking of the channel, rehabilitation needs, and recreation activities. The Corps of Engineers and Coast Guard are the primary managers of the navigation system.

Environmental. All ongoing Corps ecosystem restoration studies and projects would be evaluated, including the Environmental Management Program, Section 1135 projects, Section 206 projects, the Illinois River Ecosystem Program, and environmental activities associated with operation and maintenance of the 9-foot navigation channel project. Management of the UMRS National Wildlife Refuge system as well as ongoing environmental management activities by other Federal Agencies, States, local communities, non-governmental organizations, public and private landowners would be studied. An ecosystem restoration program would be developed, if feasible, to address identified UMRS environmentally sustainable goals that cannot be achieved through existing authorities and projects or modifications thereto.

Flood Plain Management. Ongoing planning studies for flood damage reduction projects, including the Corps' Continuing Authorities Program and Planning Assistance to States authority, and the operation of existing flood damage reduction infrastructure would be evaluated. Activities and projects managed by the Department of Agriculture, Federal Emergency Management Agency, U.S. Fish and Wildlife Service, state resource agencies, multiple special interest groups, and public and private landowners would be assessed. Methods to address the systemic flood plain management needs of the UMRS would be identified. How the Upper Mississippi River Comprehensive Study authorized in WRDA 1999 and funded in FY02 would be utilized in any comprehensive planning effort would be evaluated. The results of the ongoing UMRS flow frequency study will provide important data for flood plain management evaluations. Recommendations contained in the Sharing the Challenge: Floodplain Management into the 21st Century (Galloway Report) dated June 1994 would also be considered. This effort will look at the

basin as a system with the goals of continuing growth, reducing flood damages, and environmental sustainability.

Role of other agencies and organizations. A comprehensive approach to the management of the Upper Mississippi River System (UMRS) has repeatedly been identified as an essential first step in holistically addressing issues regarding the economic development and environmental integrity of the UMRS. Currently, there are numerous Federal and state agencies, and hundreds of local units of government with management and regulatory responsibilities for the river environment, with many more organizations involved in various aspects of the regional economy and/or its resources. Historically, each agency or organization has narrowly focused activities or interest to respective jurisdictional or authoritative responsibilities. None has exclusive jurisdiction over the river or the exclusive responsibility to protect the river's natural resources. Another complicating matter is that many of the management objectives are vague, contradictory, and rarely appraised for progress or success. Some positive headway has been made, but efforts are still fragmented and continue to create competing demands and hinder both conservation and economic development. This study will attempt to bring the various agencies and interest groups together in a collaborative effort to identify the needs for this complex system, and identify, evaluate, and support an appropriate plan to meet those needs.

Historic UMRS comprehensive plans. A number of comprehensive planning efforts for the water resources of the UMRS have been prepared over the last 25 years. The Interim Report will review these past efforts to establish a baseline for the assessment of the need for and content of a new comprehensive plan. Examples of some of these past efforts are:

- A. Comprehensive Master Plan for the Management of the Upper Mississippi River System, 1982.
- B. Sharing the Challenge: Floodplain Management into the 21st Century (Galloway Report), June 1994.
- C. The Mississippi River in the Upper Midwest, its Economy, Ecology, and Management, sponsored by the McKnight Foundation, 1996.
- D. Ecological Status and Trends of the Upper Mississippi River System published by the U.S. Geological Survey, April 1999.
- E. A River That Works and a Working River, published by the Upper Mississippi River Conservation Committee (UMRCC), January 2000.
- F. Habitat Needs Assessment for the Upper Mississippi River System, published by the US Army Corps of Engineers, February 2001.