



US Army Corps
of Engineers
St. Louis District

Section 4 of the Flood Control Act of 1938; Section 103 of WRDA 1986; Section 1001(20) of WRDA 2007

Information Paper Wood River Levee, IL

Construction (FRM)

Location: The project area is located in the Mississippi River flood plain of Madison County, Illinois, upstream of the city of East St. Louis. An urban design levee, authorized in 1938 and constructed in the 1950s, protects the area.

Description: The levee system was designed to withstand a flood at 54 feet on the St. Louis gage; approximately a 0.2 percent chance of exceedance (500-year event). The project includes replacing existing relief wells as well as installing new relief wells as a design deficiency correction under the existing project authorization. The recommended plan to correct deficiencies of underseepage controls identified in the Limited Reevaluation Report includes construction of new relief wells, pump stations, seepage berms, and cutoff walls.

Status: The levee system will have a significant risk of failure during high water events unless underseepage design deficiency and through-seepage corrections are made. The system currently does not provide the authorized level of protection, equivalent to 54' on the St. Louis Mississippi River gage (approx. 500-year event) due to uncontrolled underseepage. Rehabilitation of aged infrastructure is complete. Design deficiency corrections are underway to address uncontrolled underseepage. The Sponsor, Southwestern Illinois Flood Prevention District (FPD) Council, is performing work to improve the levee to a 1.0 percent chance of exceedance to attain 100-year level of protection and maintain FEMA accreditation. Incorporation of new project information will result in a change to the total project costs (TPC) for design deficiency corrections. Re-analysis has been completed and a Risk Assessment (RA) has been initiated for Lower Wood River. The RA is anticipated to be completed in FY19 and will result in an updated approved TPC. The FPD continues to request that the Corps mandate the use of Project Labor Agreements (PLA) for construction contracts in the geographic area. The Army and the Corps delivered as promised on an alternate acquisition strategy to address the PLA issue; however, the outcome did not meet FPD expectations. The FPD has indicated their desire to provide cost share funds as Work in Kind (WIK) credit and has developed a plan for designing and constructing portions of the authorized project. The FPD initiated WIK activities in 2015. Approximately \$14 million of Federal project work has been self-constructed by the Sponsor to aid in their accreditation efforts. Development of an Integral Determination Report (IDR) and an amendment to the Project Partnership Agreement (PPA) will be required to afford the FPD WIK credit. The PPA amendment requires an accurate cost estimate and ASA(CW) approval to provide the opportunity for WIK credit by the FPD. Until the PPA amendment is executed, the FPD must provide cash to meet their cost share requirement. The FPD has agreed

to provide cash cost share funds to support project capability. The project has been funded in excess of immediate capability. Further capability is pending completion of the RA.

Importance: The Wood River Levee System protects a population of approximately 20,000 people in 5 towns; a high concentration of industry such as petrochemical infrastructure, steel manufacturing, and ammunitions production; and 12,700 acres of bottomland. In addition, the system is part of the containment feature of the Melvin Price Lock and Dam.

Risk: Without design deficiency corrections, the levee is in danger of failing due to underseepage or through-seepage during flood events.

Consequence: A levee failure would have catastrophic life, economic, and environmental consequences including damages to commercial/heavy industrial development, environmental and agricultural losses, spread of hazardous and toxic wastes, and significant loss of life.



Activities for FY 17: Funds used to complete construction of the Upper WR Shallow Cutoff Wall, complete design of Lower WR Deep Cutoff Wall, initiate risk assessment activities to determine updated risk-informed total project scope and cost, and perform Section 408 observation of FPD construction and continue collaborative design activities in support of FPD WIK credit.

Acquisition Strategy: Best Value Tradeoff acquisition strategy with voluntary inclusion of a PLA.

Activities after FY 17: Award construction contract for Lower WR Deep Cutoff Wall, continue collaboration with FPD on design activities and oversight of construction for WIK credit, complete risk assessment activities and prepare supplemental report to update total project scope/cost and inform PPA WIK amendment.

Project Sponsor/Customer: Wood River Drainage and Levee District and Southwestern Illinois FPD.

Congressional Interest: Senate: Durbin (IL) and Duckworth (IL); House: Bost (IL-12), Shimkus (IL-15) and Davis (IL-13).

Phase	FY 17 Allocation	FY 18 Budget
Construction	\$31,700,000	\$0