Your engagement in this process is important to the success of this project, so thank you for taking the time to be here today!
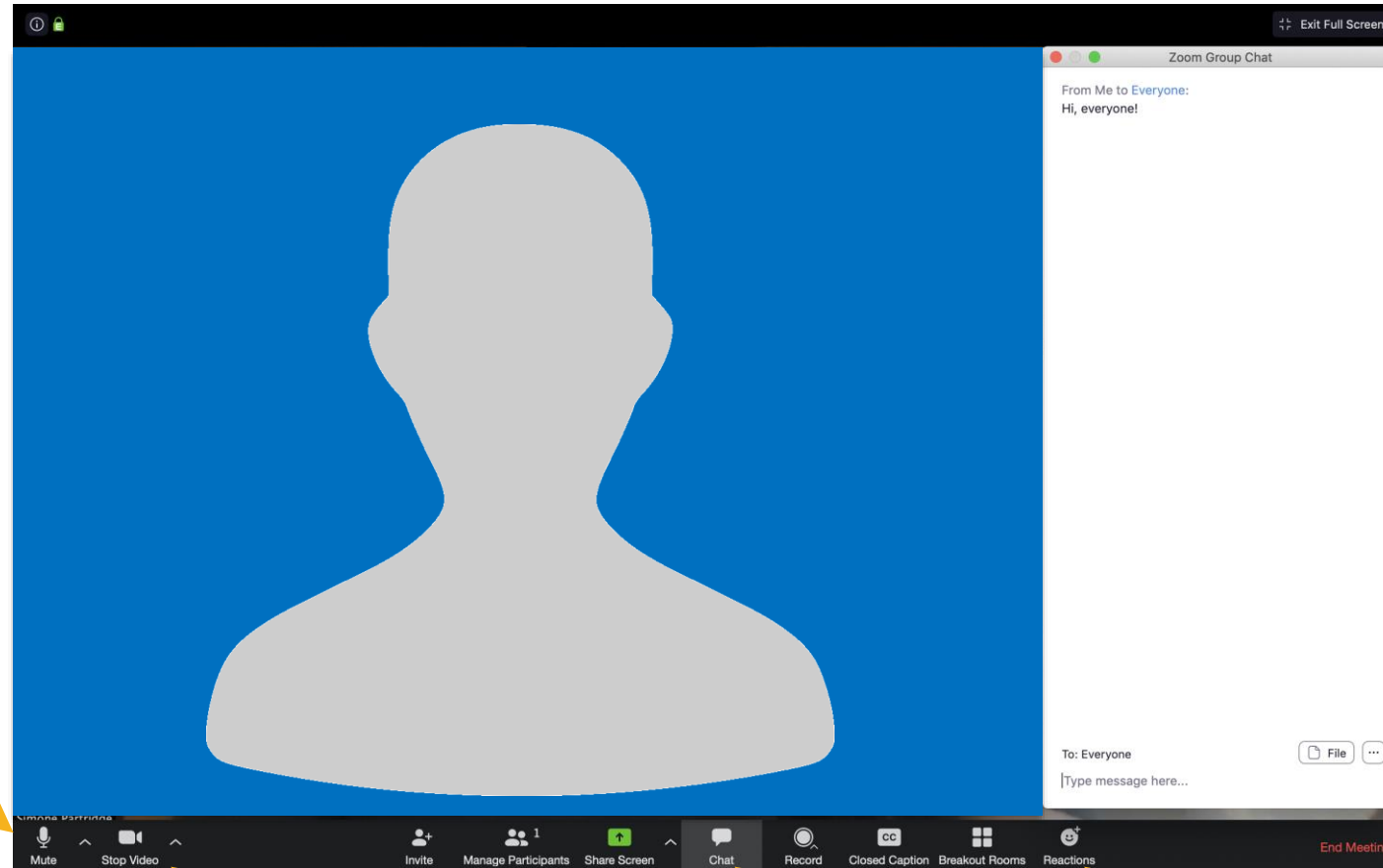
Zoom Features

Mute / Unmute

Start your Video

Use the Chat Feature

Reactions

Kansas
Department of Agriculture
Division of Water Resources

Rules of the Road

- Attendees 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 and have several poll questions.

- If you want to share your video, please do!

- For technical difficulties, send a private chat to Joanna Rohlf; or email joanna.Rohlf@ks.gov

- We'll be recording this webinar for those who aren't able to attend today.

Introductions

Kansas Department of Agriculture

Tara Lanzrath, CFM
Floodplain Mapping Coordinator

Joanna Rohlf, CFM
Floodplain Mapping Specialist

William Pace, CFM
Floodplain Mapping Specialist

Steve Samuelson, CFM
State NFIP Coordinator

Cheyenne Sun Eagle
NFIP Specialist

FEMA – Region VII

Andy Megrail
Regional Project Officer

Wood Environment & Infrastructure Solutions

Joe File, PE, CFM
Senior Associate / Program Manager

Maria Neeland PE, CFM
Engineer

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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.

Overview

Why We're Here: The Big Picture

The flood risk information in portions of the Blue Custom Watershed warrants updating.

We want to develop a complete, current picture of your flood hazards and risks.

The ultimate goal is to help you better:

| *Plan for how to reduce your flood risk* | *Communicate the risk to your citizens* | *Take action to protect your communities* |

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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.
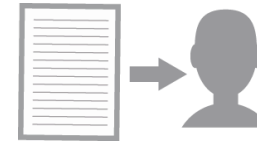
Flood Maps Affect Important Decisions
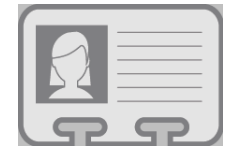

To Identify Flood Risk & the Need for Insurance

To Establish Rates for Flood Insurance
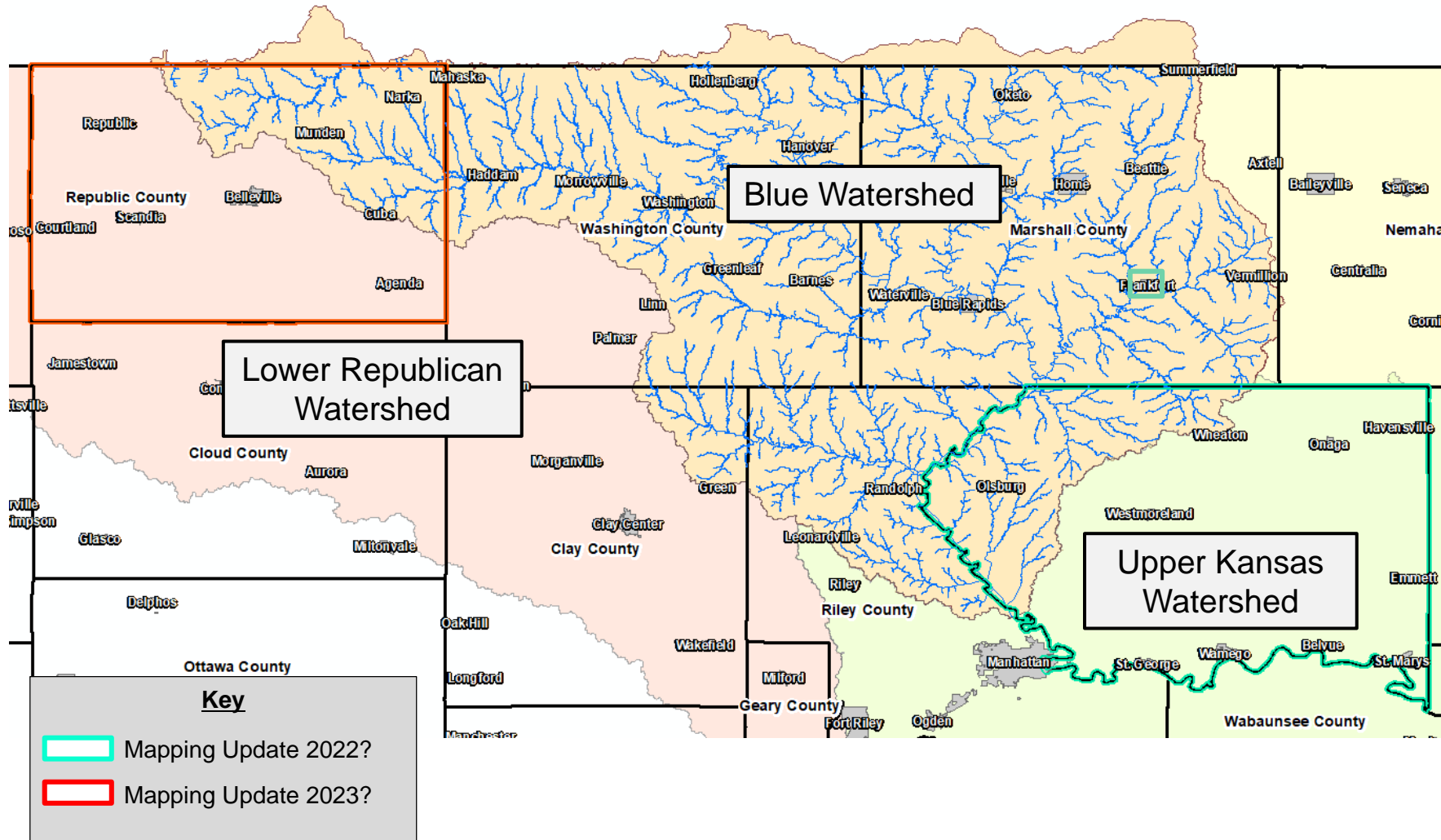
To Determine Land Use & Update Ordinances

To Inform Engineers and Developers

To Equip Emergency Managers

Overview of Watershed

Pottawatomie County-

- Mapping Update for areas outside of recent PMR Anticipated for 2022

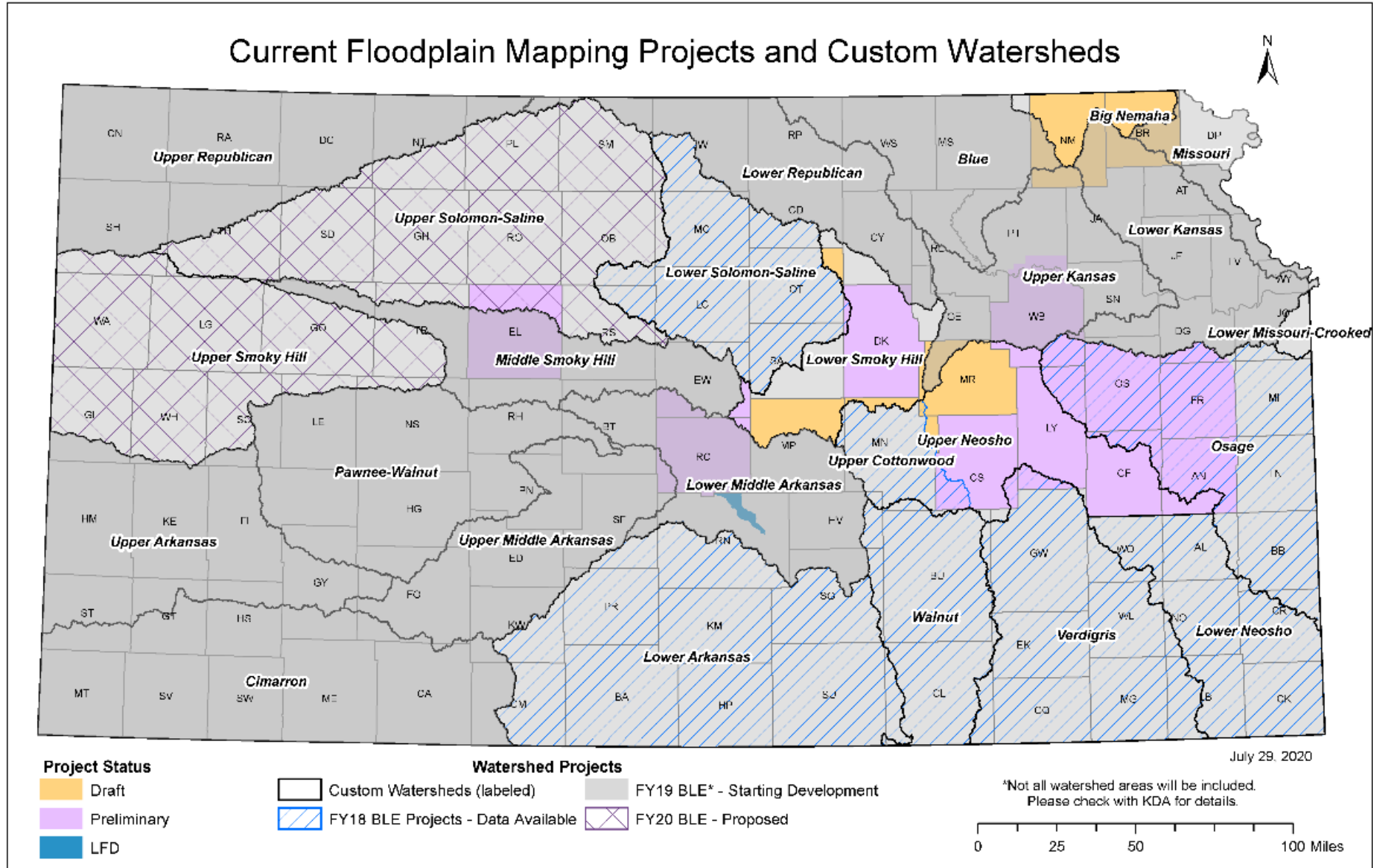Republic County-

- Mapping Update Anticipated for 2023

Marshall County-

- Mapping Update for Frankfort Anticipated for 2022

Other Counties-

- TBD Based on Needs

We are doing this work across Kansas…

Current Floodplain Mapping Projects and Custom Watersheds

July 29, 2020

Project Status
- Draft
- Preliminary
- LFD

Watershed Projects
- Custom Watersheds (labeled)
- FY18 BLE Projects - Data Available
- FY19 BLE* - Starting Development
- FY20 BLE - Proposed

*Not all watershed areas will be included. Please check with KDA for details.

0   25   50   100 Miles

Today's Goals

KANSAS
AD ASTRA PER ASPERA
Department of Agriculture
Division of Water Resources

Today's Goals

Get Input	Get your input on where you have seen flooding
Share	Share how we can help your community lower its flood risk
Review	Review the work ahead and how we propose doing it
Discuss	Discuss your role in this work moving forward

Your Role

- Tell us where you've seen flooding in your community.

- Share where and how we can help lower your flood risk.

- Ask questions as we review the work ahead – we'd like your input.

- *NOTE: if there are others in your community who might have input about your community's flooding concerns and our approach to this work, PLEASE put their name, community, and email into the chat, or email Tara so we can make sure to connect with them.*

We Need Your Input:

Where has your community experienced flooding?

How are your community's daily activities impacted when it floods?

As We Review Your Floodplain Maps, We Want to Hear from You:

Where are you experiencing flooding?

- Intersections that often flood and stop traffic?

- Drainage areas that cause problems?

- Any parts of town where homes or businesses have flooded?

Are there areas where there has been recent construction/development? Or, where there are plans to build?

Are there any tricky areas to take a closer look at?

Do you have projects related to flooding underway that we could help with?

Introduction to the Web Map Viewer

Web Map Link: https://gis2.kda.ks.gov/gis/blue/

How We Can Help

"Mitigation Technical Assistance"

![Kansas Department of Agriculture, Division of Water Resources logo]

We are asking this question for two reasons:

If you've had flooding, we want to know WHERE. This helps truth-test the engineering analysis we will be doing.

Depending on how and where your community is being impacted by flooding, we might be able to help.

How We Can Help

STEP 1:

Explain what you need help with.

STEP 2:

We determine if it's something we can support.

STEP 3:

If we can support it, we'll work with you to put together a plan and a timeline.

Kansas
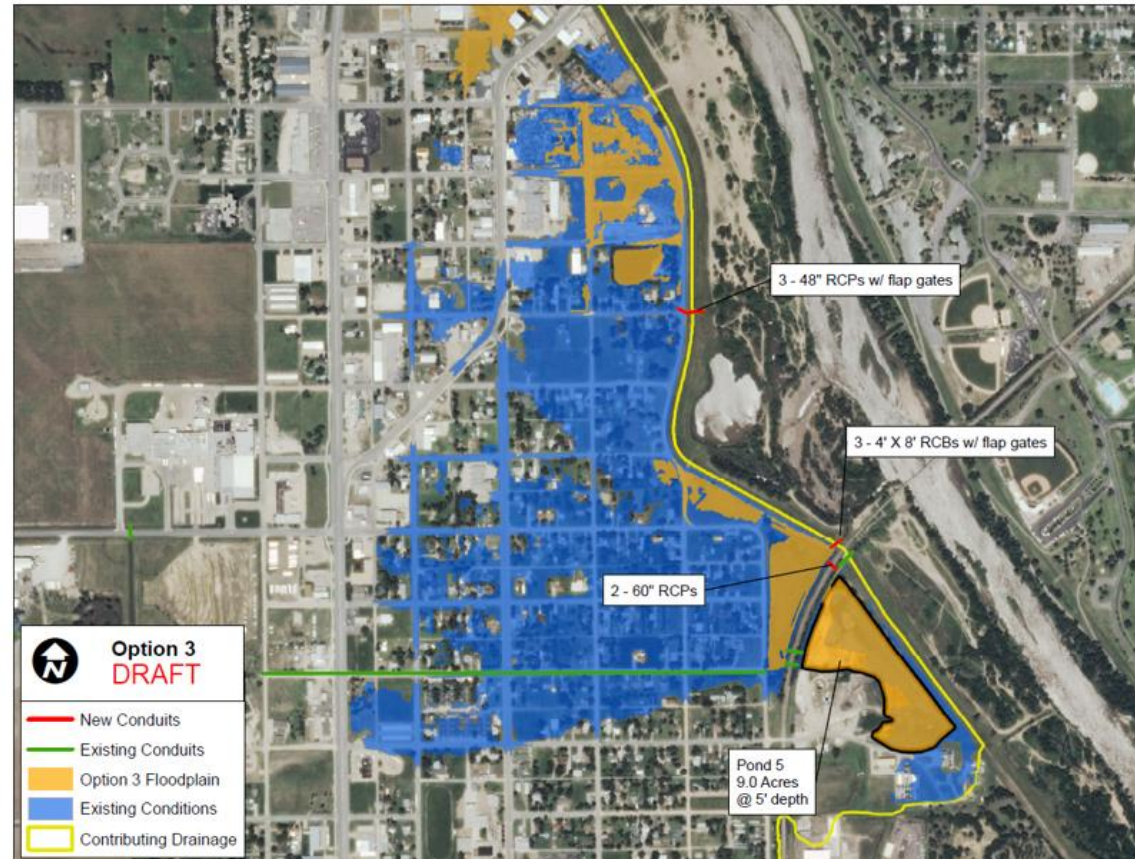Department of Agriculture
Division of Water Resources

Guidelines:

- We want to identify what help is needed now, so we can plan accordingly.

- The work will be done over the next 1-3 years.

- We can't pay for "the thing" itself (e.g., the installation of a new culvert or retention basin), but **we can help you move a project forward by developing technical information**.

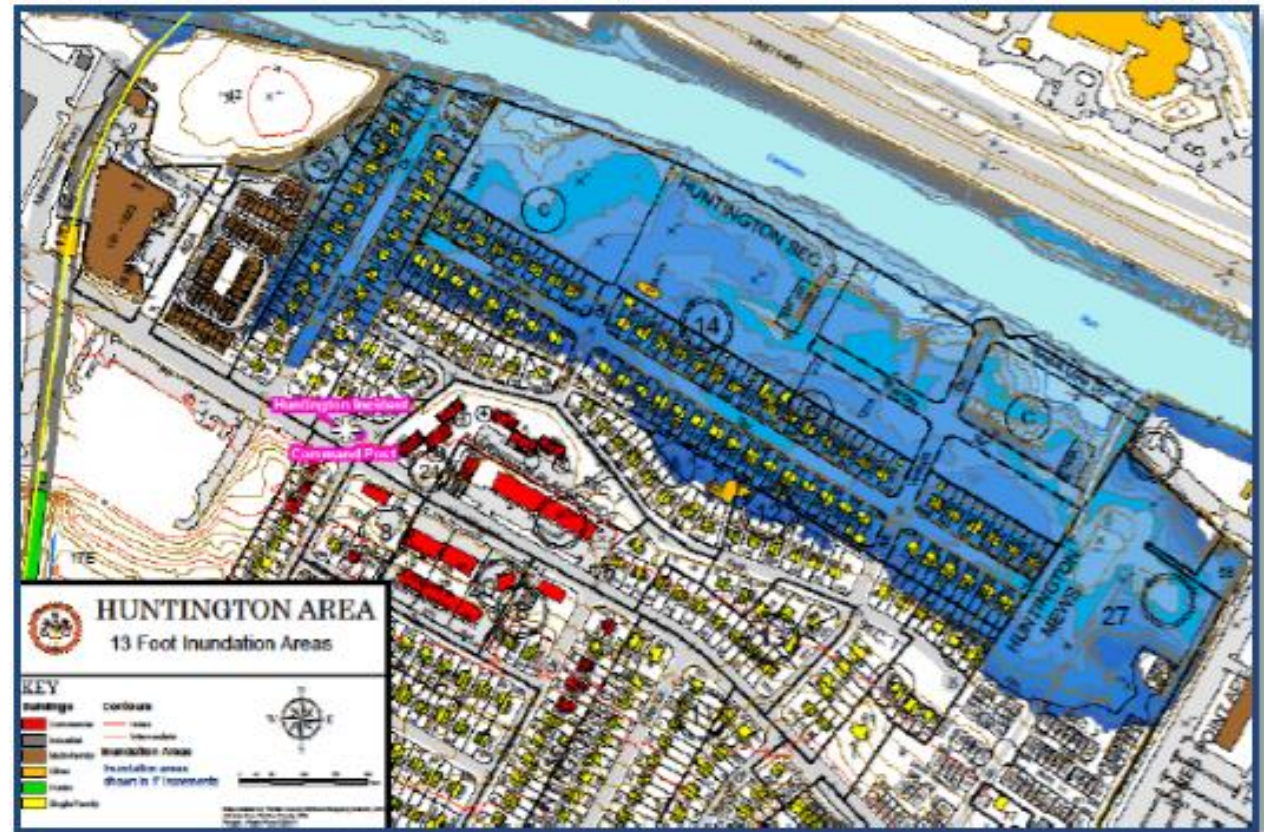- Your community must be invested in moving a project forward.

Some Ways We Can Help:

- Provide risk assessments for structures in your community

- Use engineering analysis to show you what types of projects could reduce flooding impacts.


3 - 48" RCPs w/ flap gates

3 - 4' X 8' RCBs w/ flap gates

2 - 60" RCPs

Pond 5
9.0 Acres
@ 5' depth

Option 3
DRAFT

New Conduits
Existing Conduits
Option 3 Floodplain
Existing Conditions
Contributing Drainage

Some Ways We Can Help:

- Assist with the Benefit-Cost Analysis if you are putting together a grant application for a project.

- Support participation in the Community Rating System (CRS) Program.

HUNTINGTON AREA
13 Foot Inundation Areas

25

![Kansas Department of Agriculture, Division of Water Resources logo]

Some Ways We Can Help:

- Provide training for staff on how to use flood risk products.

- Support Education and Outreach
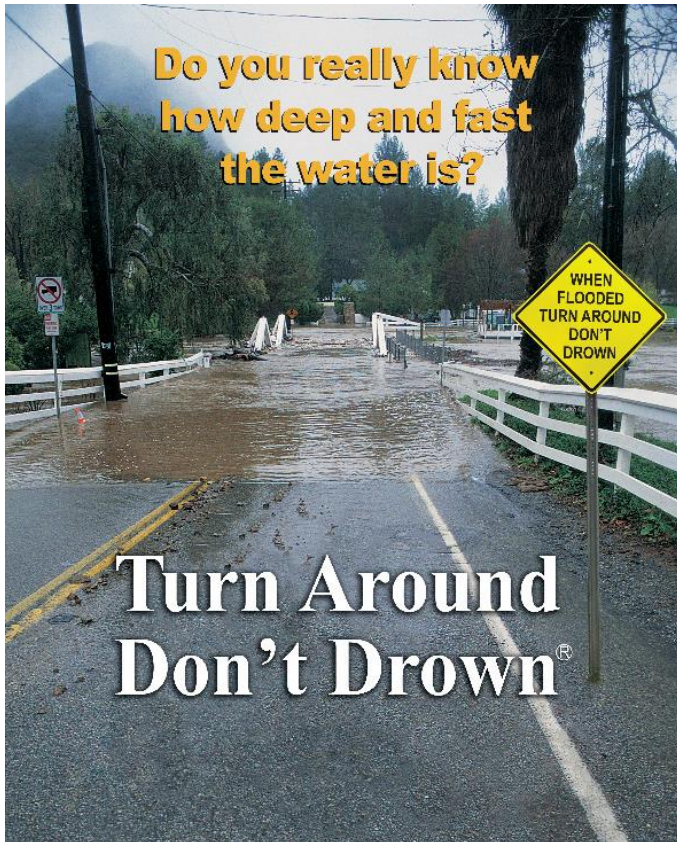
Any Ideas?

Review of the Work Ahead and How We Propose Doing It

To Note

A lot of our work is technical and it's likely that not everyone in the (virtual) room is an engineer.

That's OK!

Kansas
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Our Next Steps:

1. Generate early flood risk data with Base Level Engineering (BLE)

2. Gather additional data from you that will inform us of mapping needs and assist us in our analysis for any new floodplain maps

   - We will ask for this during a future Discovery meeting with you

3. Complete data development for specific areas of watershed as part of future regulatory updates

Throughout this work, we will share the emerging picture of flood risk with you to get your feedback.

Base Level Engineering: What is it?

BLE is an engineering approach that provides an initial (or "base" line) understanding of flood hazards, providing enough information for us to draft initial floodplains.

FLOODPLAIN: On the maps we create, the floodplains, which are areas with high flood risk – where a flood has a 1-percent chance of happening each year.
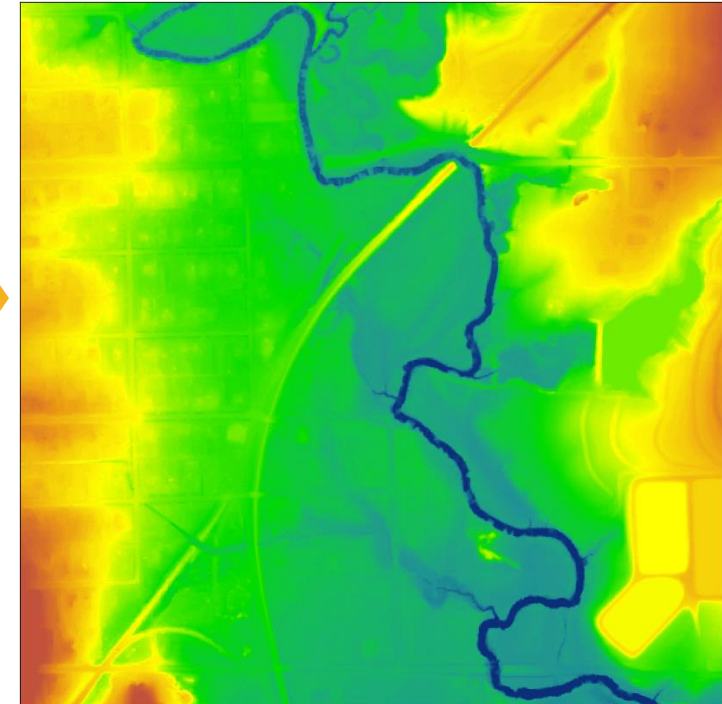
We Use LIDAR in our Base Level Engineering

Some of your current maps are based on a 10-meter Digital Elevation Model. Updated LiDAR Topography will be used in the new modeling.
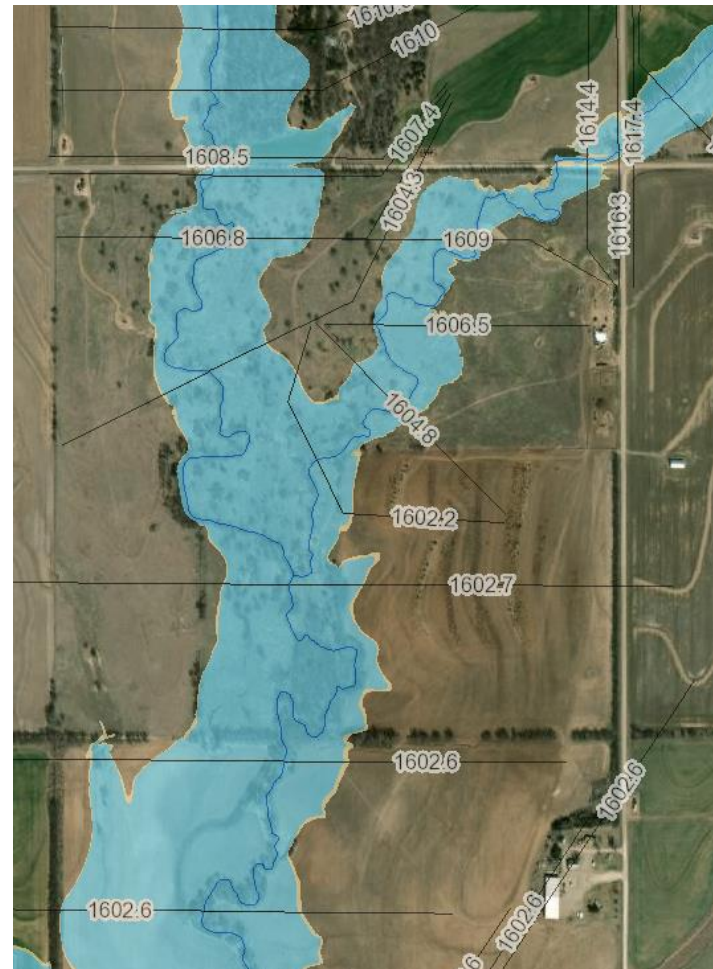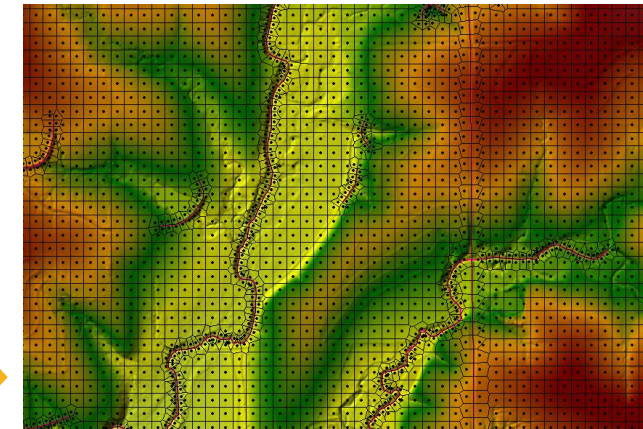
10m DEM
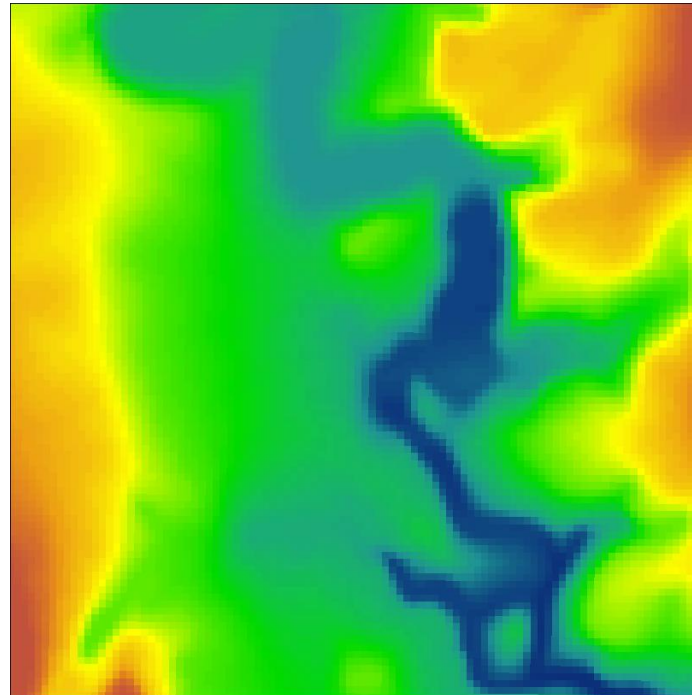
LiDAR

Bare-Earth

We Use 2D Hydraulic Modeling in our Base Level Engineering

Your current maps are done with one-dimensional (1D) modeling. Two-dimensional (2D) modeling will be used for the new modeling.
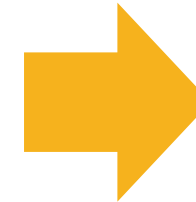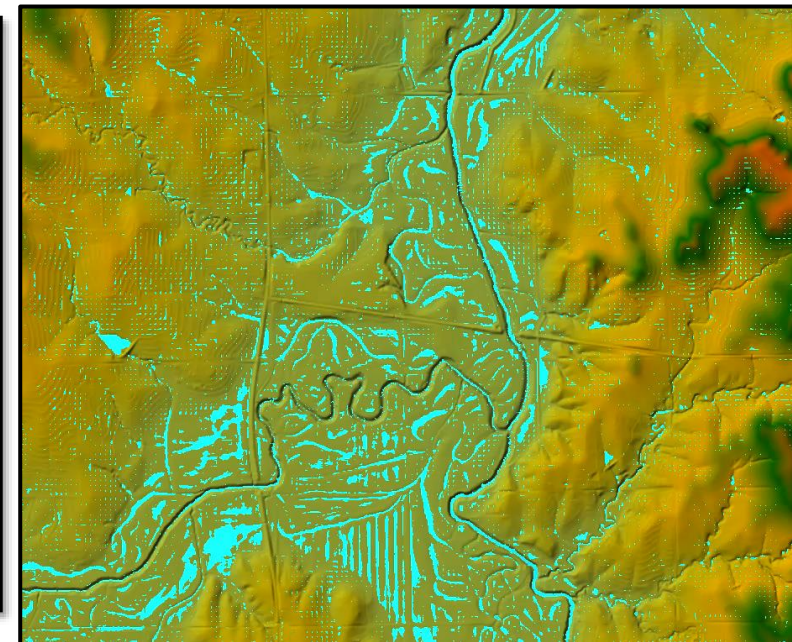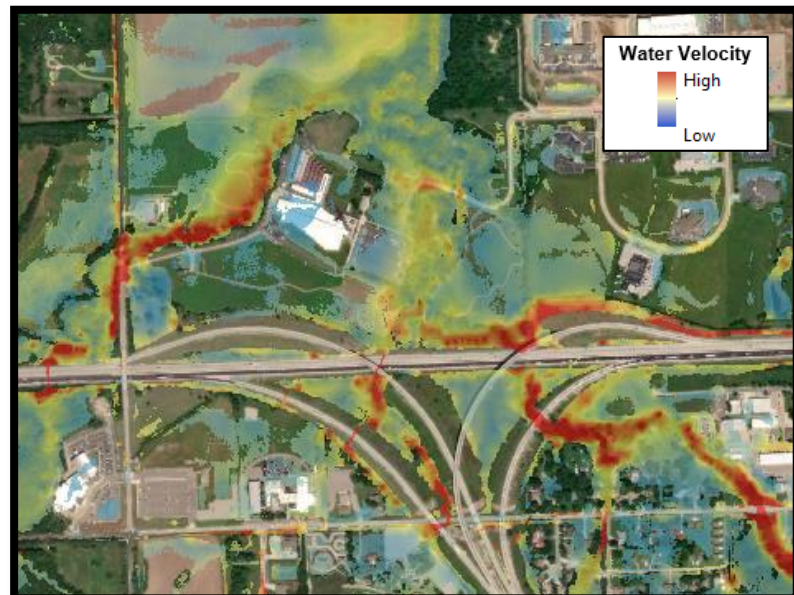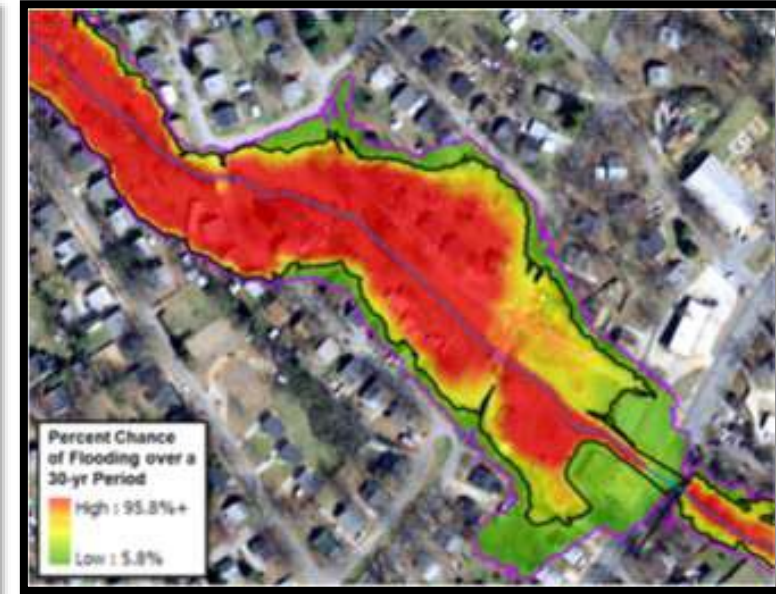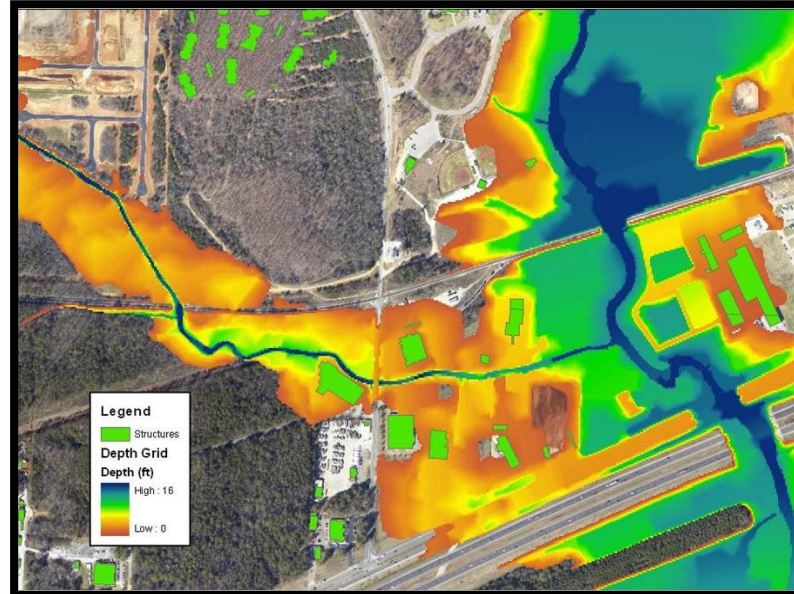

1-D   2-D

More precise data and modeling methods gives you more information about flood risk

Key Takeaways for BLE

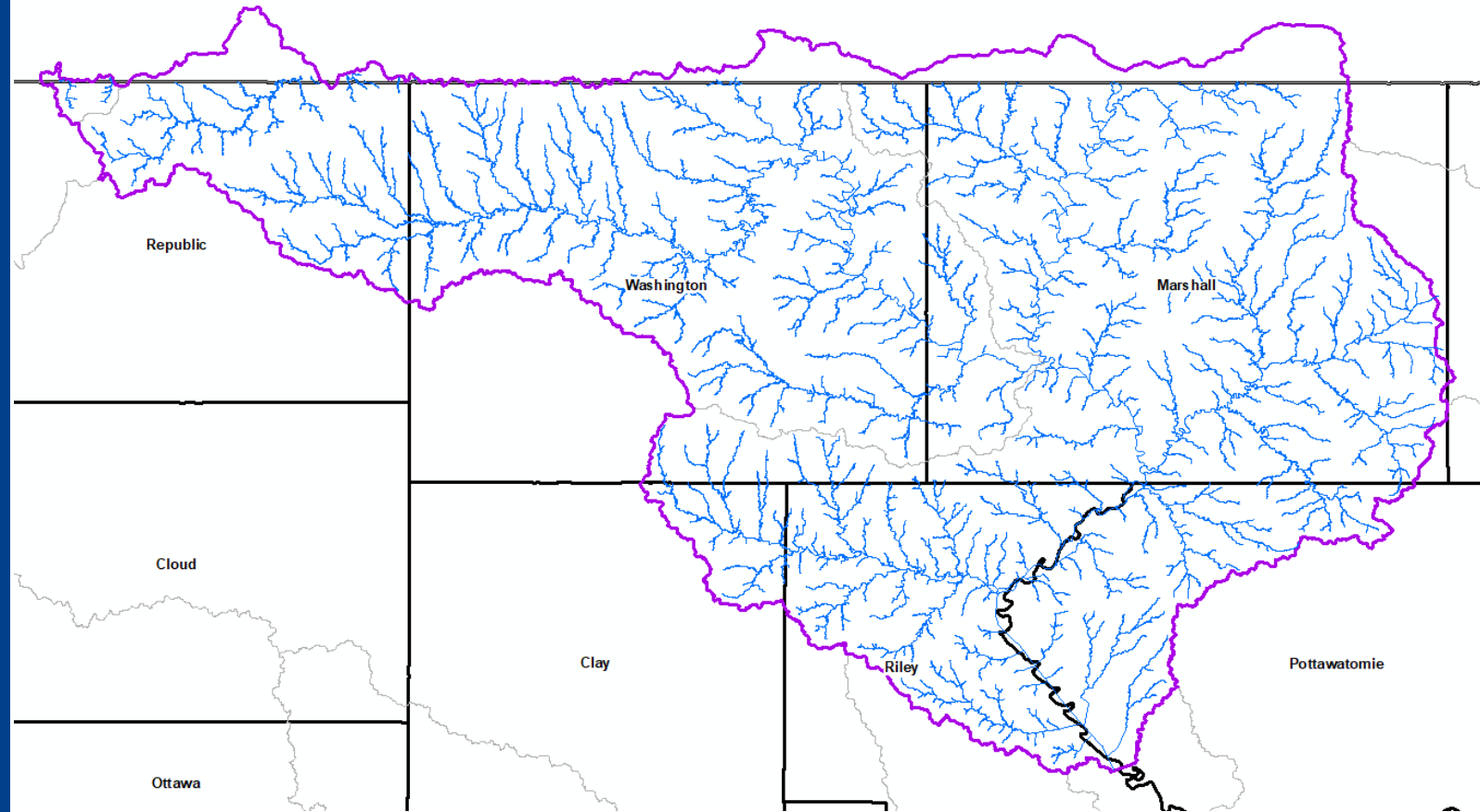**1** Uses highly advanced engineering techniques

2 Provides early insight into community flood risk

3 It's an important step in our partnership to get the data right

We will generate BLE floodplains for this area:

The BLUE lines show the streams we plan to analyze

What Happens During Data Development

- We take additional information gathered and enhance the engineering analysis.
- We develop your regulatory draft floodplain maps.
  - Also known as your Flood Insurance Rate Map (FIRM)
- We develop a Flood Insurance Study.
  - This is a compilation of flood hazard data and analysis for streams, lakes, and hazard areas in your community.
- We also develop flood risk data tools for your community to use in its planning.

FREE DATA!!!

Kansas Department of Agriculture
Division of Water Resources

Levees

Marysville Levee System

- FEMA Accredited

- Current FIRM shows protection on interior side of levee

Frankfort Levee System

- FEMA Accredited, but doesn't comply with Section 65.10 of the NFIP requirements

- Current FIRM secludes area on interior side of levee

- Funding expected in 2022 to conduct detailed analysis of levee system and evaluate mapping options

Blue Rapids Levee System

- FEMA Accredited, but doesn't comply with Section 65.10 of the NFIP requirements

- Current FIRM secludes area on interior side of levee

- USACE Owned

Next Steps and Your Role

Project Timeline

Kick-off Meeting and Initial Community Feedback:
[TODAY!]

Discovery Meeting:
[~ Feb 2021]

- *Provide feedback on mapping needs?*
- *What flood data do you have available?*
- *Revisit flood risk reduction steps you are considering and how we can help!*

Data Development Work:

- *Pottawatomie County (anticipated for 2022)*
- *Republic County (anticipated for 2023)*
- *City of Frankfort (anticipated for 2022)*
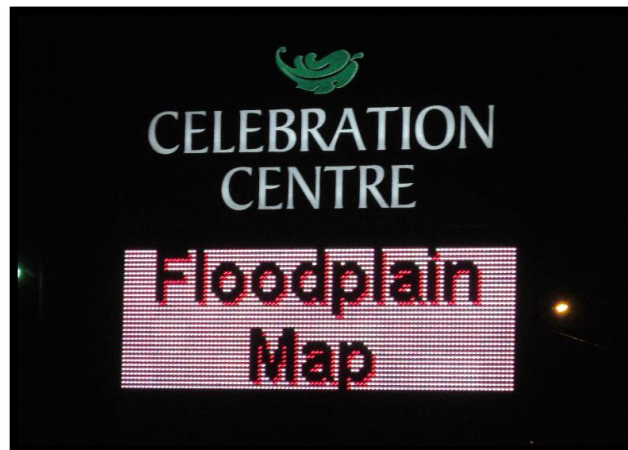- *Other Counties TBD Based on Needs*

Project Timeline, continued (following Data Development)

Your review and feedback on the draft maps

Once **feedback is received,** there is a public review of the draft maps

Preliminary Map Products

Post-Preliminary Processing

CELEBRATION CENTRE

Floodplain Map

Department of Agriculture
Division of Water Resources

What Should You Do Next?

Initial Feedback on Flooding

- Provide locations of known flooding issues on the web map.

- If there are others in your community who you think we should talk to about historical flooding, please let us know.

Project Kickoff Survey

You will receive this in a follow-up email, please fill out and return.

Consider Flood Risk Reduction Projects

If you have any additional needs or concerns, please let us know! If possible, we'd like to help.

Key Takeaways

Floodplain Mapping Projects take time

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

While we are working in your community, we also want to help you with your work to reduce flood risk

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

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We Will Keep You Informed:

Project updates will come by email

- Minimum of quarterly

- When important milestones are reached

- When action is necessary (reminders)

Future Meetings:

- As Part of this BLE Project

  - Discovery

- As Part of Data Development Project *(Mapping Update)*

  - Flood Risk Review

  - Public Open House (for you and your residents)

  - Post-Preliminary Consultation Coordination Officer meeting (for community officials who need to know the regulatory adoption steps for the map)

  - Others, as needed

Overview of Watershed
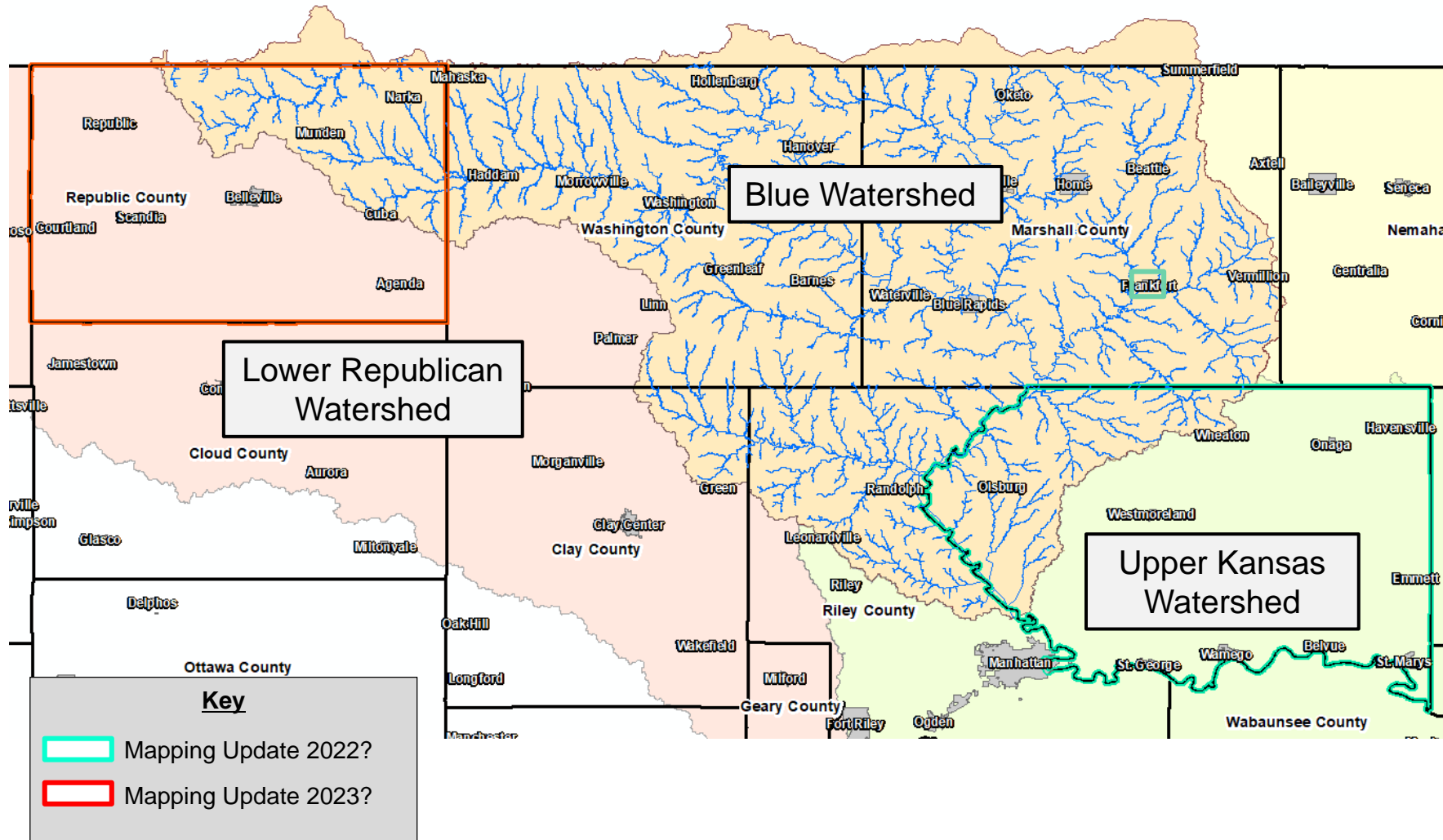
Pottawatomie County-

- Mapping Update for areas outside of recent PMR Anticipated for 2022

Republic County-

- Mapping Update Anticipated for 2023

Marshall County-

- Mapping Update for Frankfort Anticipated for 2022

Other Counties-

- TBD Based on Needs

Resources

Online Project Information

Project Website

- Scoping Maps, Project Timeline, Meeting Presentations, Newsletters, Technical Reports, Web Review Map

- https://www.agriculture.ks.gov/divisions-programs/dwr/floodplain/mapping/mapping-projects/lists/mapping-projects/

Web Review Map

- Provide comments on areas impacted by past floods, community needs, etc.

- Review of BLE data, once available

- This link will not be public facing until the project has been through Data Development

Story Maps

- Project Info

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

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

BFE Portal

Kansas
Department of Agriculture
Division of Water Resources

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Regional Project Officer

Any Questions?

Interactive Map Review and Discussion

Web Map Link: https://gis2.kda.ks.gov/gis/blue/