



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 2019 Supplement to the LRR) and includes construction of new relief wells and associated ditch work, pump stations, pump station modifications 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 annual chance of exceedance to attain 100-year level of protection and maintain FEMA accreditation (FEMA accreditation of all three Wood River segments was finalized in March 2021). 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 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) have been executed in 2019 and \$16 million in WIK has been credited. Sponsor is seeking additional WIK credit for design and construction activities.

The project has been funded in excess of immediate capability, but approximately \$14.8M in Federal funds 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.



Upper Wood River Protected Area

Activities for FY 22: Carryover funds are being used to continue collaborative design activities in support of FPD WIK credit, and continue design of the remaining increments of work (relief wells, pump stations, pump station modifications and associated mitigation activities) and to explore an alternative solution in Reach 5 due to a real estate impasse between the levee district and the Village of Roxana. Two design packages (totaling 46 relief wells and 1 pump station) have been awarded so far in FY22 with a third one on schedule (2 new pump stations).

Acquisition Strategy: The three contract awards for FY22 will be awarded utilizing the Small Business, Best Value with Trade Off, Firm Fixed Price acquisition strategy.

Activities after FY 22: Carryover funds will be used to award construction contracts for pump station modifications and additional relief wells and ditch work, along with satisfying mitigation requirements and updating Operations and Maintenance manuals.

Project Partners: Wood River Drainage and Levee District and Southwestern Illinois Flood Prevention District (FPD) Council.

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

Phase	FY 22 Allocation
Construction	\$0