Frankfort, KS Levee Data Development

Flood Risk Review

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April 13, 2023





CITY OF FRANKFORI

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Zone A

Agenda

1 Introductions

2 Project Overview

3 Mapping Review

4 Projected Timeline





USGS, 2013





Introductions

FEMA Region VII

- Dawn Livingston, Project Manager
- Rick Nusz, Regional Engineer

Kansas Department of Agriculture-Div. of Water Resources

- Joanna Rohlf, Floodplain Mapping Coordinator
- Tara Lanzrath, NFIP Coordinator
- Bill Pace, Floodplain Mapping Specialist
- Patrick Bonine, Floodplain Mapping Specialist

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- Lori Schrader, Project Manager
- Will Zung, Levee Subject Matter Expert





Meeting Objectives

- Review the draft flood hazard maps, to:
 - Communicate the City of Frankfort's and Marshall County's flood risk.
 - Show how KDA's and FEMA's engineering analysis is being applied.
 - This is the community's opportunity to identify any technical and non-technical issues they see on the maps that need additional review.
 - Understand options and decisions that need to be made by the community
- Outline next steps in this process and answer any questions about the timeline.





Project Review





Project History

- April 2012: Zone A Hydrologic and Hydraulic analysis of flooding sources within Marshall County completed by Olsson Associates and Anderson Consulting Engineers, Inc
- May 2017: Effective FIS and FIRM for Marshall County, Kansas showing no flood hazards behind the Frankfort Levee system
 - Seclusion Boundary
 - Note to users states levee does not comply with 44 CFR 65.10 and will be revised at a later date to include flood hazard information associated with the levee
- July 2017: Local Levee Partnership Team (LLPT) meeting





Project History (cont.)

- January 2018: LAMP Plan completed = Natural Valley (if no additional engineering/construction provided by City and/or County)
 - Enhanced detailed hydrologic and hydraulic analysis needed to determine BFEs of Black Vermillion River, Robidoux Creek, and Little Timber Creek
- January 2022: KDA initiates a new detailed hydrologic and hydraulics study to develop flood risk data for the flooding sources along the Frankfort Levee
- February 2022: Kickoff Meeting with City and County
- March 2023 (Today): Flood Risk Review Meeting Review new hydrologic and hydraulic analysis results





What's New in the Draft Data

- Robidoux Creek, Little Timber Creek, Black
 Vermillion River
 - Hydrology new analysis using HEC-HMS (Robidoux Creek, Little Timber Creek) and Gage Analysis (Black Vermillion River)
 - Hydraulics New HEC-RAS 1D modeling based on 2018 LiDAR and 2022 Survey
 - base flood elevations
 - floodway
 - floodplain boundaries
- Natural Valley Analysis





Next Step

Review Draft Flood Hazard Maps





Review the Draft Flood Hazard Maps

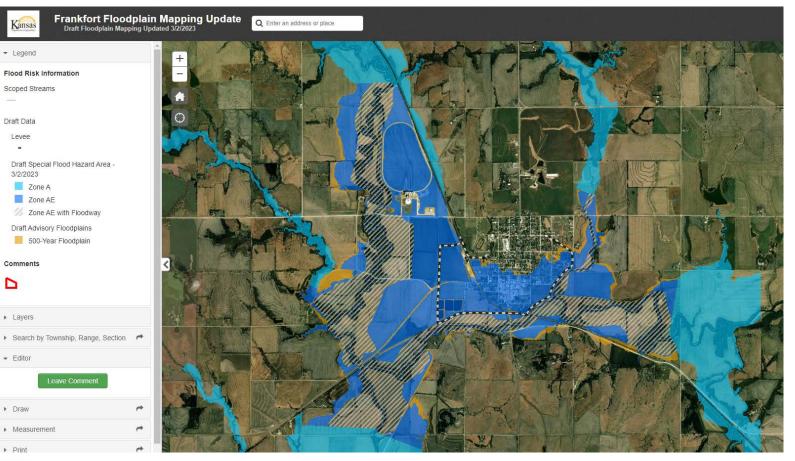
- This is the community's opportunity to review the proposed maps. Potential certification of data for the levee system will impact the timing of the project and final floodplain boundaries.
- Questions to consider:
 - What are the potential scenarios for the new floodplain boundaries?
 - Does the community want to pursue certification and if so, what is the timeline?
 - What data is available with the mapping?
 - How can elevations be determined?
 - Where can the maps be viewed?





Proposed Floodplain Mapping

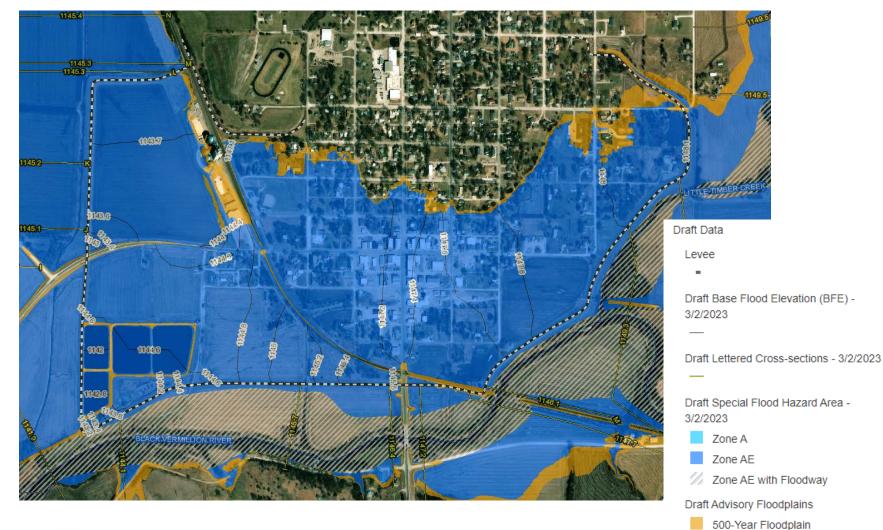
KDA Web Map Viewer: https://gis2.kda.ks.gov/gis/frankfort/







Proposed Natural Valley Mapping

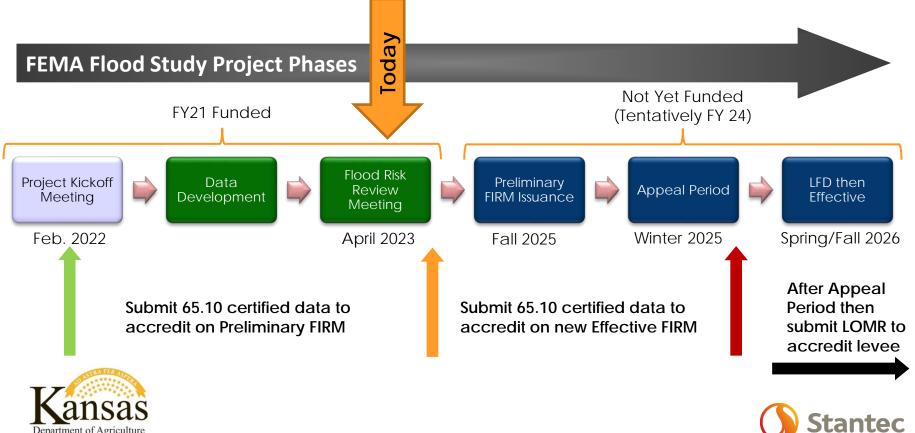


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Review the Draft Flood Hazard Maps

KDA has delayed the funding of preliminary map production until, tentatively FY24 to allow the City of Frankfort and Marshall County to process the new study and mapping and determine a path forward.



Division of Water Resources

Questions and Answers

Have We Answered All Your Questions?

Project Web Map Demo: <u>https://gis2.kda.ks.gov/gis/frankfort/</u>





Contacts

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Lori Schrader Project Manager Stantec (913) 202-6875 Lori.Schrader@Stantec.com



Will Zung Principal, Levee SME Stantec (913) 202-6867 Will.Zung@Stantec.com



Joanna Rohlf Floodplain Mapping Coordinator KDA – Division of Water Resources (785) 296-7769 Joanna.Rohlf@ks.gov



