





# Labette County, KS Flood Risk Review Meeting

**Hybrid Meeting** 

July 13, 2023

While we are waiting, please enter your name and community in the chat box!

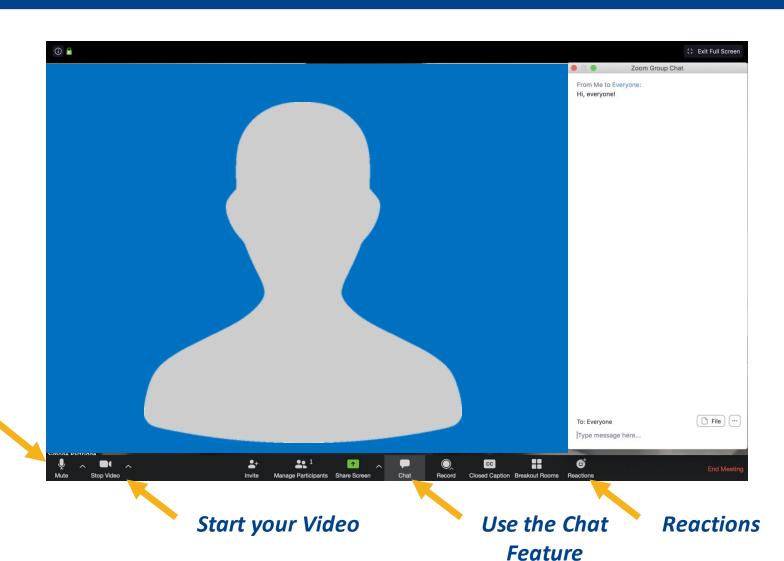
# THARKOU

We appreciate the time you are giving to this work and we want to use it wisely.

Your feedback at this point in the project is very important.

## **Zoom Features**





Mute / Unmute



# Rules of the Road

- Attendees joining on Zoom will be muted during the presentation to help eliminate background noise.
- Use the chat to ask questions during the presentation! We will pause for questions at various stopping points.
- If you want to share your video, please do!
- For technical difficulties, send a private chat to William Pace; or email William.Pace@ks.gov
- We'll be recording this webinar for those who aren't able to attend today.

#### Intros



#### **Kansas Department of Agriculture**

Joanna Rohlf, CFM, GISP Floodplain Mapping Coordinator

William Pace, CFM
Floodplain Mapping Specialist

Patrick Bonine
Floodplain Mapping Specialist

Tara Lanzrath, CFM
State NFIP Coordinator

Cheyenne Sun Eagle, CFM NFIP Specialist

FEMA - Region VII

**Dawn Livingston** – Regional Project Officer



WSP USA Environment & Infrastructure Inc.

Larry Sample, PE - Project Manager

**Lisa Tuckwin, GISP, CFM** – Lead GIS Analyst



# Today's Goals



- Review how we developed your flood risk data
- Get your feedback on the flood risk data
- Review future steps

Main Takeaway: We want your feedback while your map is still in draft form and there is time to incorporate feedback

# First, a brief recap



Over the past 30 years, flooding has been more dangerous in the U.S. than any other weather-related problem. To minimize flood damage, we must first understand where the risk is.

# Why Have Floodplain Maps?



- Understand the risk so you can make informed planning decisions and avoid future flood damage in your community.
- Determine where flood insurance is needed and rate its cost.
  - Flood Insurance Rate Map (FIRM)
- Provide the basis for updating community floodplain management ordinances.
  - These ordinances are your tool for reducing your community's vulnerability to flood risk.

### FEMA Floodplain Mapping Program



- Risk Mapping Assessment and Planning (Risk MAP)
- Supports the National Flood Insurance Program (NFIP); performed on a watershed basis.
- Consists of both Regulatory and Non-Regulatory Products.
- Through Risk MAP, we provide updated floodplain maps, as well as other (free!) data and tools that can help you plan to reduce your community's risk.





### National Flood Insurance Program



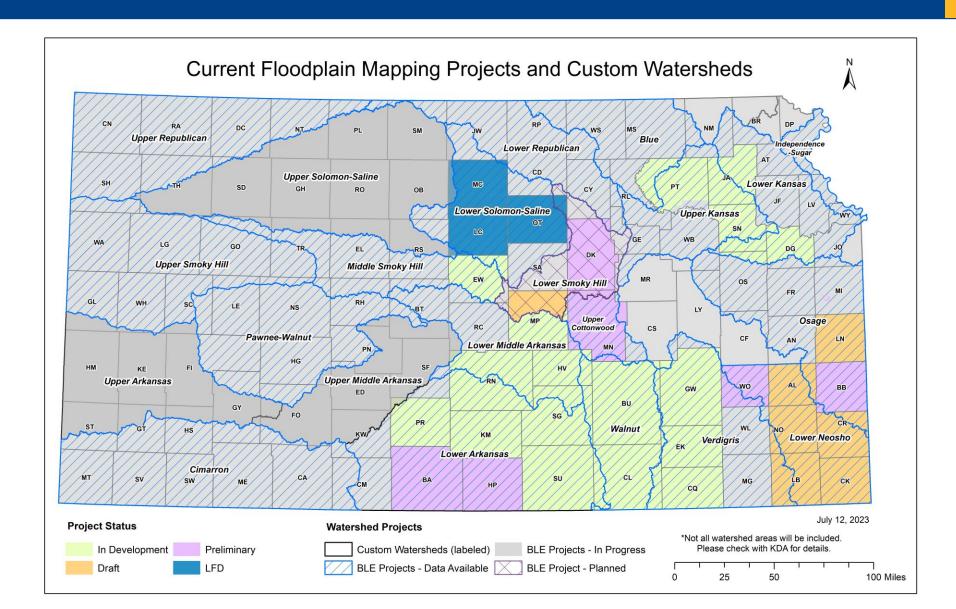
#### **Benefits of the NFIP**

- Property owners would be able to insure against flood losses
- Qualify for federal grants or loans for development
- Qualify for federal disaster assistance for damages caused by a flood
- Adoption of a floodplain management ordinance leads to smart development against flood risk

Any questions?

#### We Do This Work Across Kansas





#### How Did We Get Here?



- Base Level Engineering (BLE) 2020
  - Gives us early insight into your flood risk
  - Lower Neosho Upper DD Watershed BLE Project
    - Kickoff Meeting held on November 19, 2019
    - Discovery and Initial Map Review Meeting held April 15, 2020
  - Labette County Effective Mapping is dated January 2009
  - Through Discovery and conversations with County stakeholders, it was determined that updated modeling and mapping would benefit Labette County.

#### How Did We Get Here?



- Data Development 2021- 2023
  - Kickoff Meeting held on July 15, 2021
    - Discussed Project Scope & Modeling Methods
      - Enhance the engineering analysis
      - Develop regulatory draft floodplain maps
      - Develop Flood Insurance Study
      - Develop flood risk data tools for your community



#### Labette County 2021 Proposed Mapping Updates

#### **Scoped Studies**

#### New Zone A - Gage Analysis

New Zone A studies will be developed for these streams using 2D "excess rainfall-on grid" hydrology calibrated to Gage Analysis Flows, and 2D Hec-Ras hydraulics.

#### New Zone A - Excess Rainfall on Grid

New Zone A studies will be developed for these streams using 2D "excess rainfall-on grid" hydrology and 2D Hec-Ras hydraulics.

#### New Enhanced Zone A - Excess Rainfall on Grid

New Enhanced Zone A studies will be developed for these streams using 2D "excess rainfall-on grid" hydrology and 2D Hec-Ras hydraulics. Floodways will not be developed. Field measured structure data will be incorporated into the modeling.

#### New Enhanced Zone A - Gage Analysis

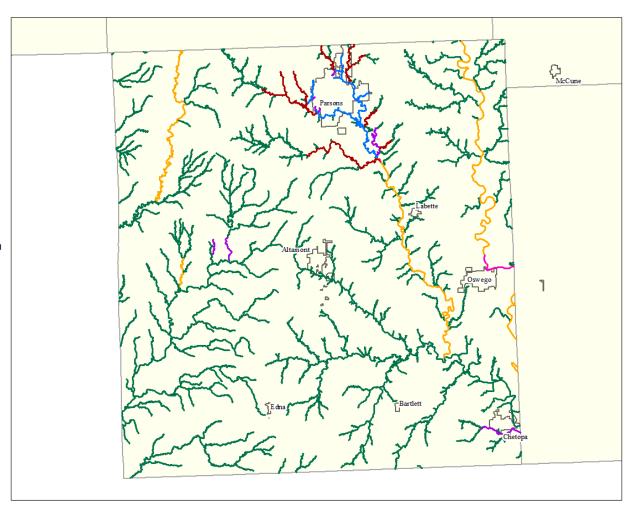
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#### New Zone AE with Floodway - Excess Rainfall on Grid

New Zone AE studies will be developed for these streams using 2D "excess rainfall-on grid" hydrology and 2D Hec-Ras hydraulics. Floodways will be developed, Field measured structure data will be incorporated into the modeling, BFEs will be shown on the maps.

#### New Zone AE - Excess Rainfall on Grid

New Zone AE studies will be developed for these streams using 2D "excess rainfall-on grid" hydrology and 2D Hec-Ras hydraulics. Field measured structure data will be incorporated into the modeling. Floodways will not be developed. BFEs will be shown on the maps.





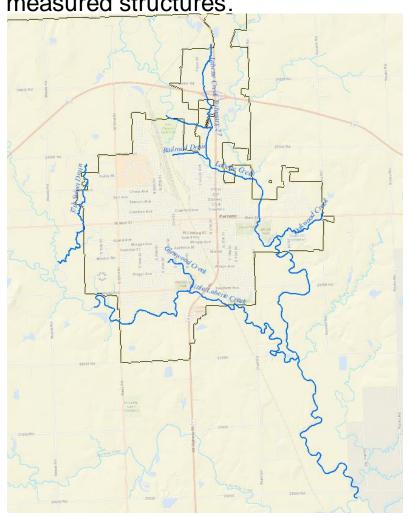




**Zone AE with Floodway -** one-dimensional (1D) model utilizing excess rainfall on grid hydrology and the inclusion of field measured structures.

#### **Near Parsons**

- 37<sup>th</sup> Street Drain
- Glenwood Creek
- Labette Creek
- Labette Creek Tributary 27
- Little Labette Creek
- Oakwood Creek
- Railroad Drain

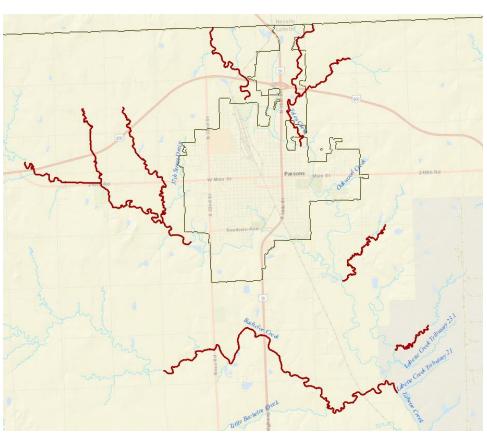




**Zone AE without Floodway** – two-dimensional (2D) model utilizing excess rainfall on grid hydrology and the inclusion of field measured structures

#### **Near Parsons**

- Bachelor Creek
- Labette Creek
- 2 Tributaries of Labette Creek
- Little Labette Creek
- 2 Tributaries of Little Labette Creek
- Tolen Creek
- 1 Tributary of Tolen Creek





**Enhanced Zone A -** two-dimensional (2D) models utilizing excess rainfall on grid hydrology and the inclusion of field measured structures

#### **Near Parsons**

- 2 tributaries of Little Labette Creek
- 1 Tributary of Labette Creek
- 1 Tributary of 37<sup>th</sup> Street Drain

#### Southeast of Parsons

1 Tributary of Labette Creek

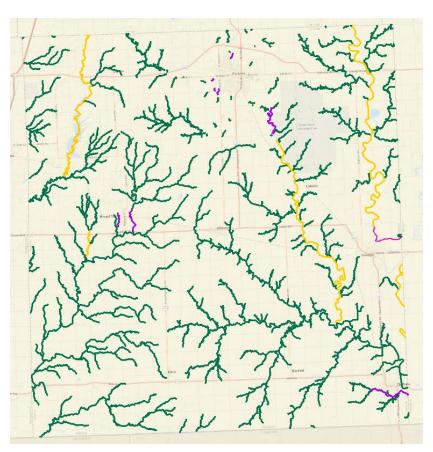
#### Near Chetopa

Town Creek

#### Near Oswego

Neosho River

**Zone A –** Remainder of the county



## **Definitions**





**Hydrology** *How Much Water?* 



Hydraulics
How High Will Water Get?



# Data Gathered

- Information gathered during the BLE Phase of the project was incorporated and/or used for validation of modeling
- Survey and as-built plan information was gathered for bridge and culvert openings for enhanced areas



# LiDAR Data

- Updated digital floodplain maps were developed on the 2013 acquired LiDAR
- 2018 LiDAR recently became available
- Comparison between the 2018 and 2013 LiDAR was performed
- Did not result in enough change in ground elevation to significantly impact the floodplain boundaries



- There are 4 non-accredited agricultural levees in the county.
  - Labette Creek Levee Labette Creek
  - LLB-0003 Pumpkin Creek
  - LLB-0005 Neosho River
  - NPS Railroad Labette Creek
- LLB-0003 and LLB-0005 are overtopped for the 1% annual chance storm and are considered hydraulically insignificant.





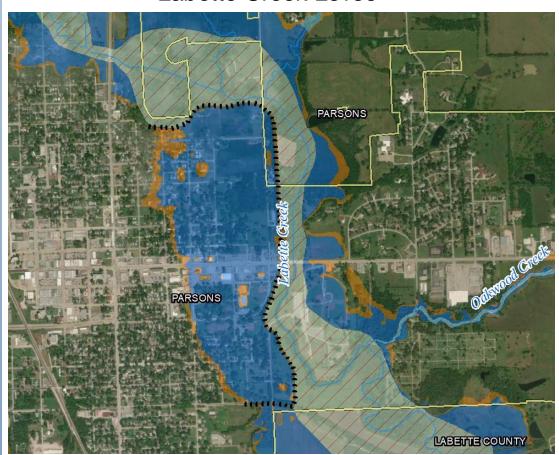




- The levees in Parsons are considered hydraulically significant.
- Because the levees are hydraulically significant the floodway is contained to the wet side of the levee as it is on the effective map.
- Because the levees are not accredited the levees are mapped without showing reduced flood hazard from the 1% annual chance storm.
- The new mapping is based on a Natural Valley Procedure which reflects the levee geometry in the hydraulic model but allows water to flow on either side of the levee.



#### Labette Creek Levee



**ZONE A** 

ZONE AE

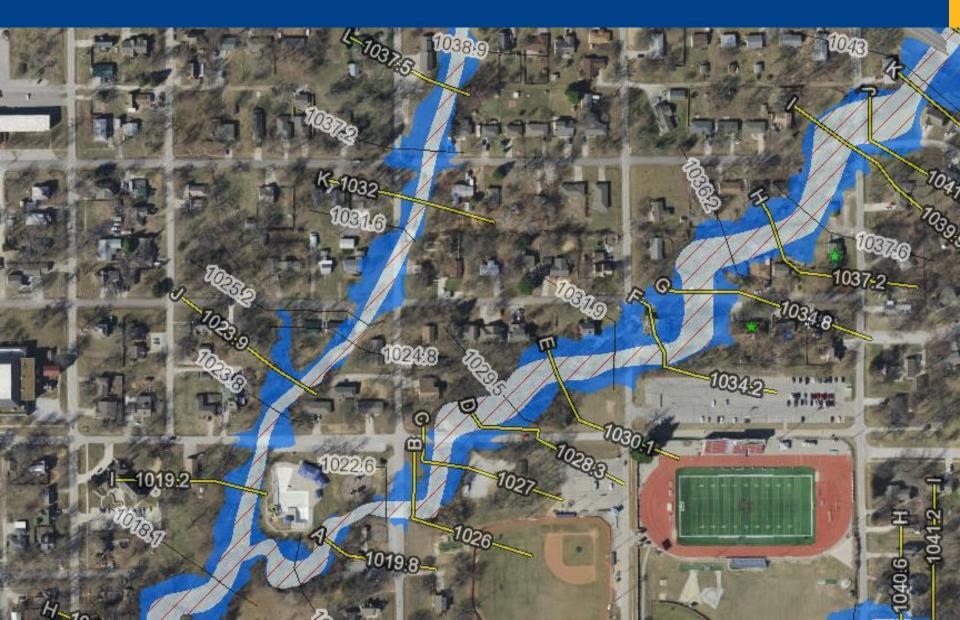
FLOODWAY

0.2 PCT ANNUAL CHANCE FLOOD

..... LEVEE

# Example of Zone AE with Floodway





## Example of Zone A

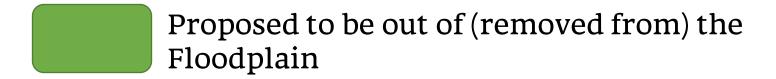




### Changes Since Last FIRM

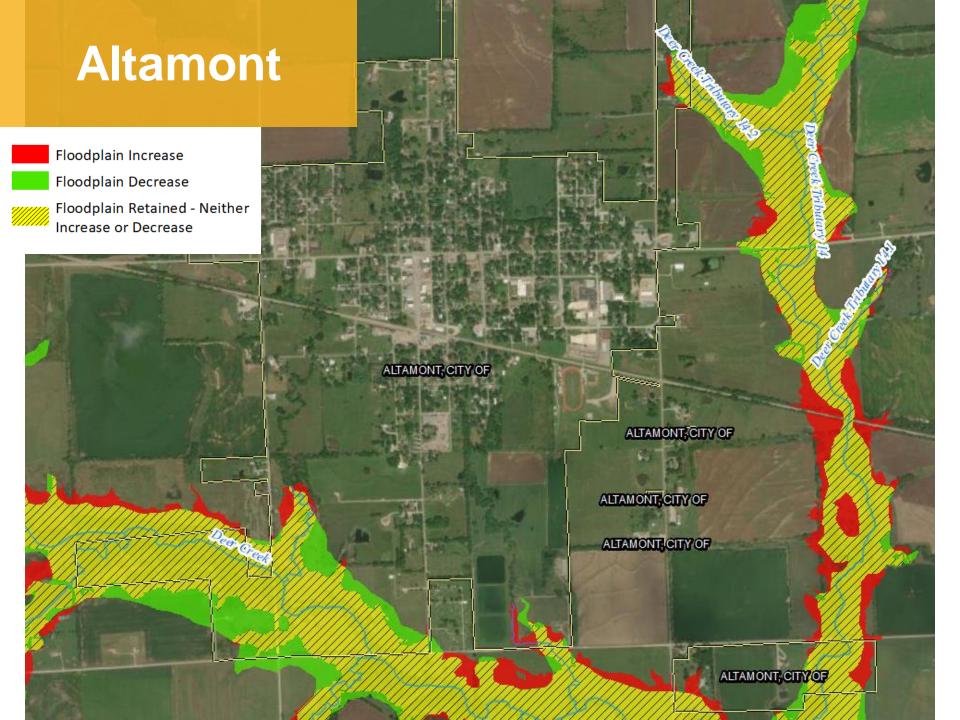


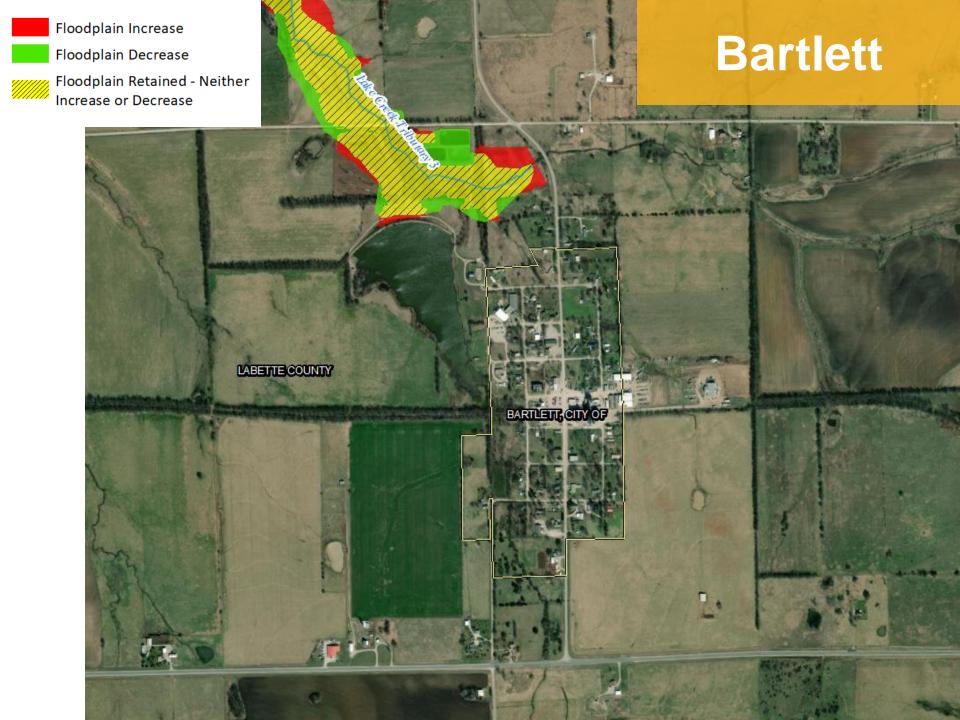
# Compares the Draft Floodplains to the Current Effective Floodplains

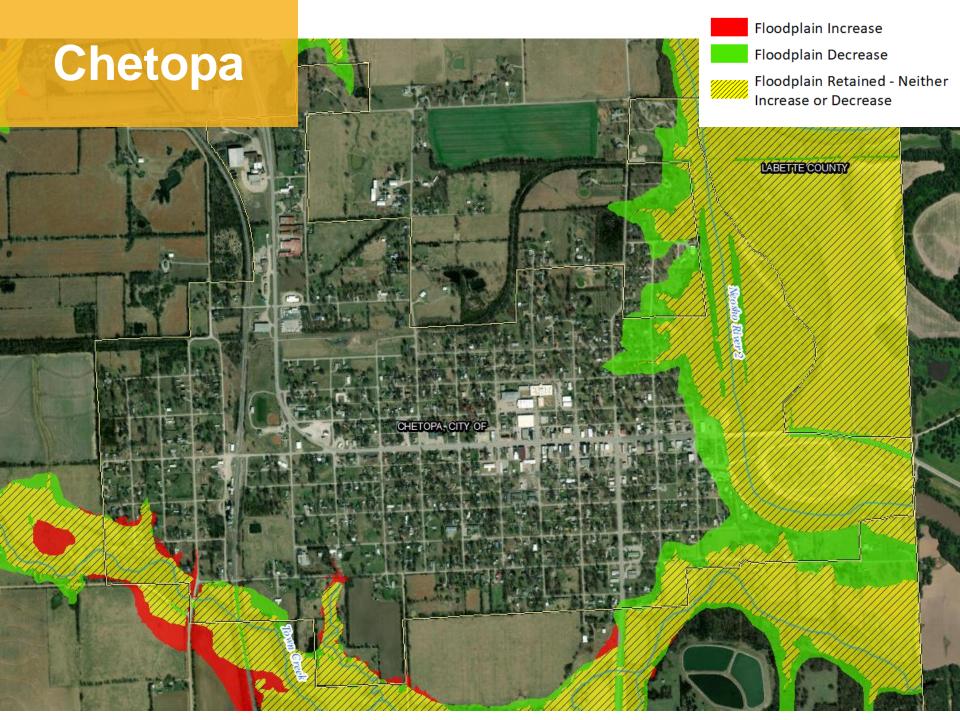


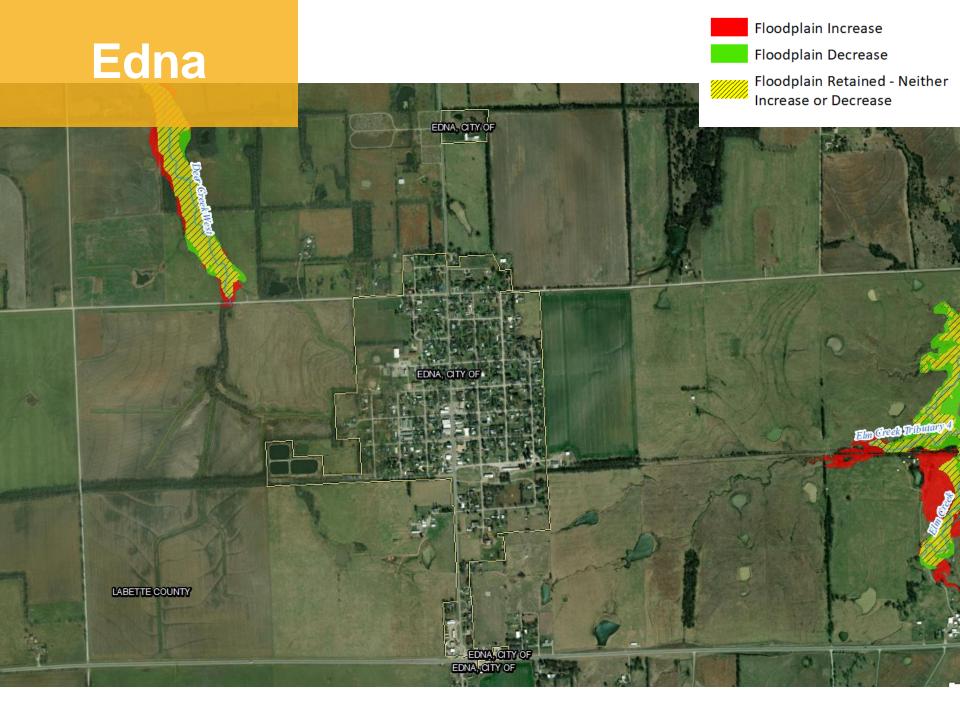
Proposed to remain in the Floodplain

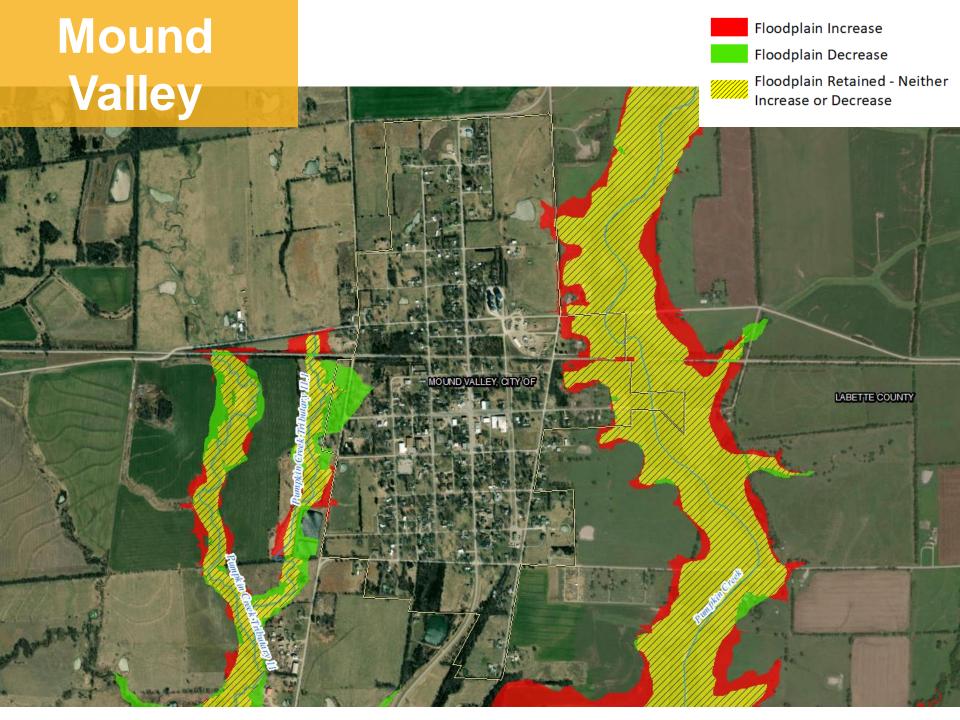
Proposed to be in (added to) the Floodplain





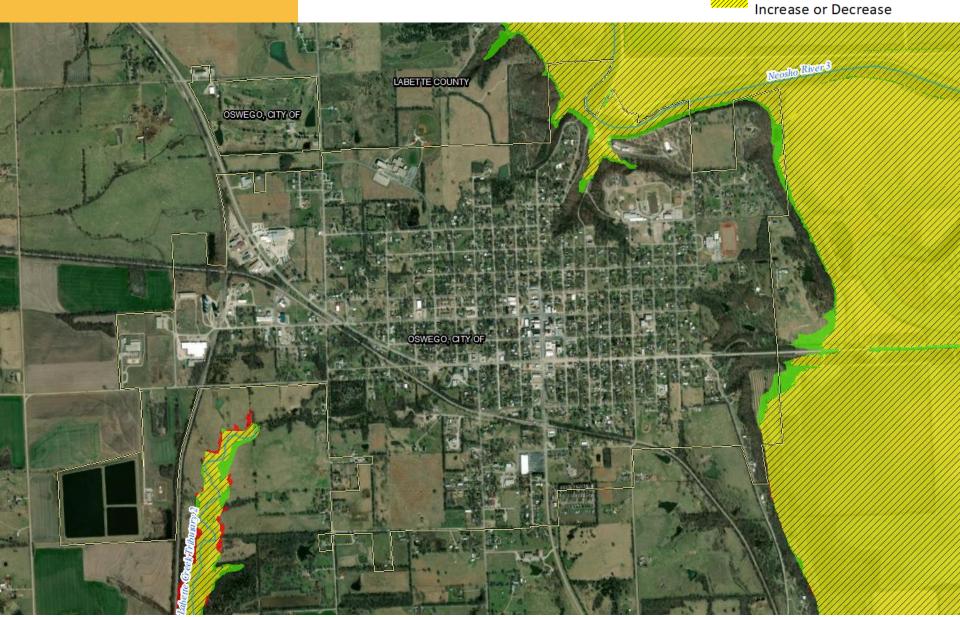


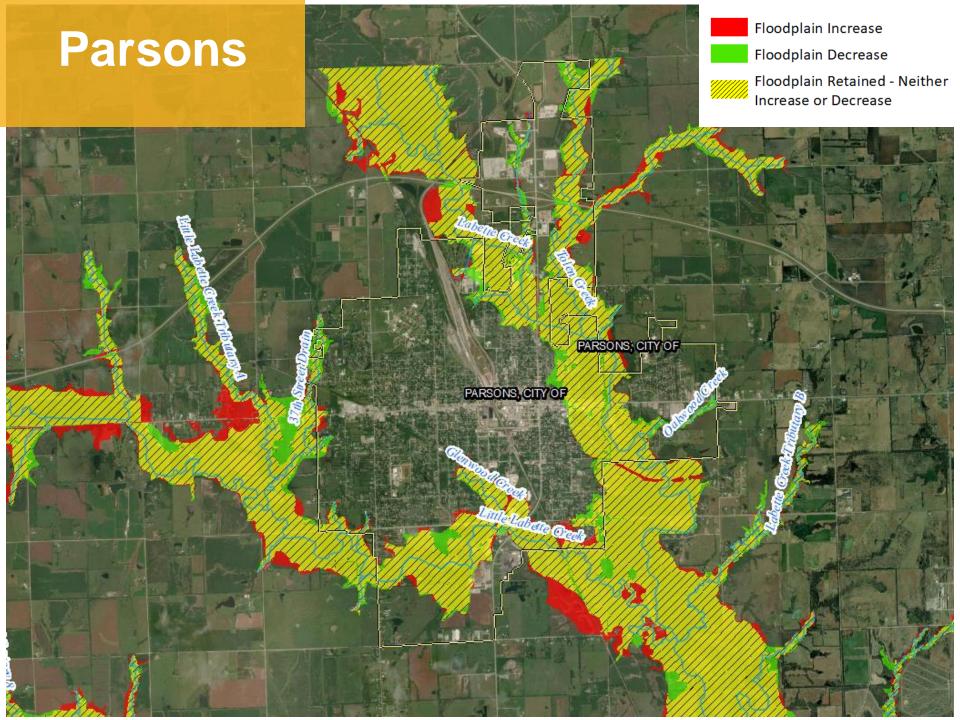




# Oswego

Floodplain Increase
Floodplain Decrease
Floodplain Retained - Neither





#### Reconnaissance Surveying

GIS Base Map
Coordination

Leverage Studies

New Studies

**DFIRM** Production

Post-Processing

Map Adoption

#### Project Tasks

- Discovery
- Base Map Preparation
- 3. Survey and Topography
- New Studies
- DFIRM and FIS Production
- 6. Post-Preliminary

Finishing this phase: data development

### Your Maps Undergo Significant Review



- WSP USA
  - Engineering reviewed by separate WSP USA office
- Independent Technical Review (ITR)
  - Third party review of engineering
  - AECOM
- KDA Review
  - Visual review
  - Eye test
  - Identify impact of the map
- FEMA Review
  - Formal quality review process of regulatory products
- Your Review!
  - Community Review
  - Public Review

Community Map Review



# Your Map Review



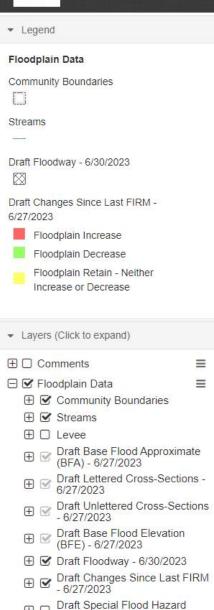
#### This is your opportunity to have an impact!

- We want to agree on what your map looks like before Preliminary Status
  - That's when we enter the regulatory map-making phase, and it's harder to change things
- A web map has been provided for review <u>https://gis2.kda.ks.gov/gis/Labette/</u>
- This is where YOU look out for YOU: please provide your comments by August 14, 2023

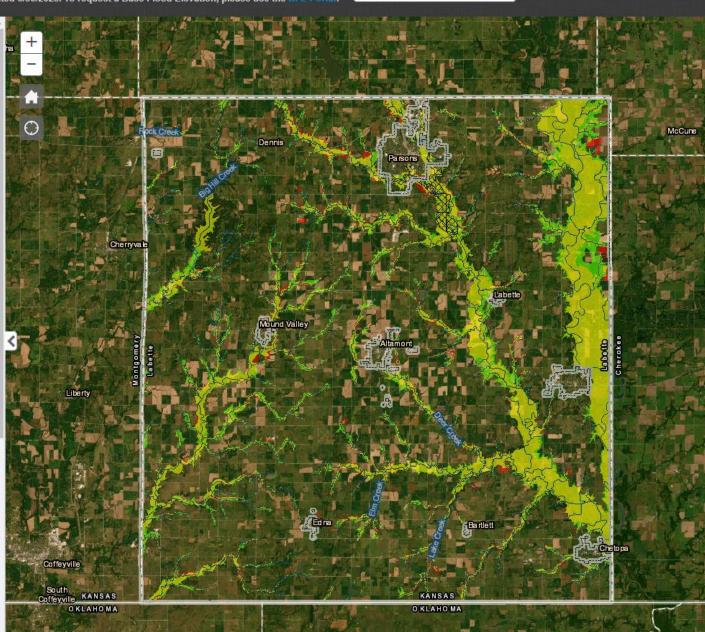


Labette County Floodplain Mapping
Draft Floodplain Mapping updated 6/30/2023. To request a Base Flood Elevation, please use the BFE Portal.

Q Enter an address or place



Area (SFHA) - 6/27/2023 Dark Additions Plandalate



## **Your Map Review**





Recent construction (e.g., a new building development that incorporated fill or changes to roadways, bridges, or culverts)



High Water Marks showing past flooding impacts



Floodplain boundaries that align with your experience of large-scale flooding



Model stream extents (where floodplains begin and end)



Political boundaries, especially if there is a recent annexation







IMPORTANT STEP: All community comments will be addressed/reviewed before doing a public review

# Your Residents Also Have the Opportunity to Review the Draft Data



- Can review and comment online, using same Review Web Map
- Will run for at least 30 days
- We will also hold an Open House
  - Typically consists of computer stations where public can discuss draft floodplains with KDA, engineers, mapping experts, and insurance specialists
- We'll need your help notifying your residents and finding location
- Tentatively scheduled for October 2023







# Open Discussion

# Zoom attendants unmute your phones and let's talk about this.

#### **Our questions:**

- What location should we hold the Open House?
- Could you help promote an Open House?
- If so, how would you do that?
   Social media? Newsletters?
   Website posting? Direct mail?

What are your questions? We know you have some...

# **Next Steps**



### Timeline Review



- Your Review
  - Please get comments in by August 14, 2023
- Public Open House
  - Estimated: October 2023
- Preliminary Map Distribution
  - Estimated: March 2024
- Preliminary DFIRM Community
   Coordination Meeting
  - Estimated: April 2024
- Appeal Period
  - Estimated: July-October 2024
- Letter of Final Determination
  - Estimated: Feb 2025
- Effective Maps
  - Estimated: August 2025

Where we still have flexibility to change the data

Where you have to follow a more formal process (with higher effort) to request any changes to the data

# **Your Next Steps**

Review your community's maps and comment on areas of concern AND/OR areas that look right.

There are a few ways to do this:







#### Lead the public outreach for your community

We can help you target who most needs to know; but will need your help to lead the outreach effort

Let us know if you need help or have any remaining questions!



# Key Take-aways

Floodplain Mapping Projects take time

Your involvement in this process will result in better flood information for your community

Get it right before Preliminary!

DON'T HESITATE TO CALL, WE ARE HERE TO HELP

# Where to go for...



# Online Project Information



#### Project Website

- https://agriculture.ks.gov/divisionsprograms/dwr/floodplain/mapping/mappingprojects/lists/mapping-projects/lower-neosho
- Scoping Maps, Project Timeline, Meeting Presentations, Newsletters, Technical Reports, Web Review Map

#### Web Review Map

- https://gis2.kda.ks.gov/gis/Labette/
- Draft Floodplain Review

#### Story Maps

- Project Info
- "Floodplain Current": Mapping Process 'Nuts and Bolts'

# Base Flood Elevation Portal



Kansas Department of Agriculture	Kansas	Base	Flood	Elevation	Portal
Home	About	Help			
Portal Regist	ration				
First Name					
Last Name					
User name					
Title					
Phone					
Email Address					
Address					
City					
Zip					
State	Kansas	,			
		Re	egister		

For Zone A floodplains, you can request BFE Data. Keep in mind that the data is still subject to change.

### Contact Information



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#### **FEMA**

#### **Dawn Livingston**

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Regional Project Officer







### And now...

We are going to show you how to make comments and review your community's map

Any questions first?