

US Army Corps of Engineers St. Louis District

Information Paper Middle Miss. Flood Prone Structure Inventory, Phase 3

Investigations (FRM) – Interagency Nonstructural / Silver Jackets

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Location: The project area is in the Middle Mississippi River watershed near Alexander County, Illinois.

Description: This interagency project will develop a tool to provide risk communication to a critically vulnerable County along the Mississippi River. Structural flood damage assessments will be developed using multifrequency Flood Depth Grids. Survey data will be collected for the lowest entry point and first floor elevation for all residential, commercial, and industrial structures within the non-leveed floodplain. This information will be provided to these communities as a web-based product. While Phases 1 and 2 included other IL counties, Phase 3 includes approximately 1,000 structures in Alexander County. Risk assessments would involve a flood prone structure inventory, structure characteristics, survey of first floor/low entry elevation creating a database of structure elevations in comparison with flood profiles to the 1% annual chance flood. Final product would assist with informing counties of the low floor elevation of at-risk structures, expected flood depth based on flood profile and damage curves to assist communities in prioritizing and ranking mitigation projects. This project would add another completed component to growing statewide risk assessment database being developed and utilized by the state of Illinois via Structures At Flood Risk (SAFR) database.

http://ilinoisfloodmaps.org/structureriskassessment/Flood RiskDB/

Status: This project received the first increment of funding in October 2023. The Project Delivery Team (PDT) has provided Illinois Department of Natural Resources (IDNR) with list of structures to survey, and IDNR began surveys in December 2023.

Importance: The objective of this interagency nonstructural project will be used to assess areas of repetitive flooding, locate individual or clusters of flood prone structures, determine which structures incur the most frequent or severe losses, evaluate mitigation measures and assist in prioritizing mitigation projects for the purpose of reducing flood risk and increasing community resiliency.

Authority: U.S. Army Corps of Engineers (USACE) Interagency Nonstructural / Silver Jackets (SJ), Section 206 of the Flood Control Act of1960, as amended (33 U.S. Code § 709a).

Schedule:

- District Receipt of Funds: October 2023
- Surveys: December 2023 July 2024
- Draft Report: October 2024
- Report Approval: December 2024



Figure 1: Example of Structure Map and Parcel Data

Activities for FY24: IDNR will perform structure surveys, and USACE will compile data and develop report and geodatabase.

Activities after FY24: Finalize report and geodatabase.

Project Partners: Illinois Dept. of Natural Resources, Illinois State Water Survey, County Floodplain Administrator.

Congressional Interest: Senate: Durbin (IL), Duckworth

(IL)

House: Bost (IL-12)

Financial: Estimated Federal cost: \$100,000. Estimated non-Federal cost: \$0 Total estimated cost: \$100,000 Total Federal funding to date: \$50,000