



US Army Corps
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Information Paper

J. UMRS Ecosys. Restoration & Mngt. Plan

Upper Mississippi River System - Navigation and Ecosystem Sustainability Program

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Location/Description

The program area comprises the Upper Mississippi River System, as defined by Congress in the Water Resources Development Act of 1986 (WRDA 1986), which includes the Upper Mississippi River from Minneapolis, Minnesota, to Cairo, Illinois; the Illinois Waterway from Chicago to Grafton, Illinois; and navigable portions of the Minnesota, St. Croix, Black and Kaskaskia Rivers. This multi-use resource supports an extensive navigation system (made up of 1200 miles of 9 foot channel and 37 lock and dam sites), a diverse ecosystem (2.7 million acres of habitat supporting hundreds of fish and wildlife species), floodplain agriculture, recreation and tourism. Based on the recommendation of the recently completed UMR-IWW System Navigation Feasibility Study that examined system needs over the next 50 years, the Navigation and Ecosystem Sustainability Program (NESP) was implemented to achieve the dual purposes of UMRS ecosystem restoration and navigation improvements. The UMRS Ecosystem Restoration and Management Plan is one of 23 initial NESP ecological component projects being implemented under this new UMRS program.

The study area for the Ecosystem Restoration and Management Plan is comprised of three UMRS pilot reaches including Pool 5 (River Miles 738-753), Pool 18 (River Miles 410.5-437), and Harlow Reach (River Miles 128-164). These reaches were selected because of their rich record of data, ongoing testable restoration measures, or similar planning efforts already being conducted in these areas. Additional reaches will be selected for this effort in the future.

The primary focus of the UMRS Ecosystem Restoration and Management Plan is to develop a reach-scale process that efficiently coordinates the selection and sequencing of restoration efforts to best address identified UMRS ecosystem objectives. Existing and new information, models, and monitoring efforts will be used to generate a scientifically valid process of multi-project selection, refinement, and implementation. Utilizing this process, initial implementation and monitoring plans were developed for the pilot reaches to support, test, and further refine the planning process.

This project presents an opportunity for clarifying the effects of UMRS restoration and management activities on plant, fish, and wildlife resources, improving our ability to more successfully implement future restoration efforts. Input and coordination with the NESP Science Panel, Study Teams, and UMRS stakeholders will be crucial to the success of this project. A Decision Support System (DSS) is being developed to guide planners in a programmatic framework, capture planning information, and make ecological data and models more accessible.

Problem Statement

Efforts to restore and manage this complex system have been implemented, but have primarily focused on site-specific needs. A more holistic planning process is needed to efficiently achieve ecological objectives at multiple scales (i.e., project, reach, and system). The complexity and amount of data for the system has also made ecological planning and management difficult. Tools are needed to help manage and more easily access this information. Finally, there is a need for improved assessment tools and procedures to better evaluate project results and adaptively manage future restoration efforts.

Current Status

In FY 2005 the multi-agency Study Teams developed and implemented an initial reach planning process. Tasks accomplished include assessing information needs, implementing baseline monitoring, reviewing and refining ecosystem objectives, and identifying appropriate restoration measures for the development of reach implementation plans. Initial results were in an FY05 Interim Project Report. A draft Reach Planning Framework and individual draft Reach Reports for the pilot reaches were presented to the NESP Science Panel for assistance with evaluation procedures. FY07 work will emphasize evaluation procedures and DSS development..

Authority

Pending new authority, our current activities supporting UMRS navigation and ecosystem improvements are performed under authority provided by Section 216 of the Flood Control Act of 1970 (Public Law 91-611).