



FEMA


wood.

Lower Middle Arkansas Custom Watershed

*Floodplain Mapping Project
Kickoff Meeting*

October 27, 2020

Please enter in the chat what you are most looking forward to in 2021 while we are waiting!



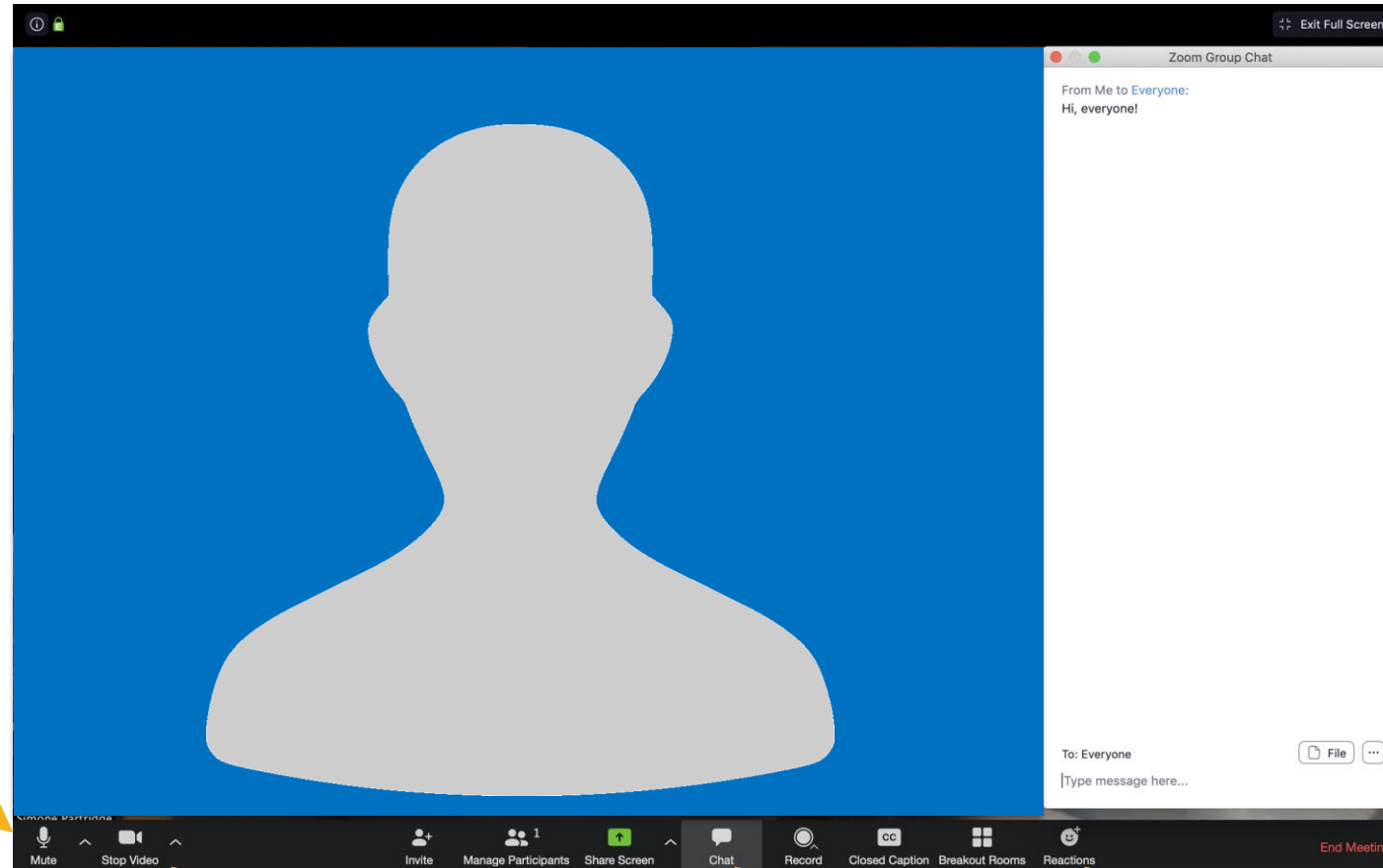
***Your engagement
in this process is
important to the
success of this
project, so thank
you for taking the
time to be here
today!***



**THANK
YOU**

Zoom Features

**Mute /
Unmute**



Start your Video

**Use the Chat
Feature**

Reactions



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
Project Manager



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 Lower Middle Arkansas Custom Watershed needs to be updated.

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***

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



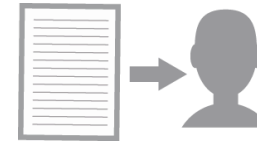
***To Identify
Flood Risk
& the Need
for
Insurance***



***To Establish
Rates for
Flood
Insurance***



***To
Determine
Land Use &
Update
Ordinances***



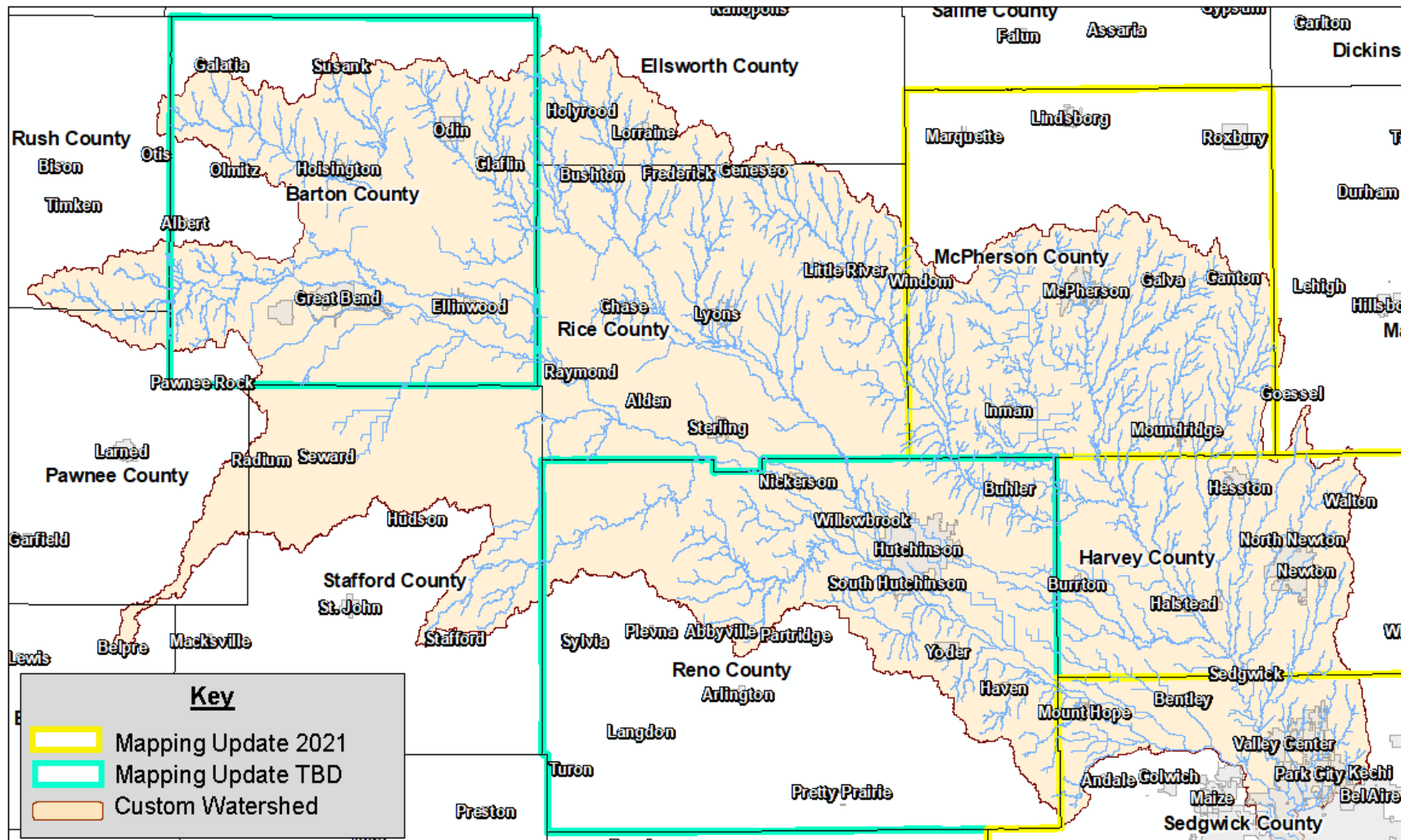
***To Inform
Engineers
and
Developers***



***To Equip
Emergency
Managers***

Overview of Watershed

Lower Middle Arkansas Custom Watershed



Harvey County-

- Update Planned for 2021

McPherson County-

- Update Planned for 2021

Sedgwick County-

- Targeted Update for certain streams of interest
- Planned for 2021

Reno County-

- Targeted Update for certain streams of interest.

- Date TBD

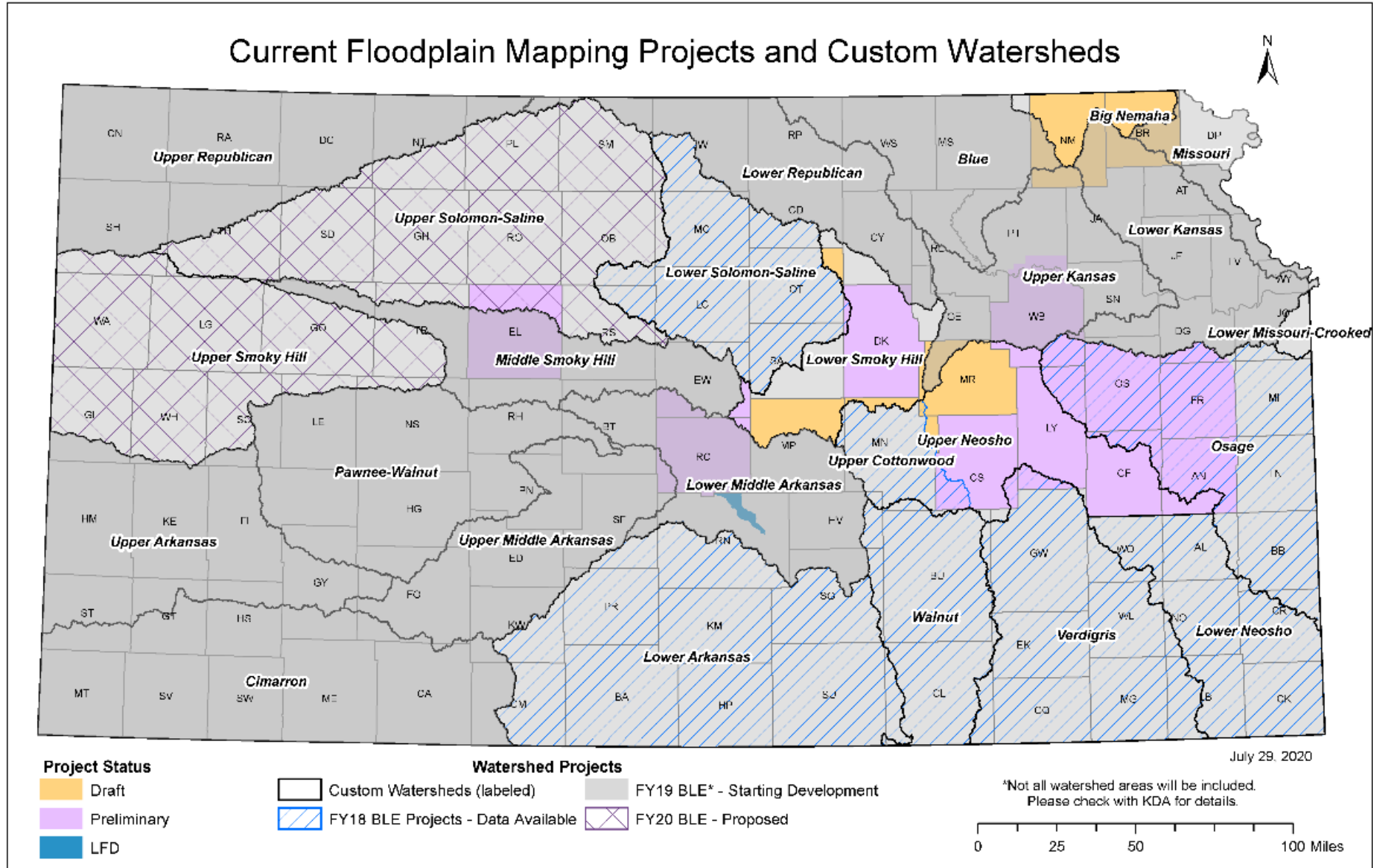
Barton County-

- Update for areas not in recent map update
- Date TBD

Other Counties-

- TBD

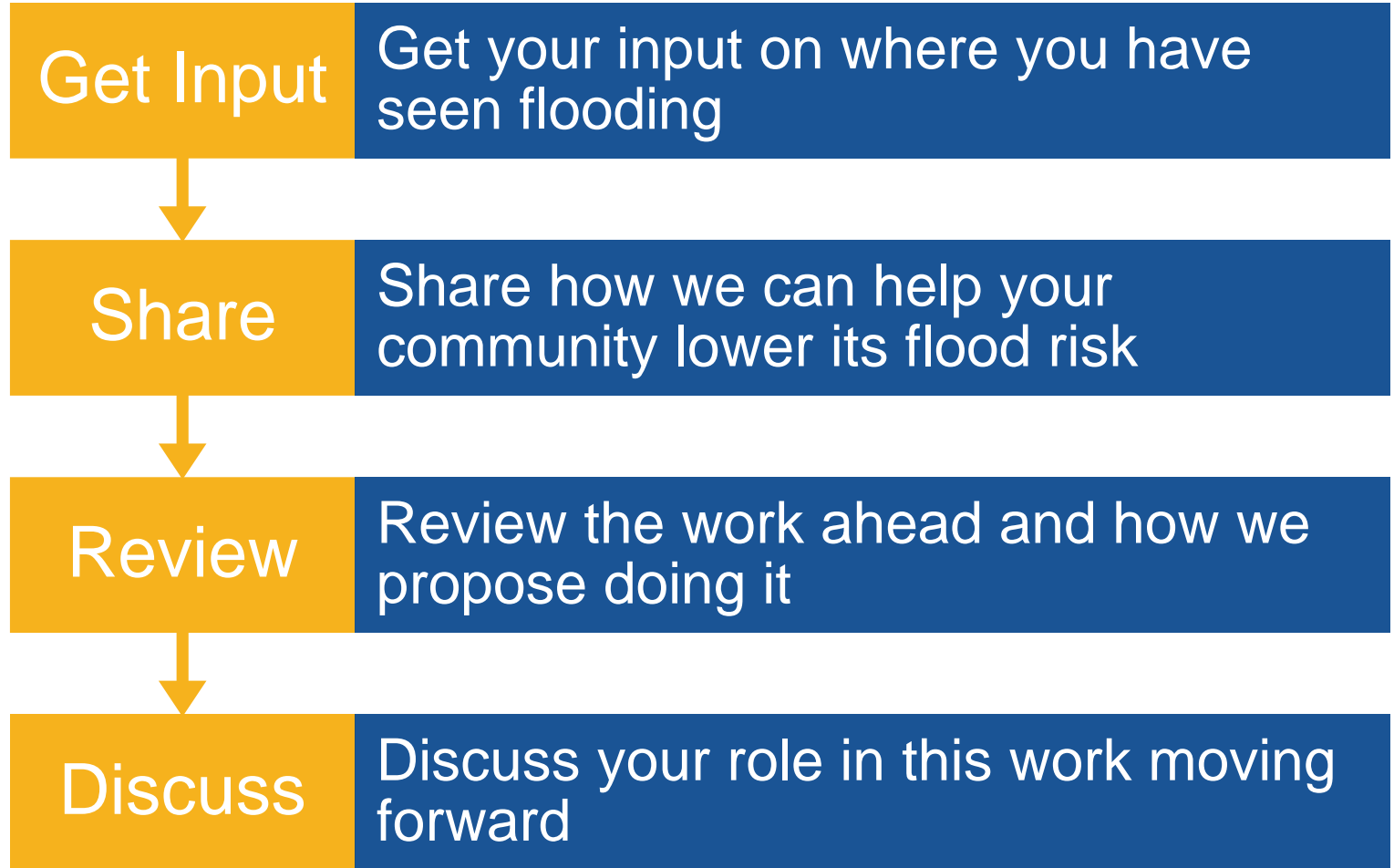
We are doing this work across Kansas...



Today's Goals



Today's Goals





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?***



***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?



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



Introduction to the Web Map Viewer

Web Map Link:

http://gis2.kda.ks.gov/gis/lower_middle_ark/

How We Can Help

“Mitigation Technical Assistance”



***We are asking
about local
flooding 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.

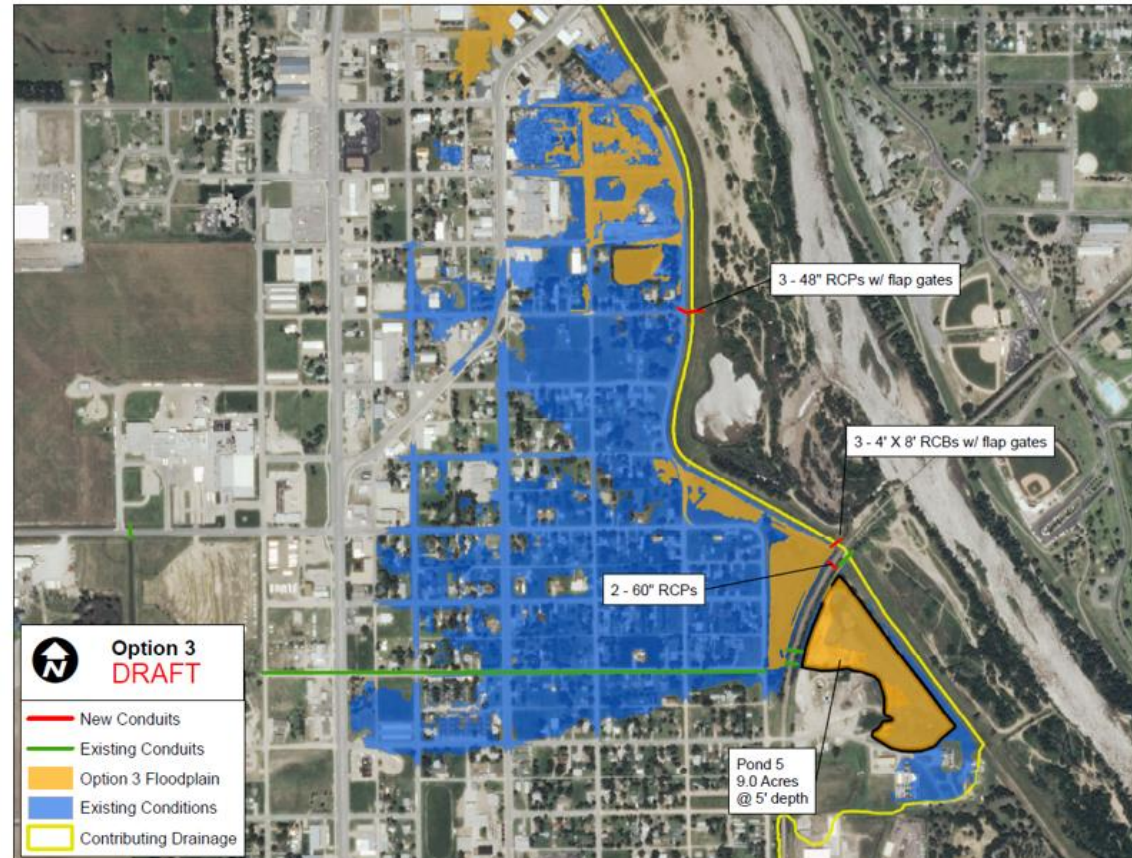


Guidelines:

- 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:

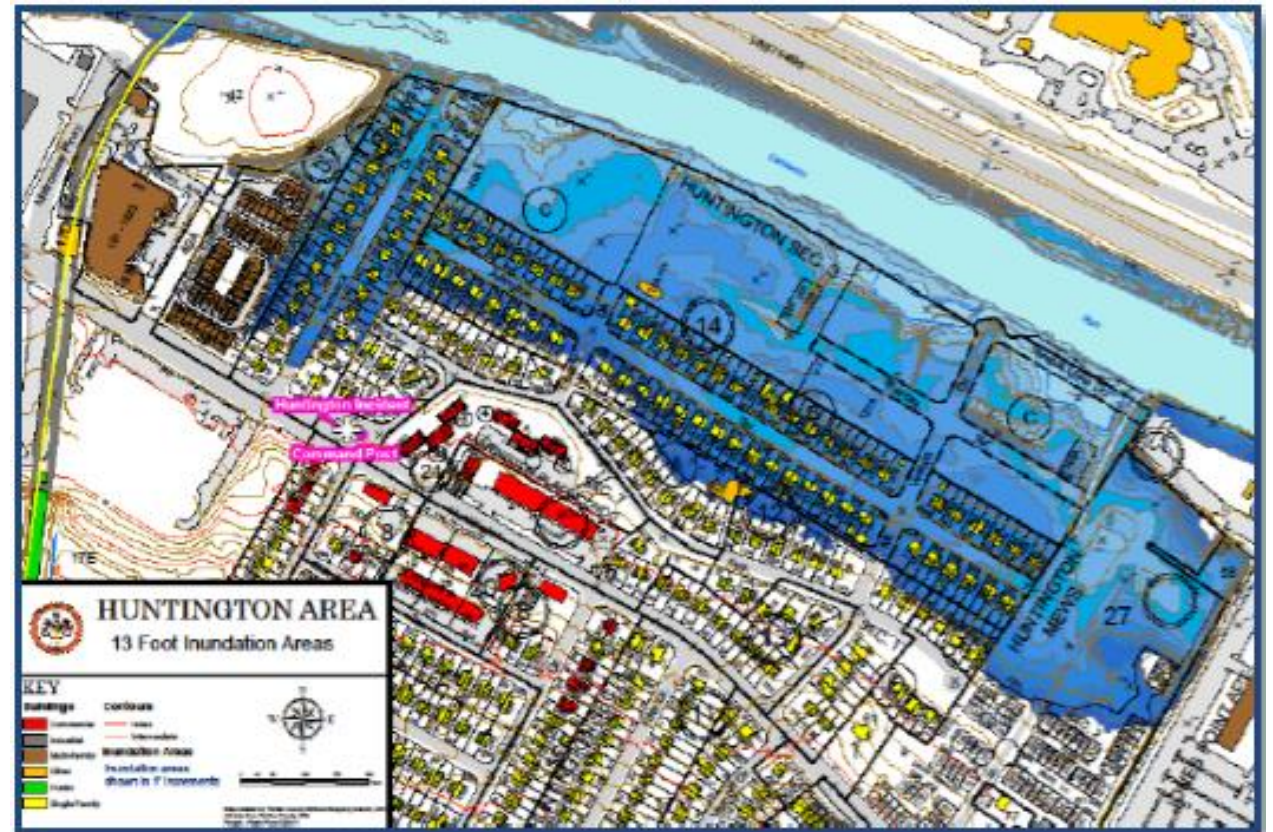
- Provide risk assessments for structures in your community
- Use engineering analysis to show you what types of projects could reduce flooding impacts.





Some Ways We Can Help:

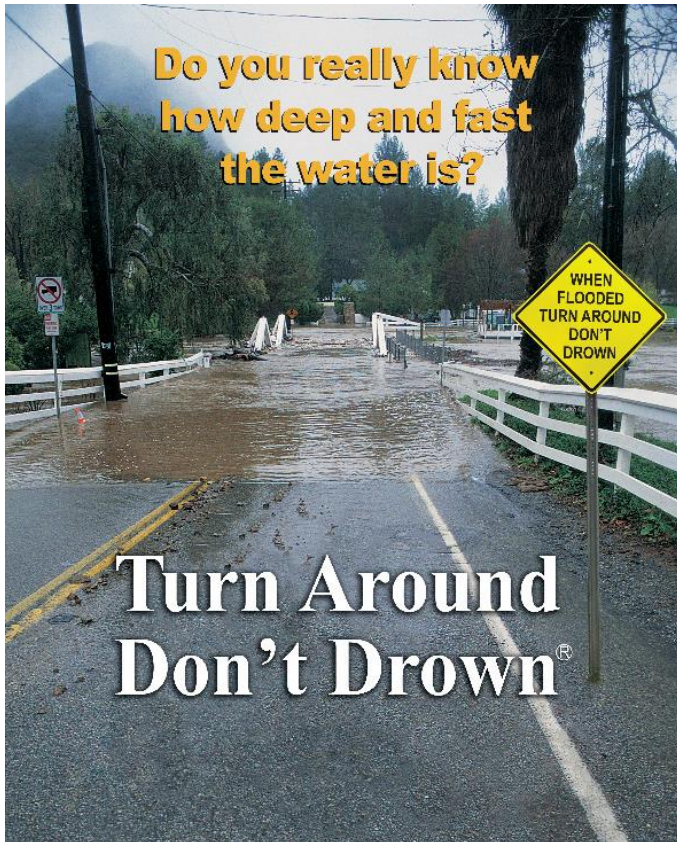
- Assist with the Benefit-Cost Analysis if you are putting together a grant application for a project.
- Support participation in the Community Rating System (CRS) Program.





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!



Our Next Steps:

1. Generate early flood risk data with Base Level Engineering (BLE)
2. Gather additional data from you that will inform our analysis for the new floodplain map
 - 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.

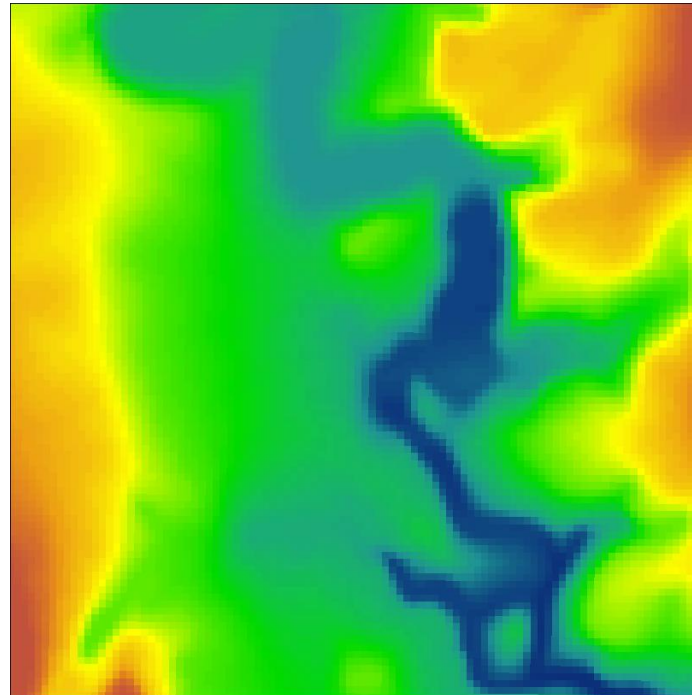
FLOODPLAIN: On the maps we create, the floodplains, which are areas with high flood risk – where a flood has a 1-percent chance of happening each year.



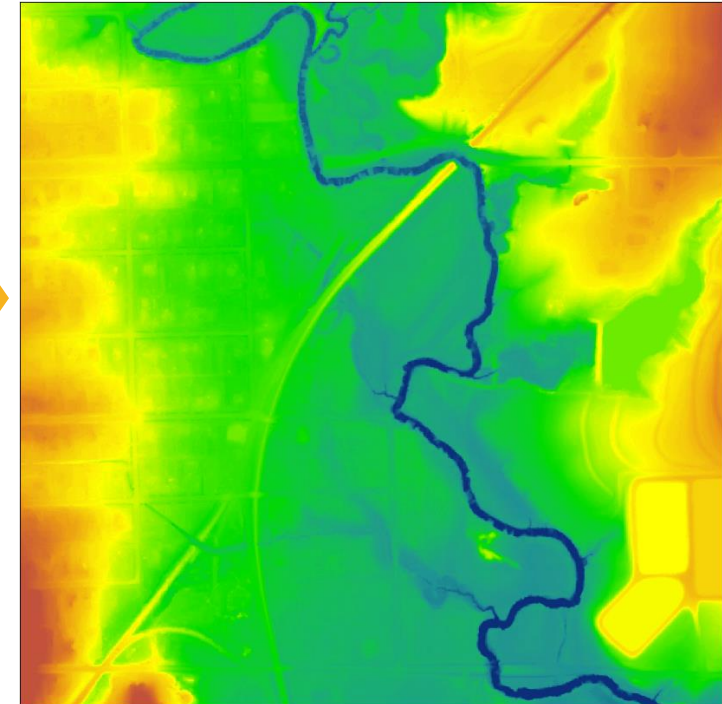
***We Use LIDAR
in our Base
Level
Engineering***

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

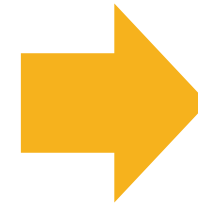
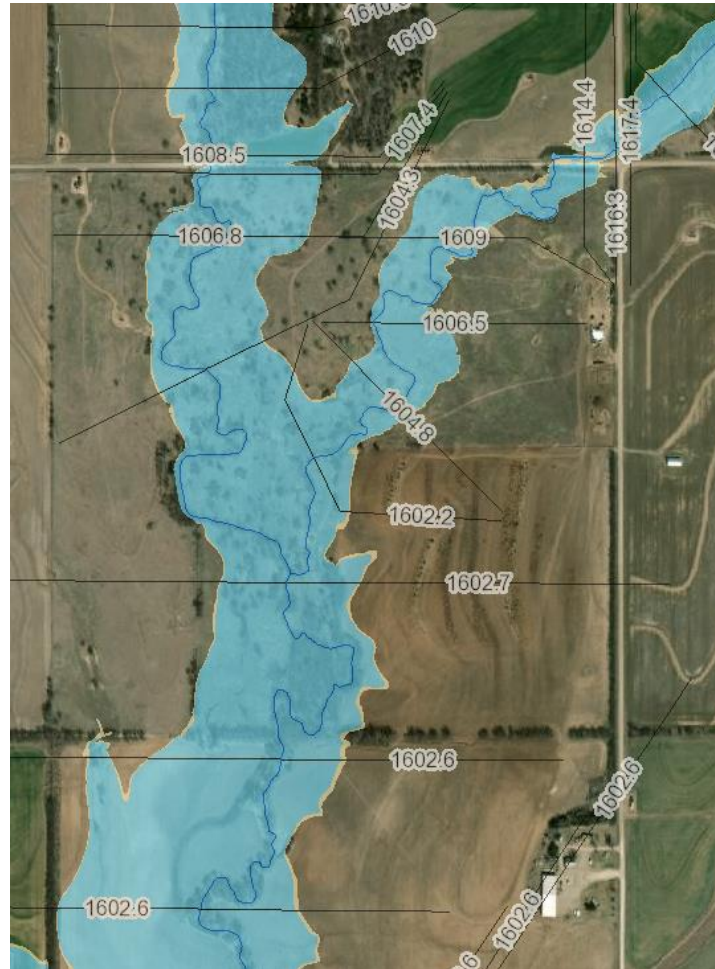


**Bare-Earth*

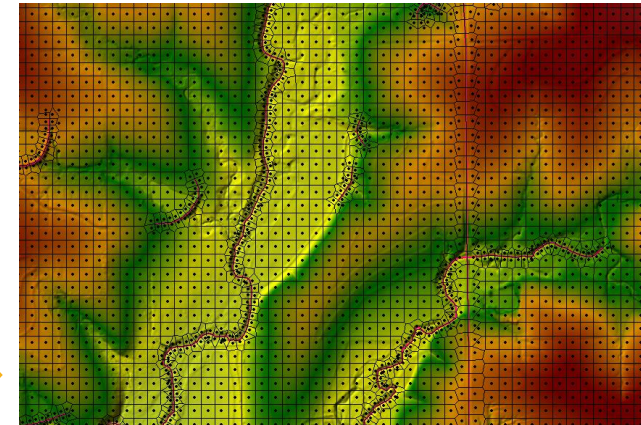


We Use 2D Hydraulic Modeling in our Base Level Engineering

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

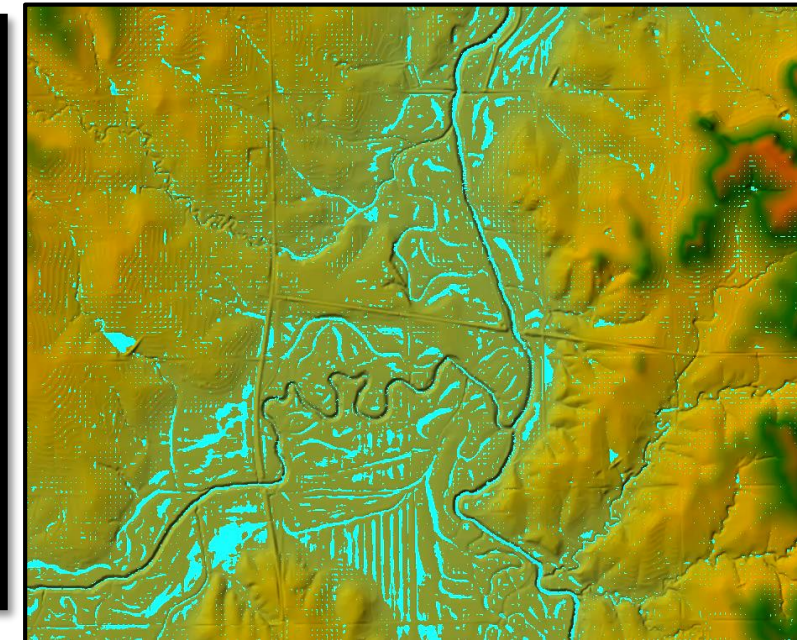
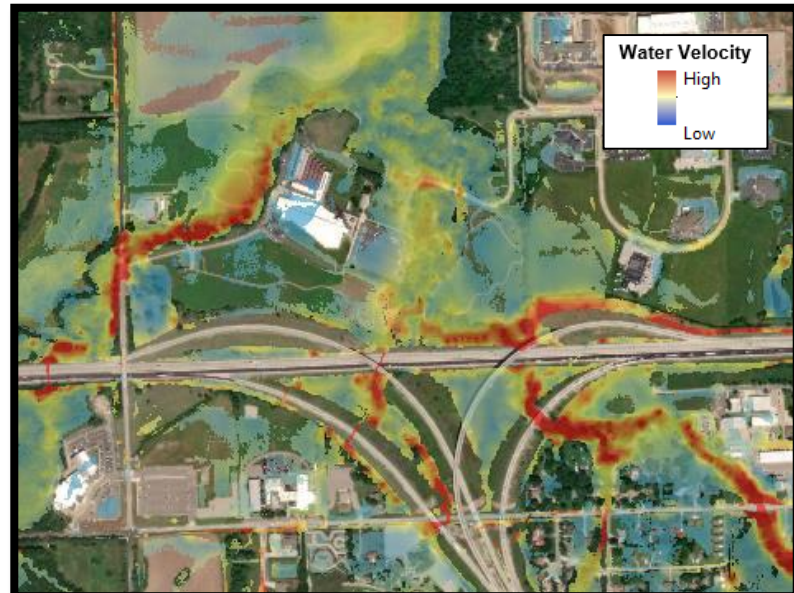
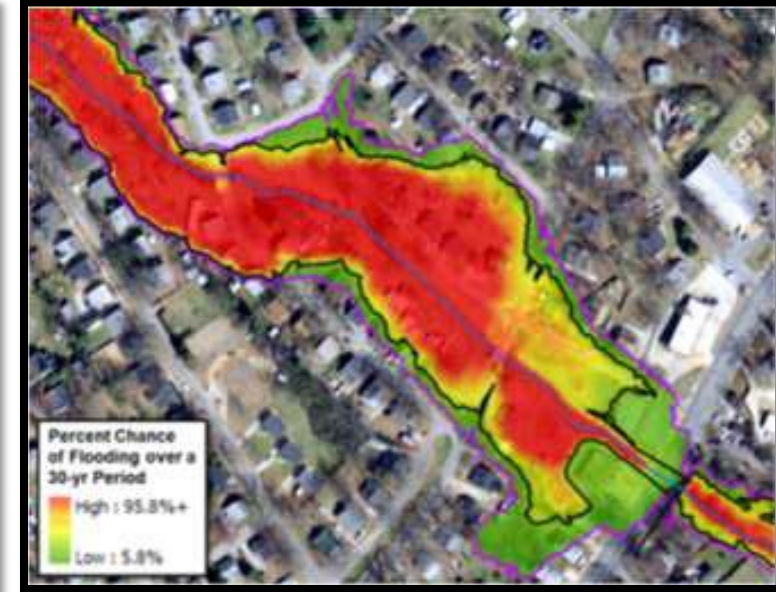
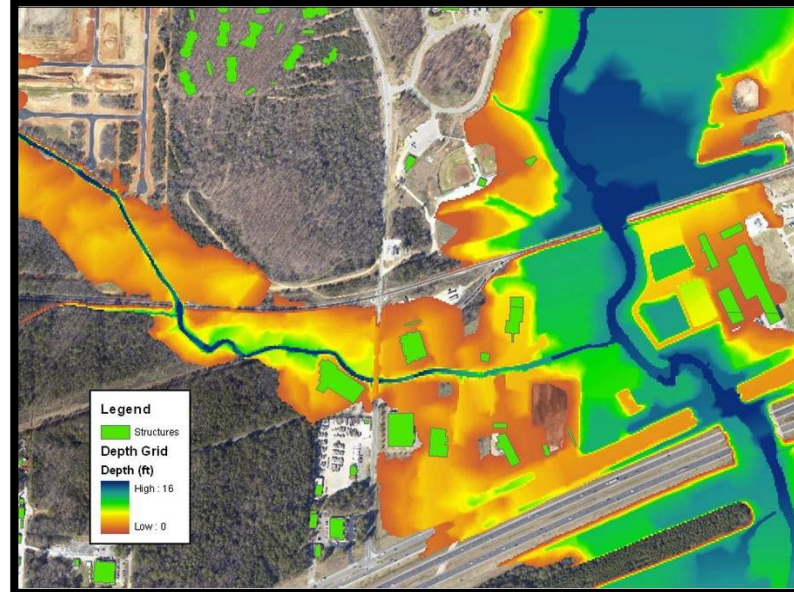


1-D 2-D





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





Key Takeaways for BLE

1

Uses highly advanced engineering techniques

2

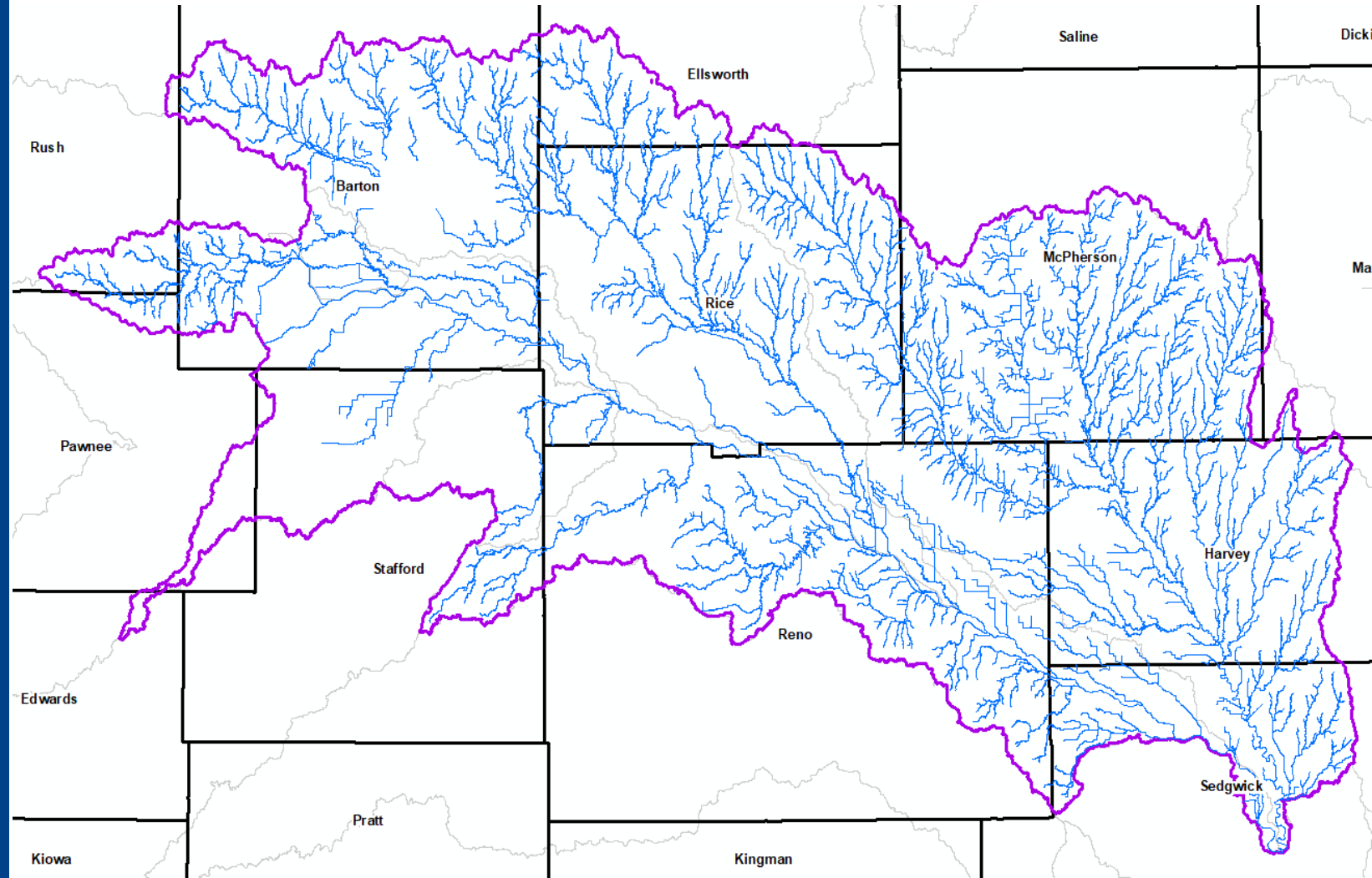
Provides early insight into community flood risk

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 the information we gathered from you, State and Federal agencies, 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!!!

Next Steps and Your Role

Project Timeline

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

Discovery Meeting:
[~ Jan 2021]

- *What data could contribute to making the map as accurate as possible?*
- *Revisit what flood risk reduction steps you are considering and how we can help!*
- *Provide feedback on data development scope and mapping needs.*

Data Development Work:

- *McPherson, Harvey and portions of Sedgwick Counties (2021)*
- *Portions of Barton and Reno Counties (TBD)*
- *Other Counties (TBD)*

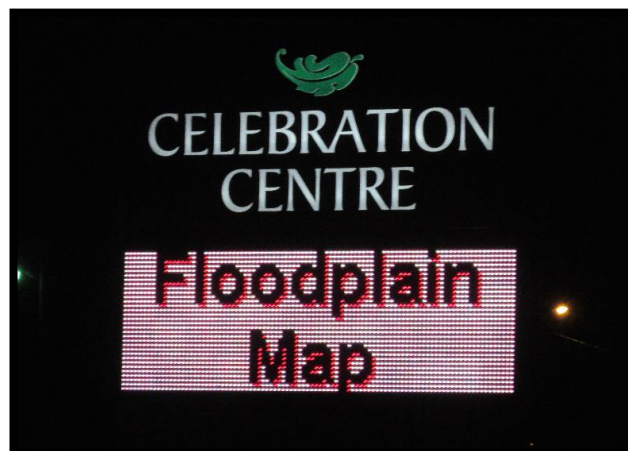
Project Timeline, continued

Your **review and feedback** on the draft maps



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

- We'll need your help in getting the word out to your residents*



Preliminary Map Products

Post-Preliminary Processing





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

This process is going to take time

Your involvement in this process will result in a better map

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***



***We Will Keep
You Informed:***

Project updates will come by email

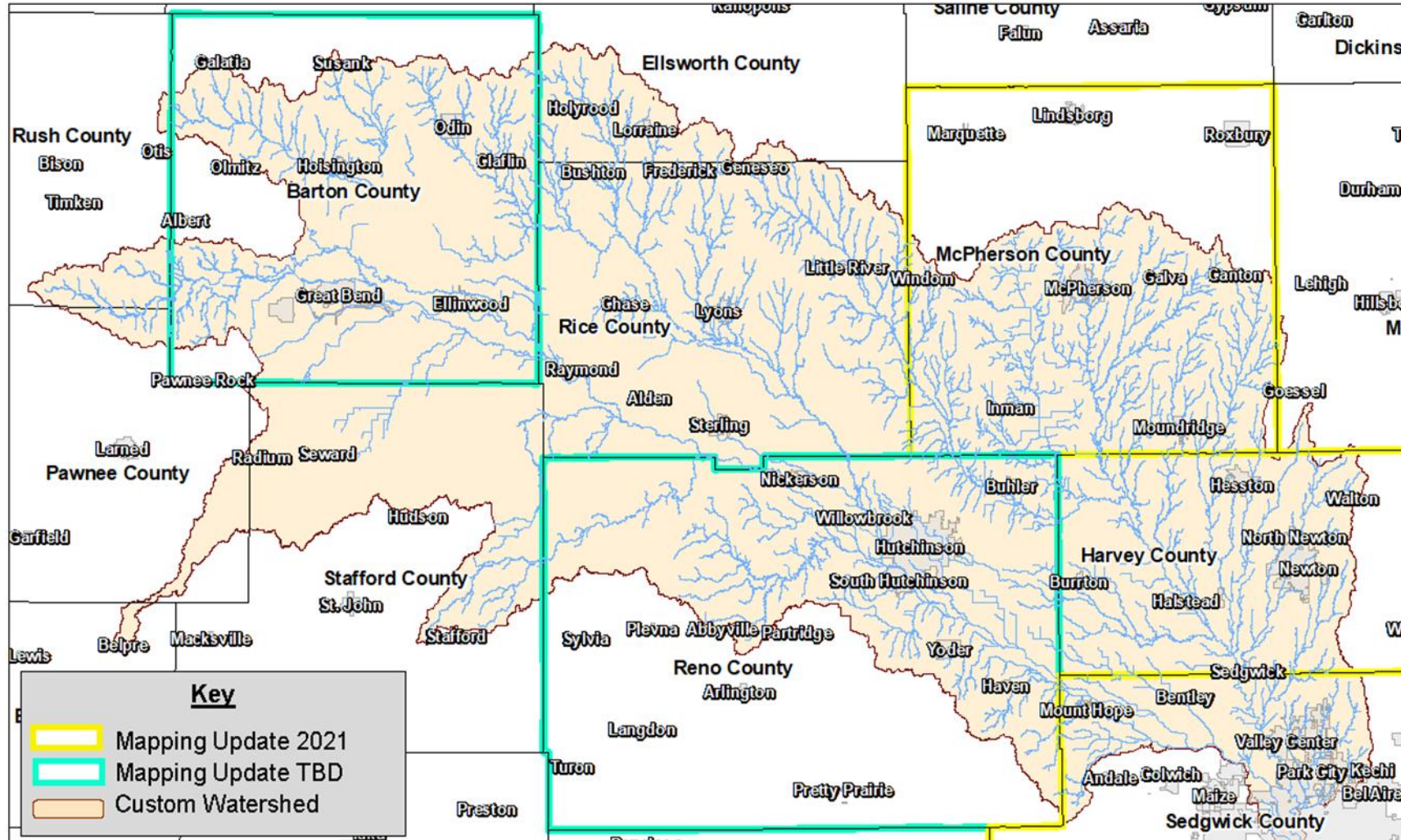
- Minimum of quarterly
- When important milestones are reached
- When action is necessary (reminders)

Future Meetings:

- As Part of this BLE Project
 - Discovery
- As Part of Data Development Project
 - 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

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- Date TBD

Barton County-

- Update for areas not in recent map update
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Other Counties-

- TBD

Any Questions?

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

- 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’



BFE Portal

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

A screenshot of the "Kansas Base Flood Elevation Portal" registration form. The page header includes the Kansas Department of Agriculture logo and the title "Kansas Base Flood Elevation Portal". Below the header are three navigation buttons: "Home", "About", and "Help". The main content area is titled "Portal Registration" and contains a series of input fields for user information: "First Name", "Last Name", "User name", "Title", "Phone", "Email Address", "Address", "City", "Zip", and "State". The "State" field is a dropdown menu currently set to "Kansas". At the bottom right of the form is a yellow "Register" button.

Portal Registration

First Name

Last Name

User name

Title

Phone

Email Address

Address

City

Zip

State

[Register](#)



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Project Manager



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Regional Project Officer

Interactive Map Review
