



**US Army Corps
of Engineers**
St. Louis District

Information Paper

I2. Lock 25 New 1200-ft Lock

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 Lock 25 – New 1200 ft Lock is one of 8 initial NESP navigation efficiency component projects being implemented under this new UMRS program.

Lock and Dam 25 is located in Calhoun County, Illinois, and Lincoln County, Missouri, at approximately Mile 241.1 on the Upper Mississippi River above the mouth of the Ohio River near Winfield, Missouri. Proposed project features include construction of new 1200-foot, pile founded, lock in the auxiliary miter gate bay, and construction of an upstream, ported guardwall totaling 1200 feet, and a 650-foot downstream approach wall. The existing 600-foot lock remains in place and will become auxiliary lock chamber to be used primarily by recreation traffic. The project also includes associated channel work, relocations and site specific environmental mitigation and is estimated at \$272,000,000(2005 price level). This cost will be shared equally (50/50) between Federal Construction General (CG) funds and the Inland Waterway Trust Fund (IWTF).



Problem Statement

The majority of the Upper Mississippi River locks were designed and constructed in the 1930's and the lock chambers are 600-ft long. The 600-ft lock chamber cause significant average delays to navigation because of double lockages required for tows larger than 600-ft. The new 1200-foot lock will significantly reduce delays and increase safety.

Current Status

In FY05, the preconstruction engineering and design (PED) phase for the new lock and guidewalls was initiated. This phase is scheduled to take approximately three years to complete. To date, the study team has initiated and accomplished significant work, including lock wall concept determination, approach wall concept determination, hydraulic navigation physical and numeric modeling, geotechnical/foundation study, and ongoing environmental assessment. The PED work will be documented in a Design Documentation Report (DDR). Following DDR documentation, the project will proceed into the production of multiple sets of plans and specifications, and construction contracts. Pending authorization, the construction is estimated to start in FY09 and take about eight years. It is estimated that the entire lock project will require thirteen years design and build, assuming sufficient funding.

Authority

Pending new authority, 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).