



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 (as well as the Supplement to the LRR) 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, has completed 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 has resulted in a change to the total project costs (TPC) for design deficiency corrections. A Risk Assessment (RA) has been completed for Lower Wood River. The RA resulted 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 \$16 million of Federal project work has been self-constructed by the Sponsor to aid in their accreditation efforts. An updated Integral Determination Report (IDR) and an amendment to the Project Partnership Agreement (PPA) has been executed and WIK has been credited. Sponsor is seeking additional WIK credit for design activities.

The project has been funded in excess of immediate capability, but approximately \$14.8M is needed to complete the project.

**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 20:** Carryover funds are being used to close-out the Lower WR Deep Cutoff Wall, continue collaborative design activities in support of FPD WIK credit, and initiate design of the next increments of work (relief wells and pump stations).

**Acquisition Strategy:** An aggressive FY20 design schedule is expected to produce a contract awards for 4 new pump stations and 46 relief wells. Design work also includes additional 44 relief wells and 2 pump station modifications.

**Activities after FY 20:** Carryover funds will be used to award construction contracts of previously designed features, as well design/contract award of the remaining 56 relief wells and complete mitigation work.

**Project Partners:** 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 20 Allocation
Construction	\$0