

US Army Corps of Engineers St. Louis District

Project Fact Sheet St. Louis Flood Control System, MO

Section 5070 of Water Resources Development Act 2007, Section 216 of FCA of 1970

Investigations (FRM)

Location: The study area is within the St. Louis Flood Control System and situated along the right bank of the Mississippi River between Miles 176.3 and 187.2, in the City of St. Louis, Missouri.

Description: The City of St. Louis has flood risk reduction from the Mississippi River through a levee, floodwall, and pump station gate structures constructed by the Corps in the 1960s. System reconstruction and underseepage correction completed in FY14 did not address the pump stations and associated gate structures that compromise an essential part of the overall system. The Metropolitan St. Louis Sewer District (MSD) operates and maintains 28 pump stations and a large number of independent gate structures within the flood risk reduction system. The MSD has funded a comprehensive condition assessment of each pump station identifying structural, mechanical, electrical, and closure gate components with long-term degradation and advanced age that reduce the system's ability to perform as authorized. Through MSD's condition assessment study and a preliminary evaluation by Corps cost estimators, total estimated project cost for reconstruction is \$30 to \$80 million dollars.

Issues: MSD has identified through their condition assessment that roller gates in the largest pump stations are made of fabricated steel. The fabricated steel is very susceptible to rust and corrosion and are showing significant signs of wear. As these gates continue to degrade, their risk of failure increases and compromises the entire flood risk reduction system.

Importance: The St. Louis Flood Control System provides urban level flood protection to 260,000 people and 8,400 acres of industrial, commercial, and residential area. Infrastructure crucial to the nations supply chain is also protected by the flood risk reduction system and includes five interstate highways which converge at three bridge crossings over the Mississippi River, 6 Class I railroads, and six intermodal transfer facilities. Also the National Geospatial-Intelligence Agency (NGA) has one of its two main facilities in the nation protected by the project. The project also provides protection against Environmental contamination from known Federal and State industrial sites containing hazardous waste including a FUSRAP site.

Risk: Without further evaluation of the closure gates further degradation reduces its ability to perform authorized project functions.

Consequence: The condition assessment study dated 2009 and supplemented in 2012 evaluated the vulnerability of the pump station network and revealed that pump station failure during a Mississippi River flood coupled with a 20-year storm event and a 3-hour duration would cause widespread interior flooding and property damages exceeding \$1.43 billion dollars.



Pump Station Closure Gates

Activities for FY 16: None Acquisition Strategy: N/A

Amount That Could Be Used in FY 17: An amount of \$100,000 could be used to verify Federal interest, conduct scoping meeting, achieve alternatives milestone, and receive vertical team concurrence.

Project Sponsor/Customer: Metropolitan St. Louis Sewer District

Congressional Interest: Senators Blunt and McCaskill (MO) and Representative Clay (MO-1)

	FY 16	FY 17	FY 17
Phase	Allocation	Budget	Total Capability
Construction	\$0	\$0	\$100,000

