



# Upper Mississippi River System Hydraulic Model Update (SI/FPMS)

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG ®

## Location

NONE PROVIDED

## State(s)

IA,IL

## Congressional District(s)

## Status

FY16 funding received \$500,000 from reprogramming. Work initiated in August 2016 and expected to be complete by September 2017. This model is expected to provide a base condition for real-time river forecasting, Corps Water Management, evaluation of floodplain permitting issues, and flood fighting operations. This project will provide the components to identify and respond to future flood events reducing flood damages and improving life safety. This project will provide the base condition to improve the accuracy of forecast models. By providing better information and reducing the uncertainty about flow levels, the outcome from this project may result in a decrease for the need of structural flood control solutions. Flood planning tools will proactively reduce hazard risks and invest in hazard response and recovery capacity. The community based flood planning will mitigate risk to health, safety, and property posed by floods in order to protect life, property, and the economy, and lower the demand for response.

## Description

The project purpose is to develop an Upper Mississippi River System Hydraulic model. The need has been identified by U.S. Army Corps of Engineers districts, and state and federal partners for an updated, user-friendly Mississippi River System Hydrologic Engineering Centers River Analysis System (HEC-RAS) model which would incorporate software improvements, navigation dams, and the availability of period-of-record inflow data files for model users. The updated Upper Mississippi River System Hydraulic (UMR) HEC-RAS computation model would allow for wider use for floodplain management on the UMR system in support of flood risk management and 408 Levee Modification studies. The development of the UMR hydraulic model will be a collaborative effort by federal and state agencies facilitated by USACE Rock Island and St. Louis Districts covering 320 river miles from Mississippi River Lock and Dam 19 to Thebes, Illinois. The HEC-RAS model will run unsteady flow hydrographs and will provide a base condition to efficiently evaluate proposed changes to the system and subsequent transference of risk. It will replace multiple models currently in use, leading to better and more consistent flood risk management. State, county, and the local community officials will have access to enhanced flood risk information to assist with community communication and decision making processes regarding land-use and future development in high risk flood areas.

**Point of Contact:** Chief, Project Management Branch

**Phone:** (309)794-5386

**Email:** NONE PROVIDED