Location: The Degognia and Fountain Bluff Levee and Drainage District and the Grand Tower Drainage and Levee District comprise a single closed levee system protecting the Mississippi River floodplain of Jackson County, Illinois, approximately 70 miles south of St. Louis, Missouri.

Description: The levee system, which is part of the Alton to Gale levee system, is 36.6 miles in length and protects a population of 3,000 people, seven communities, two state highways, two class I railways, pipeline infrastructure, a power and natural gas plant, thousands of acres of prime farmland and small businesses. A feasibility study is necessary to examine the reconstruction of the levee system features that warrant Federal participation to address major project deficiencies caused by long-term degradation of project components, construction materials, or engineering systems or design deficiencies.

Issues: The Degognia-Fountain Bluff as well as the Grand Tower Drainage and Levee District was authorized by the 1936 Flood Control Act and was constructed and turned over to the levee districts in the early 1950s. There are 41 gravity drains in the system and through levee inspections four have been identified as inoperable with others showing signs of failure. The system’s 354 relief wells need to be tested and rehabilitated. The flood of 1993 produced serious underseepage problems exhibited by sand boils, quick soil conditions, and piping of foundation material. These conditions continue to be observed in more recent floods such as 2008, 2011 and in 2013. The levee system requires reconstruction to ensure the authorized level of protection.

Importance: During the 2013 flood event (4th highest recorded level at St. Louis) a 60-inch gravity drain collapsed causing a significant void in the levee embankment. The levee district has backfilled the void and has temporarily diverted interior drainage to other gravity drains. However, these temporary measures have not restored the authorized level of protection and the rehabilitation of the collapsed drain and levee embankment exceeds the levee District’s financial capability. A breach in this flood protection system could compromise the Big Five levee system located immediately south of this flood protection system.

Risk: Levee Inspections and observed degradation during flood events reveals performance deficiencies caused by long-term degradation and advanced age that comprises the ability of the project to perform as authorized.

Consequence: Aged infrastructure issues have impacted levee inspection results and compromised levee eligibility under PL 84-99.

Levee void from collapsed gravity drain.

Activities for FY 15: None

Acquisition Strategy: No contracts are scheduled for award in FY15.

Amount That Could Be Used in FY 16: An amount of $300,000 could be used to negotiate and execute a cost share agreement and initiate the feasibility study.

Project Sponsor/Customer: Degognia and Fountain Bluff Levee and Drainage District and Grand Tower Drainage and Levee District.

Congressional Interest: Representative Bost (IL-12)