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# Navigation and Ecosystem Sustainability Program (NESP) Upper Mississippi River System

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## **BACKGROUND**

The UMR-IWW System Navigation Feasibility Study Final Report was completed about one year ago in September 2004. The Chief of Engineers endorsed the study recommendation in a report to the Secretary of Army in December 2004. The Administration's position is currently under development, but has not yet been released.

Congress has not stood idle, but has used the final Feasibility Report and the Chief's Report as the basis for drafting authorizing language. Very similar language is included in both the House and Senate versions of WRDA. The House version of WRDA has passed by an overwhelming vote. The Senate has not yet acted on its version of WRDA. If and when that is accomplished, the House and Senate will conference and resolve differences between the two WRDA bills, before final action by both houses.

Congress appropriated funds in FY05 to start what's called pre-construction engineering and design or (PED). Under PED we are allowed to advance design and take other actions in preparation for implementation, but we are not allowed to initiate construction.

NESP is currently being managed in compliance with the Chief's Report, which fully endorsed the recommended plan in the Final Feasibility Report. When the program is authorized we will need to come in line with the specific language contained in WRDA.

## **GEOGRAPHIC AREA**

The NESP area is the Upper Mississippi River System consisting of the entire floodplain area and associated physical, chemical, and biological components, over the 1200 miles of river that comprise the 9-foot Upper Mississippi River – Illinois Waterway System - Mississippi River, Illinois River, and navigable portions of other tributaries (Minnesota, St. Croix, Black, and Kaskaskia Rivers).

## **FEATURES OF THE RECOMMENDED PLAN**

The recommended plan is a **long term, dual-purpose framework** for navigation efficiency improvements and ecosystem restoration of the UMRS, which includes the following features:

- **Authorization in increments.**
- **Small scale navigation improvements** (mooring facilities, switchboats).
- **Large scale navigation improvements** (new locks, lock extensions).
- **Development and testing of an appointment scheduling system.**
- **Larger scale ecosystem restoration measures** (fish passage, dam point control).
- Programmatic approach to implementing small scale ecosystem restoration projects (less than \$25 million each) by specifying **types and extent of small scale navigation restoration measures** but not tied to specific locations.
- **Provisions for continued evaluation and adaptation** in order to address uncertainty in the study and make adjustments as appropriate. This applies to both navigation efficiency improvements and ecosystem restoration measures.

Beyond these specific provisions the recommended plan in the Final Feasibility Report addresses the need for advancing integrated management of the UMRS and using science-based adaptive management for ecosystem restoration.

### **NAVIGATION EFFICIENCY – First Increment**

The first increment of the plan for recommended for immediate authorization includes:

- Small scale structural and nonstructural measures at a total estimated cost of \$235 million: Mooring facilities at Locks & Dams 12, 14, 18, 20, 22, 24, and La Grange; switchboats at Locks & Dams 20-25; development and testing of an appointment scheduling system.
- New 1200-foot locks 20, 21, 22, 24, and 25 on the Upper Mississippi River and at La Grange Lock and Peoria Lock on the Illinois Waterway at a total estimated cost of \$1.795 billion.
- The first increment of ecosystem restoration at a total estimated cost of \$1.58 billion for about 225 projects including fish passage, water level management, island building, backwater restoration, side channel restoration, wing dam and dike alteration, island and shoreline protection, and embankment modifications. The first increment of the plan also includes the acquisition and restoration of 35,000 acres of floodplain land.
- The integrated dual-purpose plan will be implemented through an adaptive approach that will include an incremental implementation strategy paired with periodic checkpoints requiring future reporting to the Administration and the Congress.

## **FISCAL YEAR 2005**

For FY05, which ended on 30 September 2005, we received a work allowance of \$11.3 million dollars to closeout the feasibility study and initiate PED. We received the work allowance in early February ... and immediately initiated work through over thirty teams. The teams addressed projects in three areas:

- **Programmatic Projects (5) - \$1.9 million** *including such initiatives as closeout of the feasibility study, project management, public involvement and institutional arrangements*
- **Navigation Efficiency Projects (8) - \$4.8 million** *including design of mooring facilities, development of a plan for implementing switchboats, concept design, hydraulic modeling, and field investigations for new locks at LD sites 22 and 25 and site investigations for LaGrange Lock.*
- *And nineteen* **Ecosystem Restoration Projects (19) - \$4.6 million**

Primary activities focus on site specific planning, engineering, and design; pre-project monitoring; and field investigations.

## **FISCAL YEAR 2006**

We do not know what level of funding NESP will receive in 2006. It was not included in the Administrations budget, nor was it included in the House appropriation bill. It was included in the Senate bill at \$20 million.

For FY06 we are assuming a \$12 million dollar work allowance as a lower limit, but have the capability to about double that effort if such an amount were appropriated. *The higher number (\$24 million) is needed in order to meet the current schedule for new locks.*

Under a \$12 million work allowance, we will primarily be advancing the projects that were initiated in FY2005 and not adding new projects to the mix. We will have small-scale navigation projects and ecosystem restoration projects ready for implementation in FY07.

## **ILLINOIS RIVER PROJECTS INITIATED IN FY05**

- Backwater restoration in the Middle Peoria Pool consists basically of dredging sediments and moving them to a place where they are needed.
- Emiquon West Project will restore approximately 2000 acres of the former Globe Levee and Drainage District and adjacent areas near the confluence of the Spoon and Illinois Rivers by establishing connectivity, a reliable water source, and more natural hydrology. The Fish & Wildlife Service is the sponsor in partnership with the Nature Conservancy and Ducks Unlimited.

- Investigating alternatives to current water control practices on the Illinois Waterway for purposes of reducing water-level fluctuations.
- Systemic initiatives for forest management, barge fleetings, and cultural stewardship were also initiated in FY05.

## **ADAPTIVE MANAGEMENT**

NESP will be implemented using science-based adaptive management. A Science Panel of research scientists will provide recommendations regarding the process.

## **PUBLIC INVOLVEMENT**

Public involvement from both a systemic perspective and for specific projects will be important throughout implementation. We need to keep formulating the integrated vision for the UMRS through interaction with stakeholders and the public. We had three successful public meetings in FY2005 – one addressing a new lock and fish passage at LD 22, one addressing a new lock and changes in water control at LD 25, and a third addressing water-level management in Pool 18.

When the program is authorized, our intention is to have a series of public meetings up and down the river system.

## **COLLABORATION WITH PARTNERS AND STAKEHOLDERS**

About a year ago we began exploring modification of existing institutional arrangements to better support integrated and adaptive management of the Upper Mississippi River System. We held two meetings of willing stakeholder participants to help formulate some concepts to explore. These were brought before existing institutions and circulated among Federal and State agencies for further discussion and insight. Based on that input the concepts have evolved. The current vision of the institutional arrangements consistent with these concepts is to build from existing forums and provide a connection between the Corps and its partners and stakeholders from the individual project to the National level and at the operating and policy levels regarding integrated management of the UMRS.

In October, another meeting of stakeholders is planned to discuss an operations model for the River Council. It is anticipated that the Environmental Management Program Coordinating Committee (EMPCC) will transform to the River Council with focus on the dual-purposes of (1) navigation efficiency, reliability, and safety and (2) ecological health of the UMRS.

The National Corn Growers were right on target in their comments on the Draft Feasibility Report when they said, “Continued stakeholder involvement will be critical to the successful implementation of this new dual-purpose program”.

## **SUMMARY**

In summary, although we are still waiting for authorization, the appropriation of funds for pre-construction engineering & design has allowed us to move forward in a substantial way in advancing design of many navigation and ecosystem restoration projects and preparing for implementation. There will be challenges every year and we need to continually demonstrate the ecological and economic importance of the UMRS. Mutual understanding among stakeholders and strong public support are critical to success.