



**US Army Corps
of Engineers**
St. Louis District

Information Paper

Middle Miss. Flood Prone Structure Inventory, Phase 3

Investigations (FRM) – Interagency Nonstructural / Silver Jackets

Contact:

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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 for structures will be developed using multi-frequency 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. 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/structureassessment/FloodRiskDB/>

Status: This project was competitively selected and will be funded in FY24.

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.

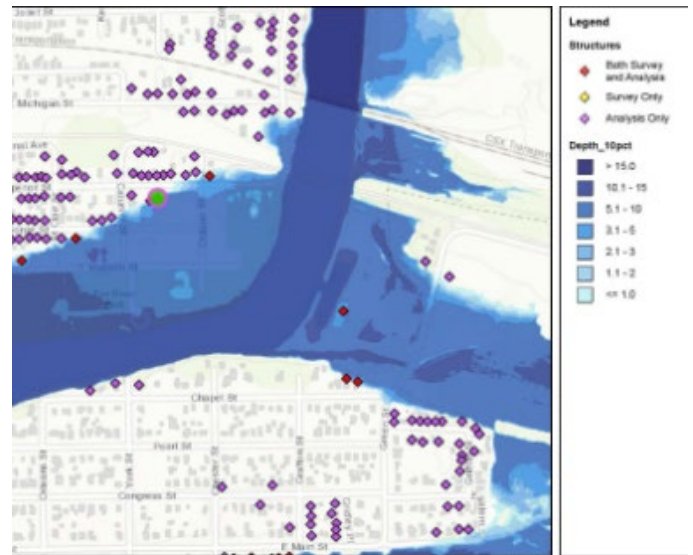
Authority:

USACE Interagency Nonstructural / Silver Jackets (SJ), Section 206 of the Flood Control Act of 1960, as amended (33 U.S. Code § 709a).

Schedule:

- District Receipt of Funds: October 2023
- Surveys: July 2024

- Draft Report: October 2024
- Report Approval: December 2024



Street Address, City, ST ZIP		Parcel ID Number	
Property Info:		Flood Risk:	
Building Value (2017 US\$)	46,233	Annual Percent Chance of Flooding	2.27%
Stories	1	Percent Chance of Flooding w/in 30 Years	43.69%
Area (Sq Ft)	1,274	Annual Chance of Flood	10%
Foundation Type	Basement (or Garden Level)	Depth from 1st Finished Floor (ft)	N/A
Occupancy Type	Residential	Building Damage (%)	N/A
		Building Losses (2017 US\$)	N/A
		4%	N/A
		2%	-7.59
		1%	-6.41
		0.2%	-0.94
		14.19	5,240
		5,240	5,560
		Survey Data:	
		First Floor Elevation (ft)	479.2
		Lowest Entry Elevation (ft)	471.0
		Lowest Entry Ground (ft)	470.8
		Survey Year (ft)	2017
		Vertical Datum	NAVD88
<small>Disclaimer: Elevations presented are not official FEMA/BCEC or survey elevations. These values are intended for use in risk assessments, but not for official determinations.</small>			
<small>Source: SAFR web map (https://ilinoisfloodmaps.org/structureassessment/FloodRiskDB/) licensed on 7/11/2022</small>		<small>Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, NOAA, NPS, NGA, Swire, IGN, Intermap, Inc., Swire, Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community</small>	
		<small>Scale = 1:9,028 0 245 490 980 1,470 Feet</small>	

Activities for FY24: Initiate the project, collect data from partners (i.e., HEC-RAS models and GIS data), partners 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

Financial:

Estimated Federal cost: \$100,000
 Estimated Non-Federal cost: \$0
 Total estimated cost: \$100,000

Total Federal funding to date: \$0