

Region 10
Lower Colorado-Lavaca
Regional Flood Planning Group

June 21, 2021

Region 10 Lower Colorado-Lavaca RFPG

1. Call to Order

2. Welcome

3. Approval of minutes from the previous meeting

Meeting Minutes
 Region 10 Lower Colorado-Lavaca Flood Planning Group Meeting
 May 17, 2021
 9:00 AM
 Zoom Virtual Meeting

Roll Call:

Voting Member	Interest Category	Present (x) /Absent () Alternate Present (*)
Terry Been	Agricultural interests	X
Phillip Spenrath	Counties	X
Jason Ludwig	Electric generating utilities	X
Kirby Brown	Environmental interests	X
G. Nicholas "Nick" Textor	Flood districts	X
Brandon Klenzendorf	Industries	X
Matt Hollon	Municipalities	X
Frances Acuña	Public	X
Patrick Brzozowski	River authorities	X (joined during item 8)
Ann Yakimovicz	Small business	X
Kacey Cubine Paul	Water districts	X
Hank Smith	Water utilities	X
Kelly Payne	River authorities	X

Non-voting Member	Agency	Present(x)/Absent()/ Alternate Present (*)
Shonda Mace	General Land Office	X
David Galindo	Texas Commission on Environmental Quality	
Lauren Mayes	Texas Department of Agriculture	X (joined during item 8)
Natalie Johnson	Texas Division of Emergency Management	* Alika Valdez
Beth Bendik	Texas Parks and Wildlife Department	X
Allen Nash	Texas State Soil and Water Conservation Board	X
Hayley Gillespie	Texas Water Development Board	X
Ronald G. Fieseler	Region 11 – Guadalupe Liaison	X (joined during item 8)
Mark Vogler	Region 8 – Lower Brazos Liaison	* Brian Fambrough
Cara Tackett	Region 12 – San Antonio Liaison	
Christy Youker	Region 9 – Upper Colorado Liaison	* Chuck Brown

Quorum:

Quorum: **Yes**

Number of voting members or alternates representing voting members present: 12

Number required for quorum per current voting membership of 13: 7

Other Meeting Attendees: **

Matt Nelson, TWDB
 James Bronikowski, TWDB
 Morgan White, TWDB
 Lauren Graber, LCRA
 Annette Keaveny, LCRA
 Juston McMahon, LCRA AV
 Michael Moya, Half Associates, Inc.
 Mike Personett, Half Associates, Inc.

Cindy Engelhardt, Half Associates, Inc.
 Matt Bucchin, Half Associates, Inc.
 Cris Parker, HDR
 Jay Scanlon, Freese and Nichols
 Karen Ford, WaterPR
 Stephen Crawford
 Marie Day
 Kathryn Johansen

Nick Kincaid
Mieko Mahi
Stephen Rockwood

Cory Shockley
Kevin Shunk
Lisa McCracken Mairs

****Meeting attendee names were gathered from those who entered information for joining the Zoom meeting.**

All meeting materials are available for the public at:
www.lowercoloradolavacafood.org/meetings

Agenda:

1. Call to Order

Chair Phillip Spenrath called the meeting to order at 9:02 AM. A roll call of the planning group members was taken to record attendance and a quorum was established prior to calling the meeting to order.

2. Welcome

Chair Phillip Spenrath welcomed members and other attendees to the meeting.

He announced that Chuck Brown would be substituting in for Christy Youker as Region 9 Upper Colorado River Planning Group liaison.

3. Approval of minutes from the previous meeting

The draft meeting minutes were reviewed, and no corrections or additions were made. Kirby Brown moved to approve the minutes, seconded by Ann Yakimovicz. The motion passed by a vote of 12-0.

4. Public comments– limit 3 minutes per person

Chair Phillip Spenrath called for public comments.

Mieko Mahi requested that towns like Hallettsville be prioritized. She voiced concerns about contaminants after a recent rain event. She noted that fresh water is in short supply and she does not want their town to be forgotten.

5. TWDB Update

Hayley Gillespie from the Texas Water Development Board noted that the technical guidelines have been finalized and posted on the TWDB website. TWDB is reviewing RFPG subcontracts, which is moving forward on schedule.

6. Update from RFPG liaisons

Mark Vogler, Region 8 Lower Brazos Liaison, said that Region 8 is currently at same stage of the Regional Planning Group process as is Region 10. They too have selected Halff Associates as technical consultant and public meetings are scheduled for June.

7. Update from the Planning Group Sponsor

Lauren Graber reported that the sponsor, LCRA, has executed the contract with the technical consultant, Halff Associates. She said the next agenda item would be the kickoff presentation. She gave instructions to submit comments and invited all to ask questions and make suggestions.

8. Regional flood planning kick-off presentation and discussion with technical consultant

Mike Personett, Mike Moya, Cindy Englehardt, and Matt Buchin (all Halff Associates, Inc.), Karen Ford (WaterPR), Cris Parker (HDR), and Jay Scanlon (Freese and Nichols) successively presented the technical consultant's presentation entitled: *Lower Colorado – Lavaca Regional Flood Plan: A Texas Initiative*.

RFPG members discussed and asked questions regarding community outreach, public engagement strategies, floodplains, and technical consultant workload.

Chair Spenrath left the meeting at 10:55 AM and Vice Chair Kacey Paul served as the presiding officer for the rest of the meeting.

9. Public comments– limit 3 minutes per person

Vice Chair Kacey Paul called for public comments.

Mieko Mahi inquired about how quantification of low-water bridge crossings (vehicles, pedestrians) was assessed, because it could affect whether or not a project might be built. She expressed frustration that the “public” was being left out of the word “stakeholder,” placing more emphasis on experts. She wanted the term “stakeholder” to be defined and to not be exclusive so as to leave out smaller, rural areas.

10. Consider date and agenda items for next meeting

Vice Chair Kacey Paul opened discussion to consider the date and agenda items for the next meeting. After general discussion, Vice Chair Paul concluded that the next meeting will be held on Monday, June 21, 2021 at 9:00 AM.

Lauren Graber said that in addition to the items included on the technical consultant's outlook calendar for June, an item would also be added at the next meeting for discussion of a possible public engagement subcommittee.

11. Adjourn

Kelly Payne made a motion to adjourn, seconded by Kirby Brown. The motion passed 12-0 and the meeting adjourned at 11:17 AM CDT by Kacey Paul.

*Approved by the Lower Colorado-Lavaca RFPG at a meeting held on **DATE**.*

Matt Hollon, SECRETARY

Phillip Spenrath, CHAIR

Region 10 Lower Colorado-Lavaca RFPG

4. Public comments – limit 3 minutes per person

5. TWDB Update

6. Update from RFPG liaisons

7. Update from the Planning Group Sponsor

Region 10 Lower Colorado-Lavaca RFPG

**8. Presentation and discussion on floodplain management
by Wes Birdwell, Executive Director, Texas Floodplain
Management Association**

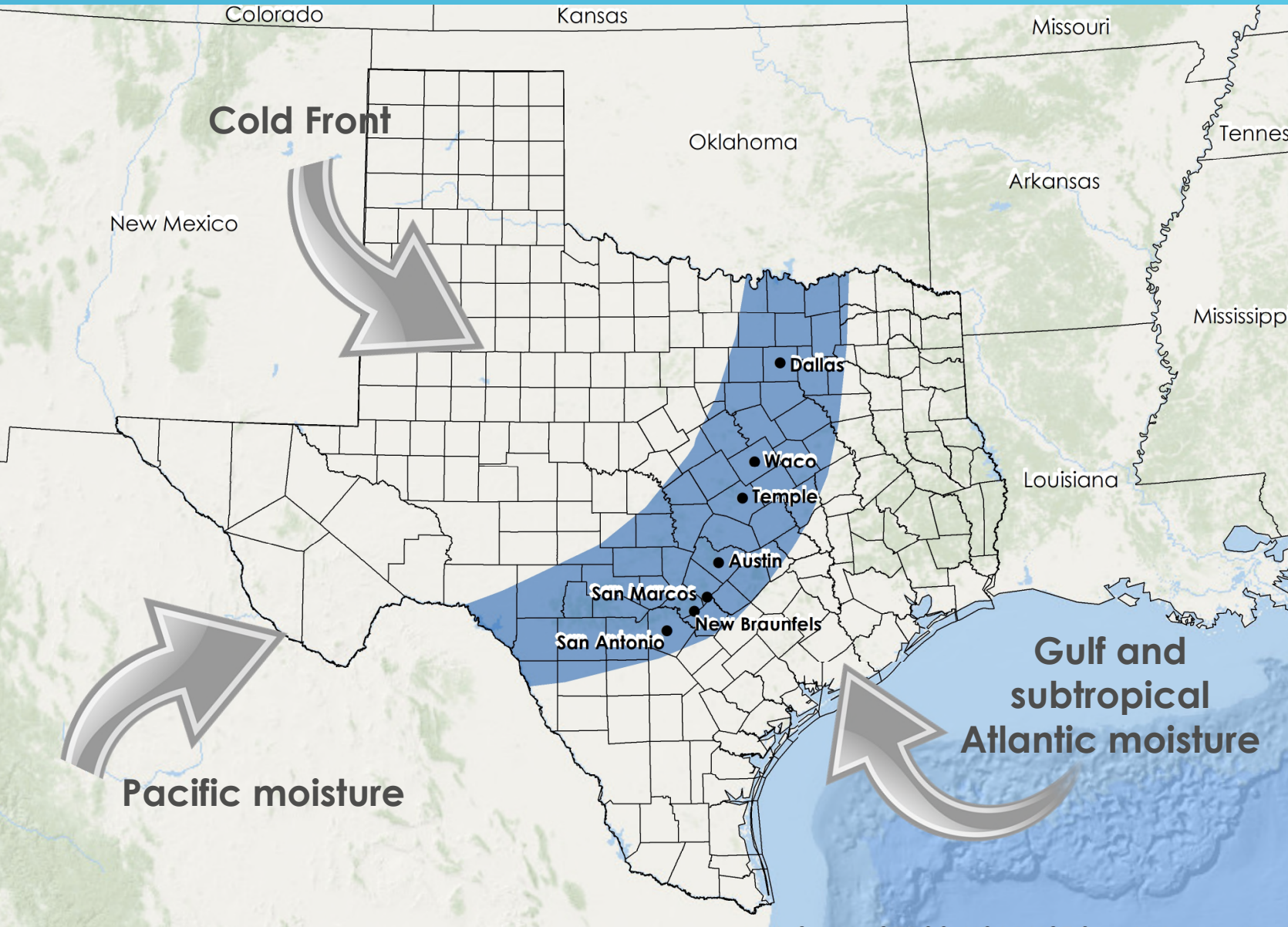


TEXAS FLOODPLAIN MANAGEMENT ASSOCIATION
PRESENTATION TO
THE LOWER COLORADO-LAVACA
REGIONAL FLOOD PLANNING GROUP

Wes Birdwell, PE, CFM
Executive Director, TFMA

June 21, 2021

TEXAS FLOODS!!



▶ Geographically located to be flood-prone

- Anywhere
- Anytime

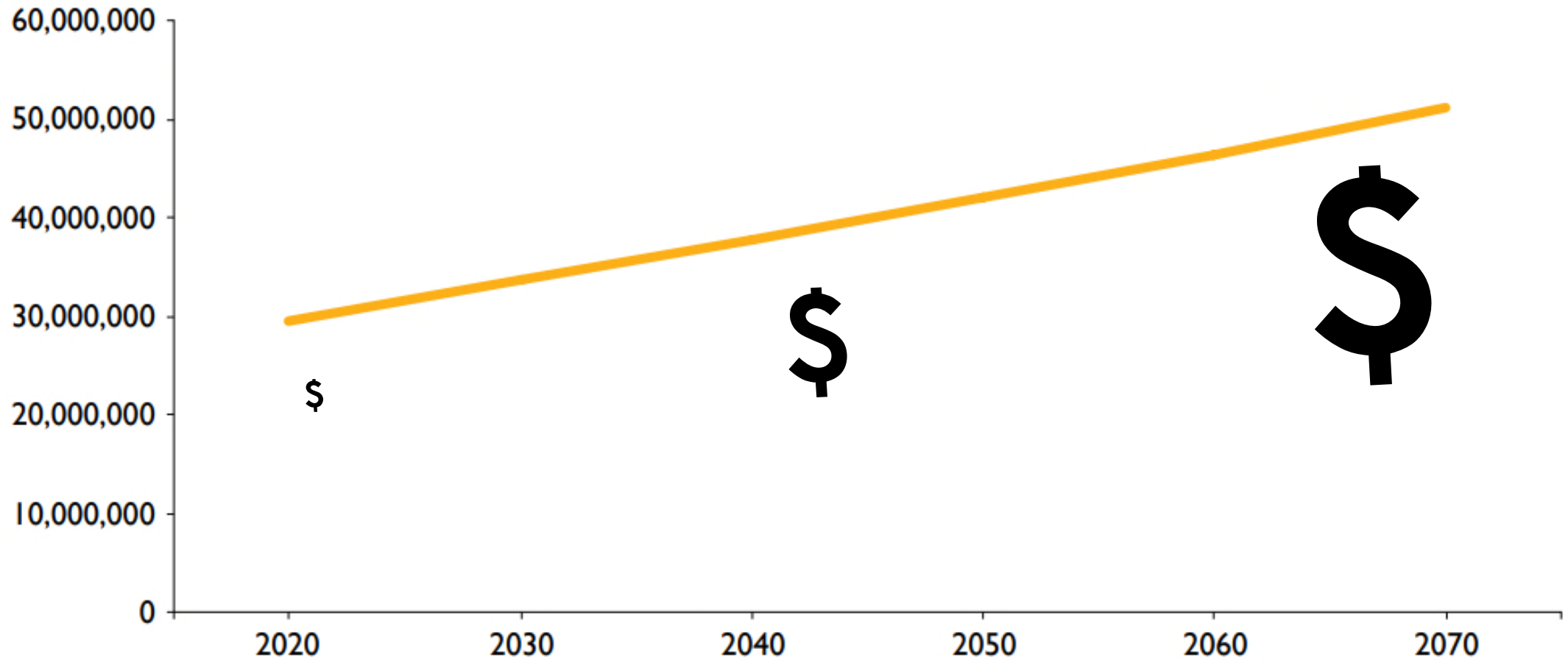
▶ We're #1!!

- Deaths
- Damages

TEXAS INCREASING FLOOD DAMAGES



Figure 5.1 - Projected population in Texas





2 COMMON MISCONCEPTIONS ABOUT FLOODS

- ▶ It was someone's fault
- ▶ There's a magical project that someone is going to build someday that will solve my flooding problem and allow me to keep doing what I'm doing the way I want to do it.



2 COMMON MISCONCEPTIONS ABOUT FLOODS

- ▶ It was someone's fault
- ▶ There's a magical project that someone is going to build someday that will solve my flooding problem and allow me to keep doing what I'm doing the way I want to do it.

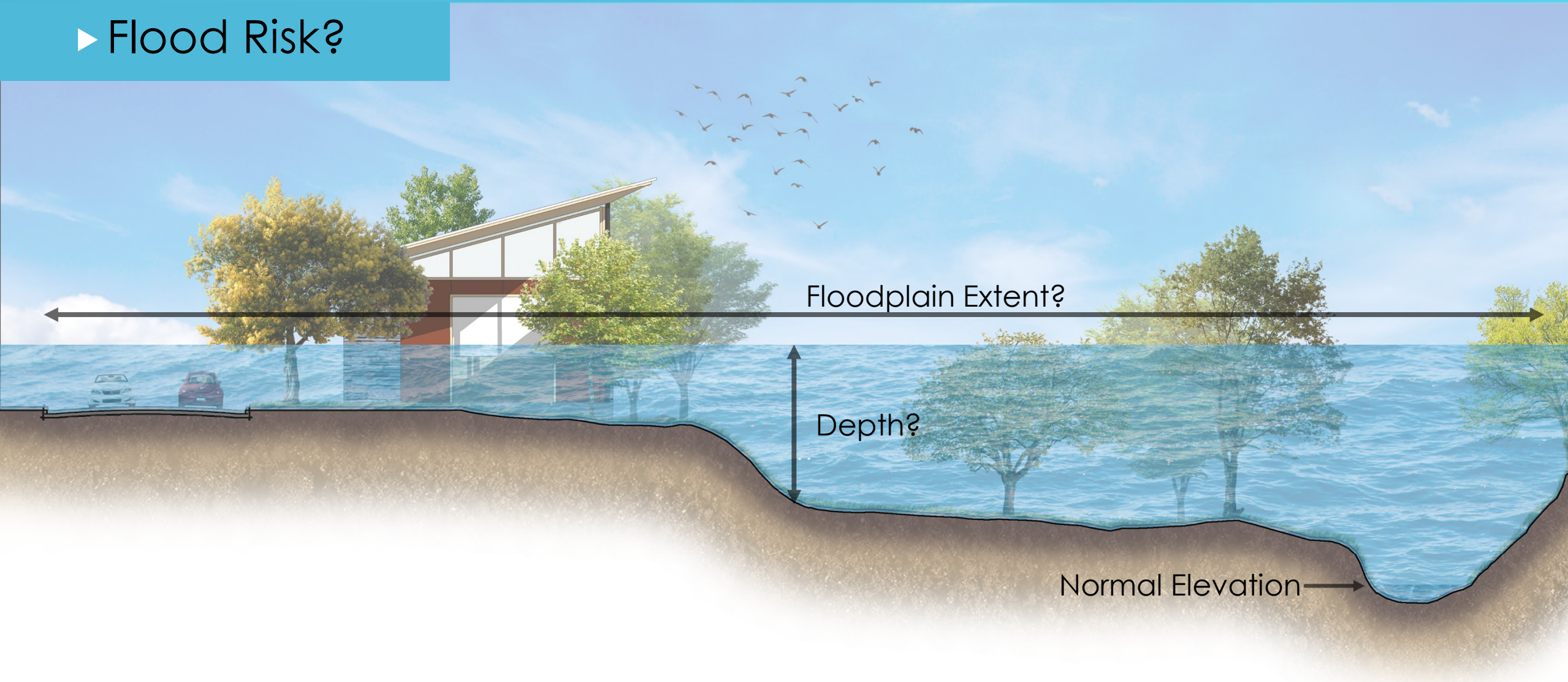
THE PROBLEM IS

- ▶ We don't know what we don't know....

INSUFFICIENT FLOOD RISK INFORMATION



► Flood Risk?

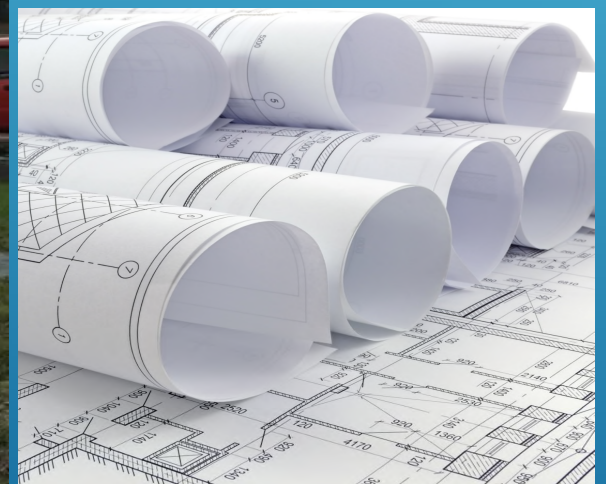


EVERY TIME IT FLOODS, SOMEONE IS SURPRISED



► Texas is at risk from more than one type of flood:

- Coastal Flood
- Riverine Flood
- Urban Flood
- Residual Risk
 - Dams
 - Levees
 - Other man-made objects that obstruct the natural flow of water

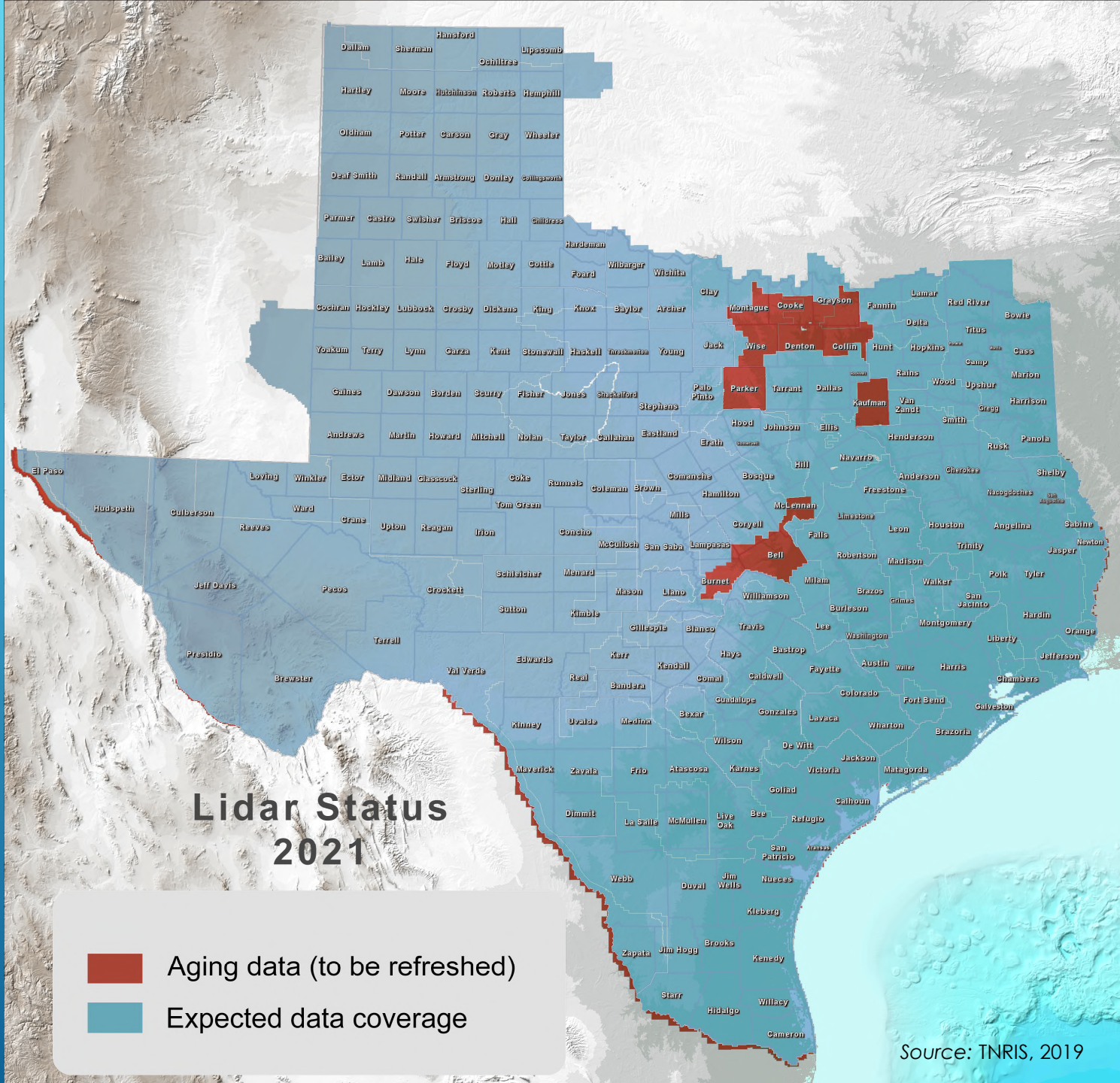


WE NEED TO FOCUS ON ALL 4 TYPES OF FLOOD RISK



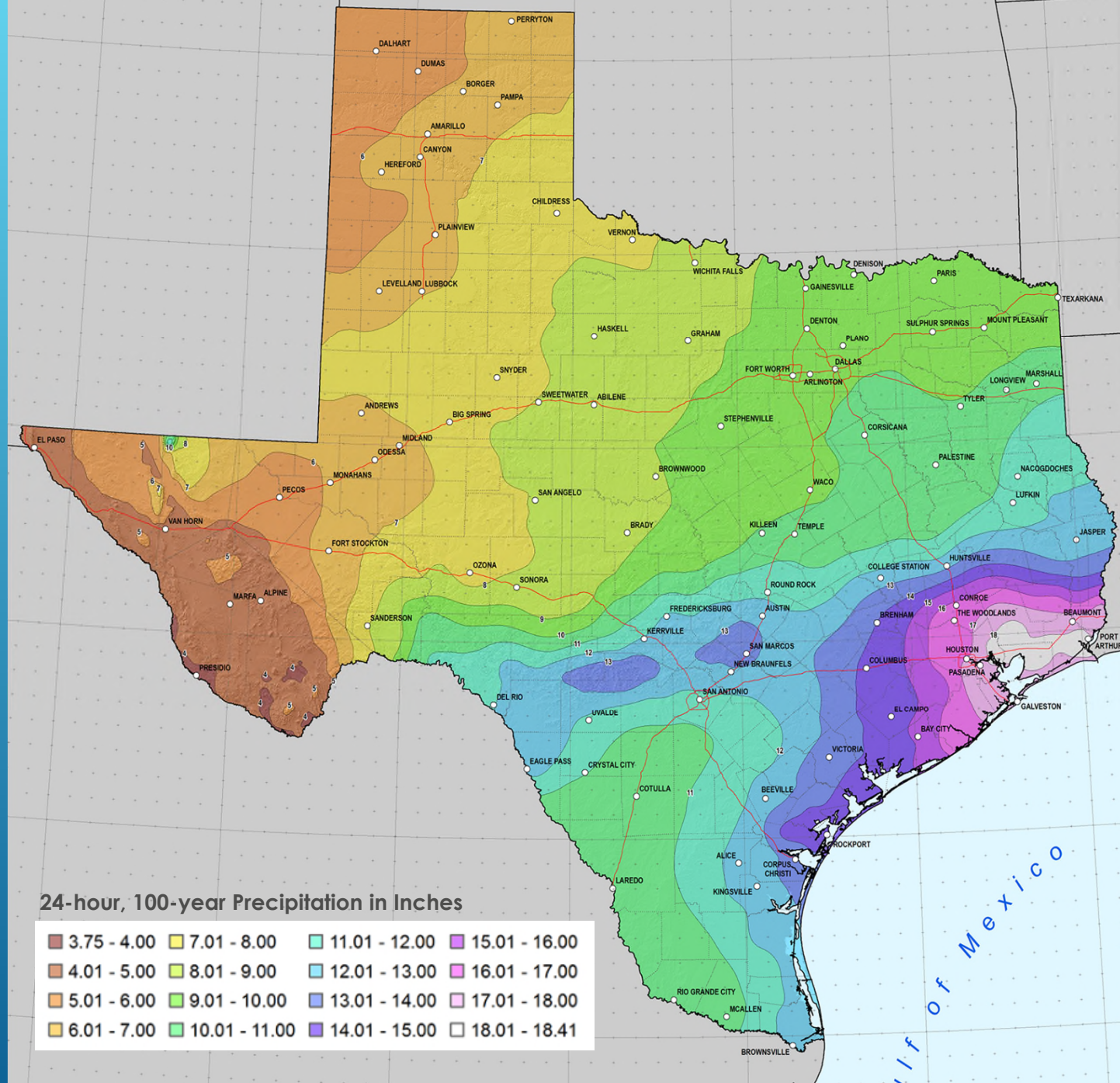
- ▶ Coastal flooding: We have very good coastal flooding information along the Texas coast
- ▶ Riverine flooding
 - Colorado River: We have good information on the river, but it needs to be updated
 - Lavaca River: Needs to be studied
 - Local Rivers and Creeks: We have good information on some rivers and creeks in some counties, but it needs to be updated and many areas have never been studied
- ▶ Urban flooding: We know very little about this
- ▶ Residual flooding: Major dams and lakes have been studied, but many local areas have not

LIDAR STATUS: 2021



ATLAS 14 RAINFALL

- ▶ Released September 27, 2018
- ▶ Atlas 14 indicates that the 1% (100-year) annual chance event may be greater than what we previously considered.
- ▶ The greatest rainfall changes occur in central Texas and along the Texas coast.



IMPROVED FLOOD RISK INFORMATION!!!

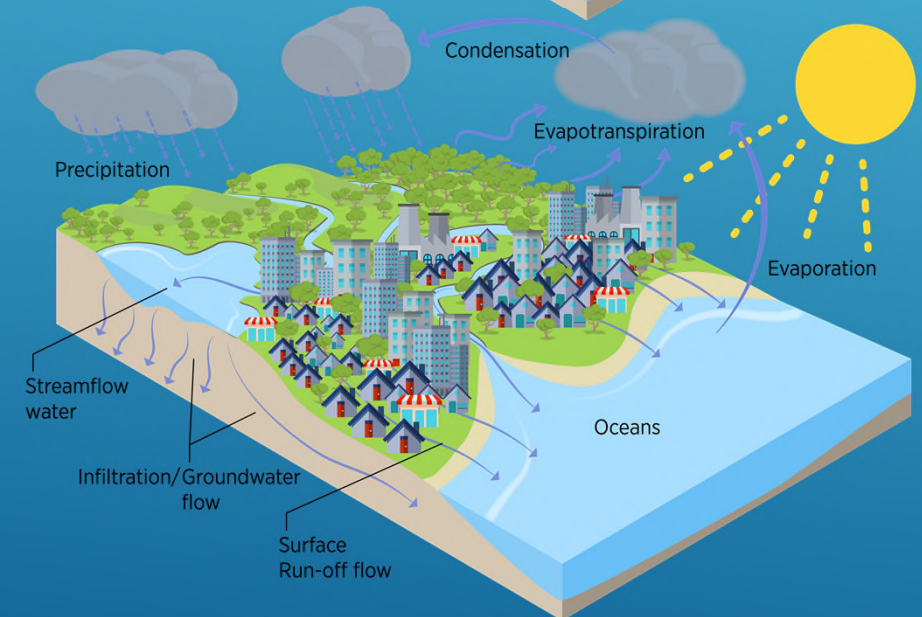
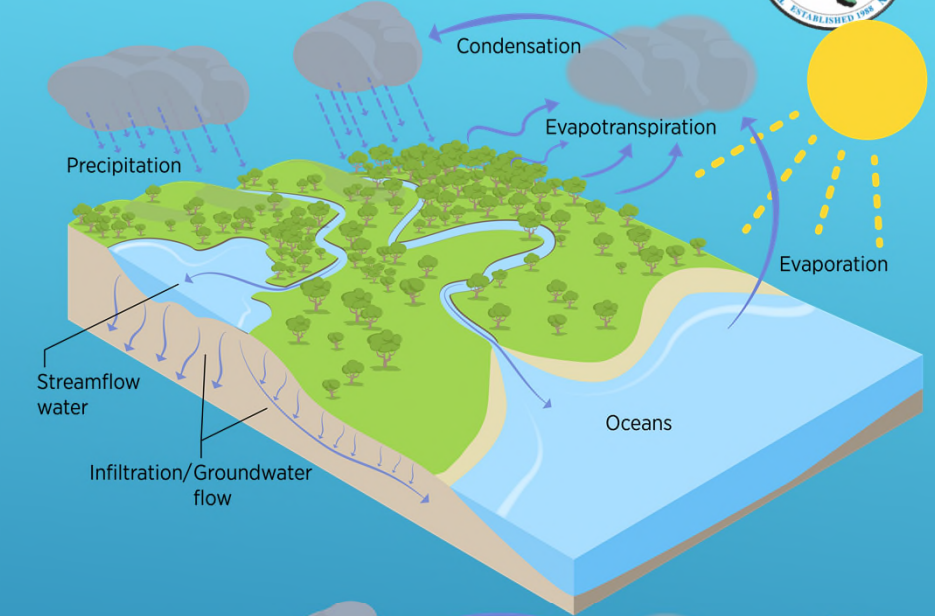


► Hydrology

- How much water enters our systems
- When does the water enter the systems
- Integrate new rainfall
- Combined impacts

► Hydraulics

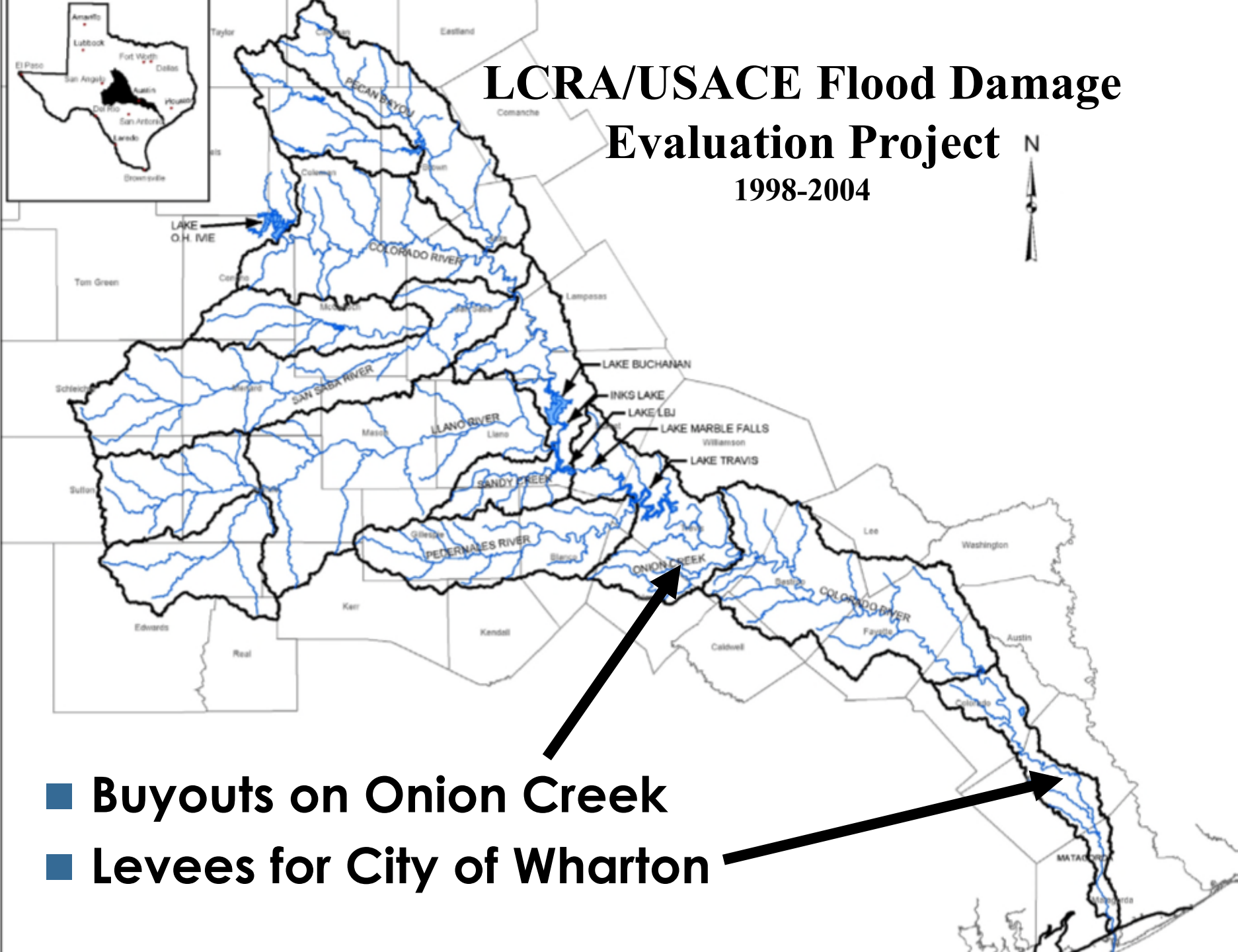
- How high does the water get
- How fast is it moving
- What is the impact





LCRA/USACE Flood Damage Evaluation Project

1998-2004



■ Buyouts on Onion Creek

■ Levees for City of Wharton

OUR DEFAULT NEEDS TO BE FLOODPLAIN MANAGEMENT

Why manage floodplains?

- First and foremost, it's about prevention of harm to people and property:
 - Preventing existing problems from getting worse
 - Preventing new problems from developing
 - Saving money
 - Reduces liability
- Preservation of natural functions of floodplains:
 - Flood attenuation – slows the flow, provides channel storage, infiltration
 - Giving streams room to do what streams do

FLOODPLAIN MANAGEMENT....

What is Effective Floodplain Management?

- Quantitative definition of flood risk:
 - Watershed modeling
 - Floodplain mapping
- Education
- Regulation:
 - Land use and development restrictions – reduce exposure
 - Building standards – elevation, flood proofing
- NFIP participation

FLOODPLAIN MANAGEMENT...

What is the NFIP?

- NFIP = National Flood Insurance Program
- Enables homeowners, business owners and renters in participating communities to purchase federally backed flood insurance
- Alternative to disaster assistance
- Managed by FEMA and the States

What are the benefits of NFIP Participation?

- Allows access to flood insurance at below market rates
- Ensures access to federal disaster assistance

Eligibility Requirements?

- Land use and development regulations
- Enforcement

FLOODPLAIN MANAGEMENT....

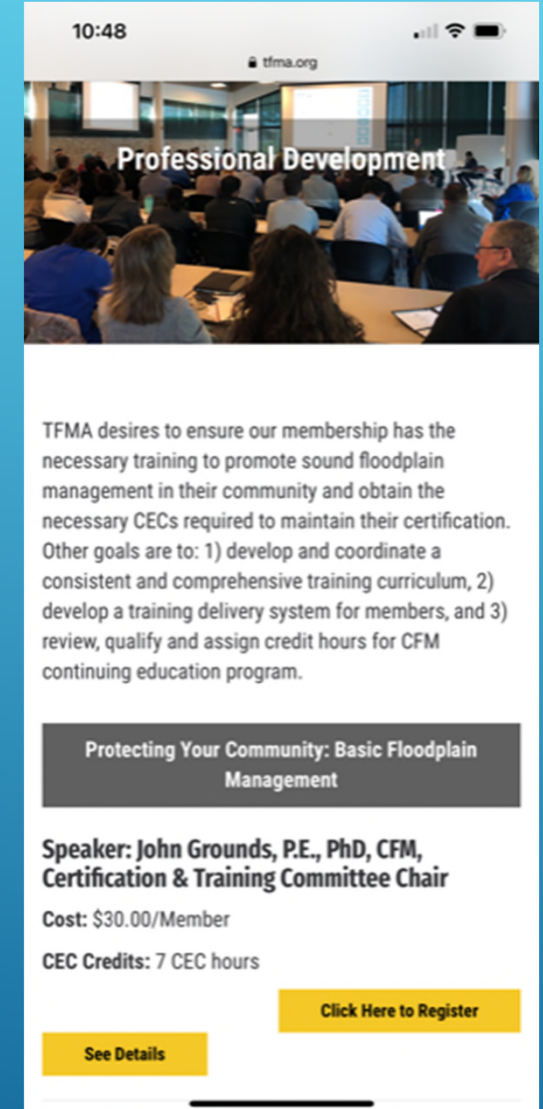
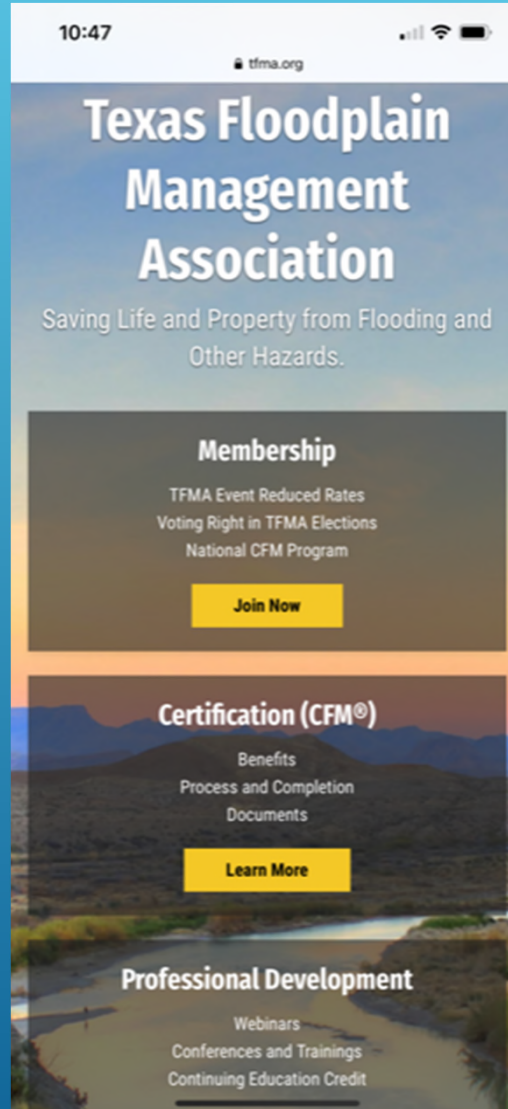
What is the NFIP Community Rating System (CRS)?

- Provides “extra credit” to reduce costs of flood insurance
- Participating communities commit to go above and beyond minimum NFIP participation requirements
- Examples of enhanced measures:
 - Develop hazard mitigation plans
 - Preserve open space in floodplains
 - Adopt higher standards for development
 - Periodic update of watershed studies and floodplain maps
 - Maintain drainage infrastructure
 - Monitor flood conditions and issue warnings

IF YOU WANT TO KNOW MORE ABOUT THE NFIP:



Google
"TFMA"



2015



Quick Guide

**TWDB's website
Click on "Flood"
Then "Community Resources"**

Floodplain Management in Texas







Texas Floodplain Management
Association www.tfma.org





FLOOD SAFETY

AA tfma.org

Print Page Sign In Register


   

MENU 



Turn Around Don't Drown (TADD)

Texas Floodplain Management Association has made a major commitment to educate the general public on the dangers and risks of natural hazards, specifically flooding, and the affects it has on all areas of Texas. We are a non-profit Association with over 30 years in Texas, focusing on outreach concerning flooding. If you've been in Texas for any length of time, you've probably already experienced at least one flood. Unfortunately, Texas is nationally ranked near the top every year in





FEMA COMMUNITY RATING SYSTEM



10:57



fema.gov

Community Rating System

The Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management practices that exceed the minimum requirements of the [National Flood Insurance Program \(NFIP\)](#). Over 1,500 communities participate nationwide.

In CRS communities, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community's efforts that address the three goals of the program:

1. Reduce and avoid flood damage to insurable property
2. Strengthen and support the insurance aspects of the National Flood Insurance Program
3. Foster comprehensive floodplain management



The brochure, [Community Rating System: The Local Official's Guide to Saving Lives, Preventing Property Damage and Reducing the Cost of Flood Insurance](#) introduces the Community Rating System as a way of promoting the awareness

Region 10 Lower Colorado-Lavaca RFPG

9. Technical Consultant presentations and discussions related to regional flood planning Tasks 1, 2, 3, and 10

- a. Project status and outlook**
- b. Public and stakeholder engagement strategies**
- c. Present and discuss requirements and approach to Task 1 – Planning Area Description**
- d. Demonstration of online survey and web map**
- e. Present and discuss requirements, approach to, and preliminary initial results of Task 3A – Floodplain Management Practices**
- f. Initiate RFPG discussion of Task 3B – Floodplain Management Goals**
- g. Review look-ahead calendar for July 2021 RFPG meeting**



LOWER COLORADO – LAVACA
REGIONAL FLOOD PLAN
A TEXAS INITIATIVE

REGIONAL FLOOD PLANNING GROUP MEETING | JUNE 21, 2021



AGENDA

Status Report

Public and Stakeholder Engagement

Status of Task 1 - Planning Area Description

Demonstration of Online Survey and Web Map

Task 3A Approach - Floodplain Management Practices

Task 3B - Floodplain Management Goals

Look Ahead



Public & Stakeholder Engagement

PUBLIC OUTREACH AND ENGAGEMENT

Karen Ford – WaterPR



Goals:

- Public process and transparency
- Educate multiple audiences within region as to process and purpose
- Grow the public notification list
- Increase public attendance, engagement and comment at meetings
- Ensure public input on Regional Flood Plan (Chapters and Draft)

PUBLIC OUTREACH AND ENGAGEMENT

Karen Ford – WaterPR

Commitment to Plain Speak:

- Definitions and Lay Language: Acronym Decoder, Glossary of Terms
- Key Terms:
 - TWDB Texas Water Development Board
 - RFP Regional Flood Plan
 - Region-10 Lower Colorado and Lavaca River Basins
 - RFPG-10 Regional Flood Planning Group for Region 10
 - FME Flood Management **Evaluation**
 - FMS Flood Management **Strategies**
 - FMP Flood Mitigation **Projects**

PUBLIC OUTREACH AND ENGAGEMENT

Karen Ford – WaterPR

Defining the Target Audience

- **ALL stakeholders: Public and Community**
- **Public Stakeholders** – Non-Government organizations, public groups and individuals
 - General public groups and individuals (Keep Texas Beautiful, Friends of ...)
 - Associations, Councils and Coalitions (Councils of Government)
 - Environmental Groups (Hill Country Alliance, Texan by Nature, Land Trusts)
 - Emergency Support Groups (CERT Coordinators)

PUBLIC OUTREACH AND ENGAGEMENT

Karen Ford – WaterPR

- **Community Stakeholders** – Individuals with flood-related responsibilities
 - Municipal/County Elected Officials
 - Floodplain Administrators
 - Public Engineers, Public Works, Transportation Departments
 - Emergency Managers and Response Coordinators
 - River Authorities
 - Special Districts (Drainage, Levee Improvement, Stormwater, Water Control and Improvement, Soil and Water, Conservation, Groundwater, Electric Generating Utilities, Water Utilities)

PUBLIC OUTREACH AND ENGAGEMENT

Karen Ford – WaterPR

Strategies to Reach the Audiences: ACCOMPLISHED

- Website Build-Out: LowerColoradoLavacaFlood.org
- Email Blasts to Community & Public Stakeholders
 - Mail Chimp Template and Lists
 - Response
- Social Media:
 - Facebook: Go, Like and Share
 - Instagram: Tag your photos: #LowerColoradoFlood, #LavacaRiverFlood, #TexasFloodPlan
- Media Relations:
 - Draft Swiss-Cheese Press Release for members of the RFPG to use
 - Draft Media Advisory

PUBLIC OUTREACH AND ENGAGEMENT

Karen Ford – WaterPR

Strategies to Reach the Audiences: NEXT UP

- Digital Communication Tools
 - Flood Planning 101, Stand-alone Presentation: Slides with text and audio
 - Digital flier for distribution by RFPG members, government & non-government groups, libraries and public places
 - 30 Radio read scripts (public service announcements)
- Email Blasts to Community and Public Stakeholders
- Media Advisories/Opinion Editorials
- Social Media

PUBLIC OUTREACH AND ENGAGEMENT

Karen Ford – WaterPR

Questions, Concerns, Ideas, Suggestions



CONTACT ME

Karen Ford
kford@waterpr.com



Status of Task 1 – Planning Area Description

TASK 1 – PLANNING AREA DESCRIPTION

Cindy Engelhardt – HALFF

Data Collection and Assessment

- Floodplain Management & Ordinances
- Flood History
- Floodplain Studies & Maps
- Risk Reduction Alternatives
- Flood Finance
- Natural Resources & Condition Changes
- Hazard Mitigation & Emergency Planning
- Existing Infrastructure

43

Counties, or a portion of each, are included in this basin

148

Communities, or a portion of each, are included in this basin

229

Other Entities, or a portion of each, are included in this basin

>24,000

Square Miles
Total Area of Region



FLOOD-RELATED PRESIDENTIAL DISASTER DECLARATIONS (1953 – MAR 2020)

50

Major Disaster Declarations

6

Emergency Declarations

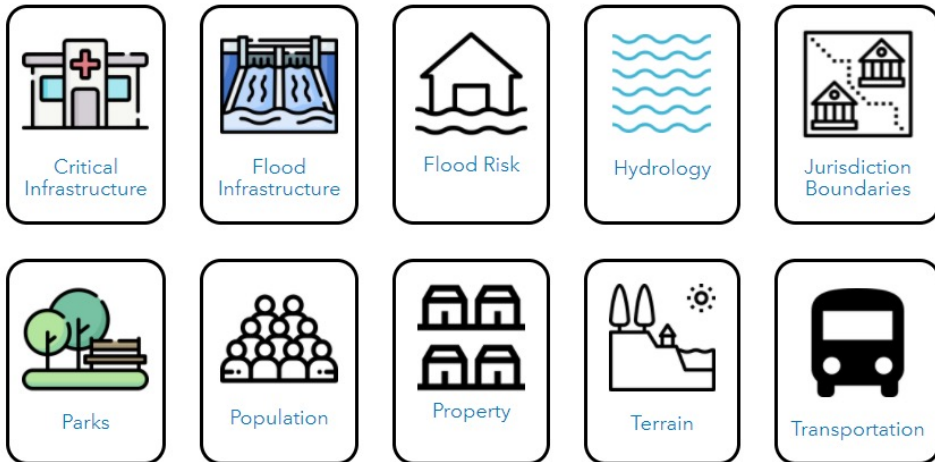
Over 25% of Disaster Declarations and 50% of Emergency Declarations have occurred within the region since 2008

FLOOD EVENTS (1996-2019)

110+ major flood events have occurred in the last 20 years with significant losses to life and property.

TASK 1 – PLANNING AREA DESCRIPTION

TWDB Provided Data



Other Data Sources

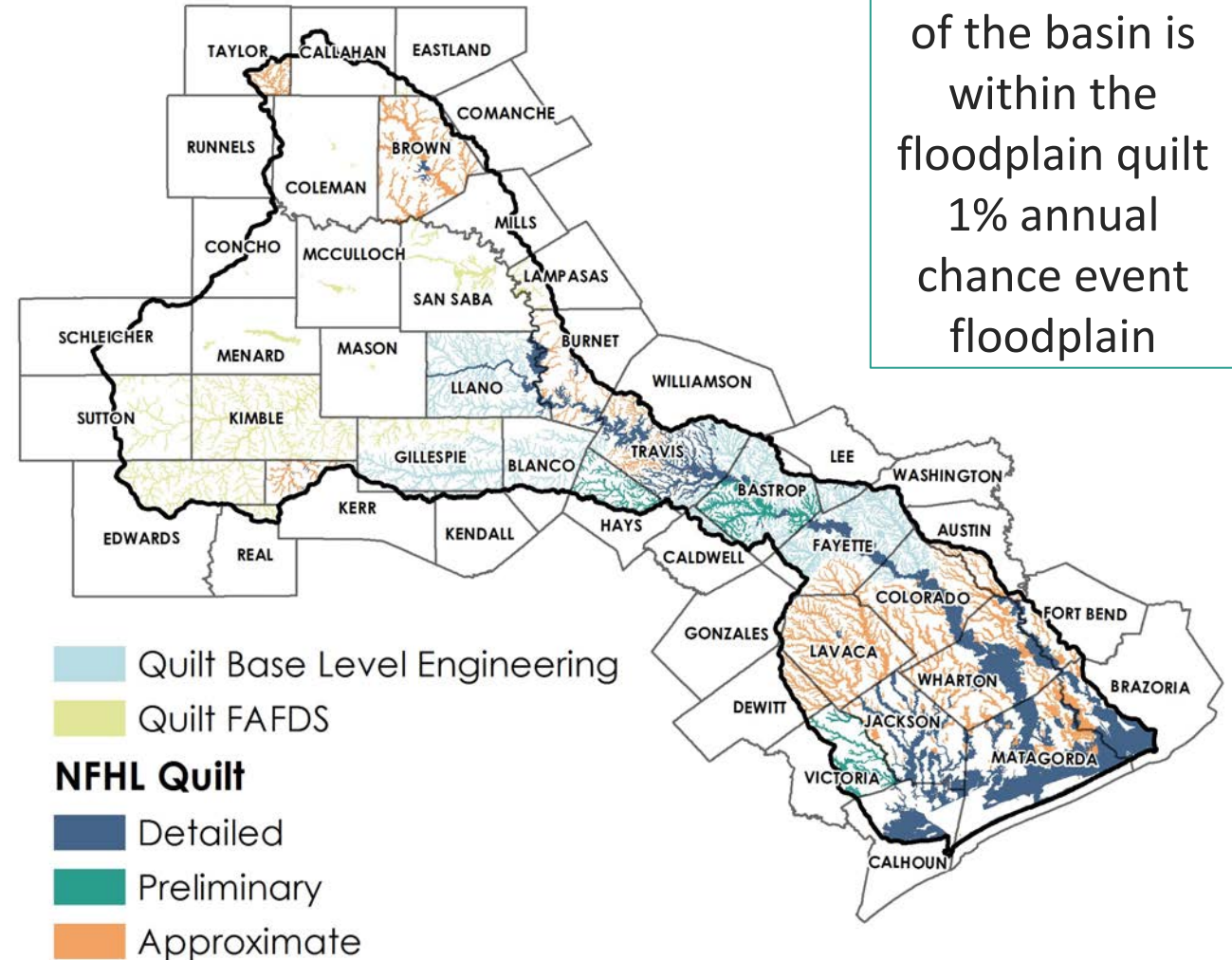


TASK 1 – PLANNING AREA DESCRIPTION

Existing Condition Flood Risk

TWDB Floodplain Quilt

1. National Flood Hazard Layer
 - Pending & Preliminary Data
 - Effective Data for Detailed Study Areas (Zone AE, AO, AH, and VE)
2. Base Level Engineering
3. National Flood Hazard Layer
 - Effective Data for Approximate Study Areas (Zone A and V)
4. First American Flood Data Services
5. Fathom

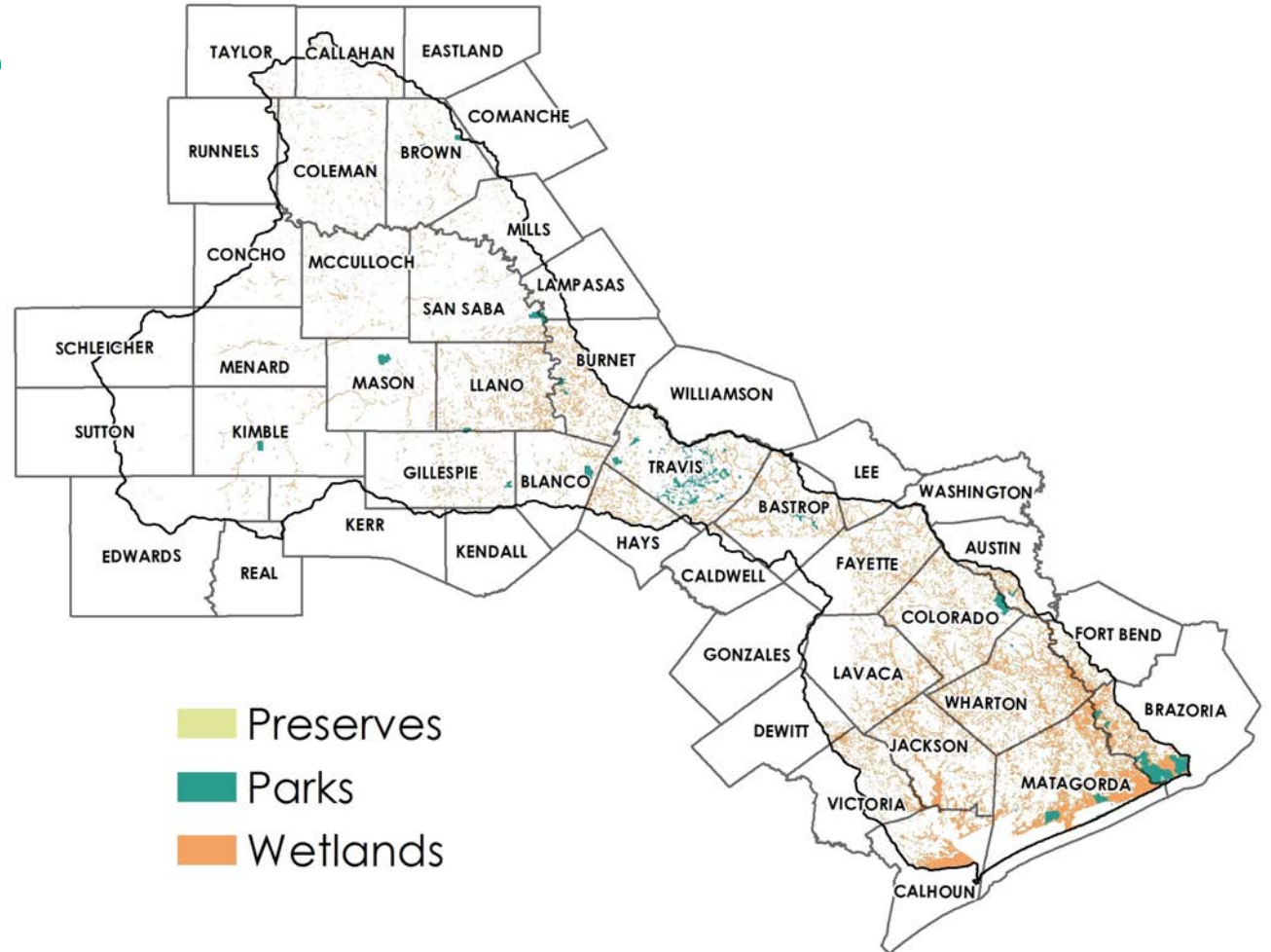


TASK 1 – PLANNING AREA DESCRIPTION

Natural Resources

Existing Infrastructure Database

- Preserves
 - TPWD Wildlife Management Areas
 - USFWS Critical Habitat Areas
- Parks
 - Municipal, County, State, National
- Streams
 - FEMA Coordinated Needs Management Strategy
 - USGS National Hydrography Dataset
- Lakes
 - TWDB Waterbodies and Major Reservoirs
 - USGS National Hydrography Dataset
- Wetlands
 - USFWS Wetlands

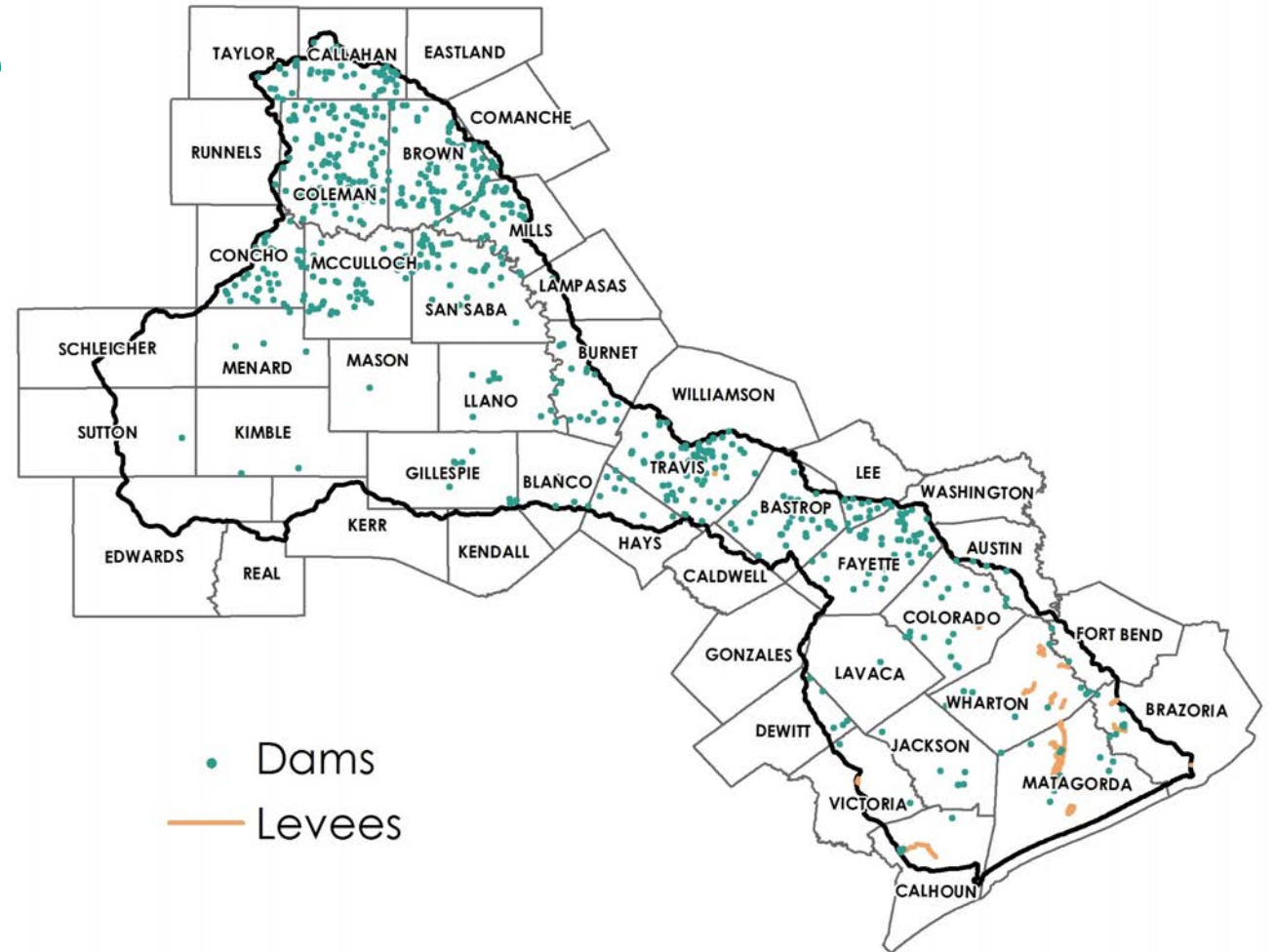


TASK 1 – PLANNING AREA DESCRIPTION

Flood Infrastructure

Existing Infrastructure Database

- Levees
 - National Levee Database
- Dams
 - USACE, TCEQ
 - Texas State Soil and Water Conservation Board
- Low Water Crossings
 - TWDB
- Critical Infrastructure
 - Fire Stations, Hospitals, Shelter Locations, Schools

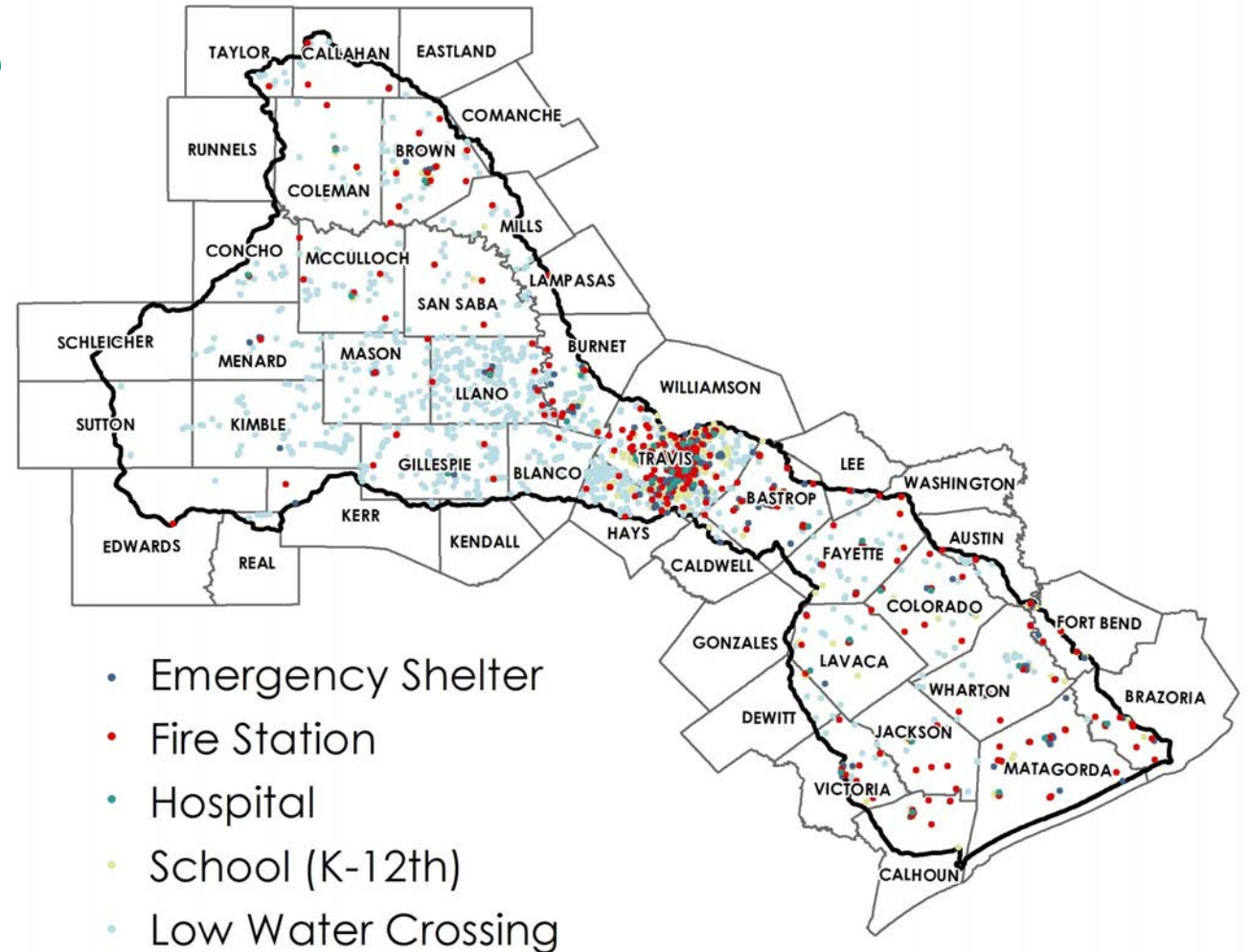


TASK 1 – PLANNING AREA DESCRIPTION

Flood Infrastructure

Existing Infrastructure Database

- Levees
 - National Levee Database
- Dams
 - USACE, TCEQ
 - Texas State Soil and Water Conservation Board
- Low Water Crossings
 - TWDB
- Critical Infrastructure
 - Fire Stations, Hospitals, Shelter Locations, Schools



TASK 1 – PLANNING AREA DESCRIPTION

Infrastructure Assessment

Level of Service

- **Functional** – Serving current design level of service
- **Non-Functional** – Not providing current design level of service and needs upgrade

Physical Condition

- **Deficient** – In poor condition and needs replacement, restoration or rehabilitation
- **Non-Deficient** – In good physical condition



Demonstration of Online Survey & Web Map

Welcome

Regional Flood Plan Development

Lower Colorado-Lavaca

In 2019, the Texas Legislation passed Senate Bill 8 that directed the creation of the first-ever State Flood Plan for Texas. The State Flood Plan, which will be prepared by the Texas Water Development Board (TWDB), will follow a similar planning approach that has been used for water supply planning for 20+ years. The TWDB has designated 15 regional flood planning areas throughout the state. The Regional Flood Planning Groups (RFPGs) are responsible for developing regional flood plans in accordance with TWDB requirements and guidelines by January 2023. The TWDB will combine the regional plans into the first state flood plan by September 2024. The overall goal of the RFPGs is to determine the nature of flood risk in the regions, evaluate flood mitigation and management practices, and identify projects that reduce flood risk without negatively affecting neighboring areas.

Who can help? The RFPG is seeking participation from everyone affected by flooding. Using the boxes below, please select which type of stakeholder you represent. If you have any trouble, technical issues or wish to coordinate directly with us, please [email us](#).

When is it due? The RFPG will close data collection on July 30, 2021, to allow sufficient time for compilation and assessment in the development of the regional plan.

Seeking additional information?

- A region synopsis providing additional information regarding this region is located [here](#)
- A listing of commonly used flood related acronyms is located [here](#)
- A link to TWDB's Flood Planning information is located [here](#)
- A link to the Region's Flood Planning website is located [here](#)

Community Representative?

Community Stakeholders in the RFPG process include individuals with flood-related responsibilities, such as County and Community Officials and Staff as well as Federal, State, regional, and local authorities, utilities, and districts.

By logging on with your email address and the password provided, you can help provide the RFPGs with localized knowledge of flood planning resources and validate a wide array of flood risk data. Through this data collection effort, the RFPG is requesting community stakeholders:

- Provide information about your contact information and flood-related responsibilities
- Verify collected flood information through an entity-specific backgrounder
- Respond to questions to support the development of the regional flood plan
- Verify and provide geospatial data through data uploads and web maps

The RFPG appreciates any information you are able to verify and provide with the understanding that it may not be possible to provide response to all items.

[Take me to the entity login](#)

Member of the Public?

Public Stakeholders in the RFPG process include general public individuals, groups, and organizations including non-profit and non-governmental organizations with an interest in providing information to support flood planning efforts.

By providing your name, address and email address, you can help provide the RFPG with localized knowledge of flood prone areas and areas where flood mitigation is needed. Your contact information is used to document who is providing information in case we have any follow-up questions.

Name

Address

Email

Once you enter your information, an interactive web map of the region will open. A search feature in the lower right corner of the map enables you to zoom to a particular address. Using the add feature tool, you can leave one or more location pin including a comment or description about flood issues/concerns.

[Take me to the public map](#)

Welcome

Your Info

Backgrounder

▼ Questions

Floodplain Management/Ordinances

Flood History

Floodplain Studies / Maps

Risk Reduction Alternatives

Flood Finance

Natural Resources & Condition Changes

Hazard Mitigation & Emergency Planning

▼ Existing Infrastructure

Levees / Dams

Storm Drainage Systems

Roadways

Coastal

Critical Infrastructure

Log in - Lower Colorado-Lavaca Basin

By logging on with your email address and the password provided, you can help provide the RFPGs with localized knowledge of flood planning resources and validate a wide array of flood risk data. Information such as condition and functionality of flood prone infrastructure, mitigation or strategic development plans, proposed flood control projects, areas of key population change or growth, etc. is needed.

Use your email address and the password provided during the webinar to log in.

Email

Password

Remember me?

Log in

No password?

Please [email us](#) and we'll help get things sorted out.

Thanks for your information, Cindy ! Please use the navigation panel on the left hand side of this window to proceed.

You are representing **Floodtown**

Title

First name

Last name

Phone number

Submit

Why do you need this?



Welcome

Your Info

Backgrounder

▼ Questions

Floodplain Management/Ordinances

Flood History

Floodplain Studies / Maps

Risk Reduction Alternatives

Flood Finance

Natural Resources & Condition Changes

Hazard Mitigation & Emergency Planning

▼ Existing Infrastructure

Levees / Dams

Storm Drainage Systems

Roadways

Coastal

Critical Infrastructure

Community Backgrounder for: Floodtown

You may continue to edit, if needed, or click the next tab above to proceed.

Field	What We Found	Your Updated Info
NFIP Participant: (Source: FEMA)	1	Yes <input type="button" value="v"/>
Population (2019): (Source: TWDB Water Plan)		<input type="text" value="0"/>
Projected Population 2050: (Source: TWDB Water Plan)	17947	<input type="text" value="0"/>
CRS Rating: (Source: FEMA)	N/A	<input type="text" value="N/A"/>
Latest FEMA Map Date: (Source: FEMA Community Status Book)	7/7/2014	<input type="text" value="What is it?"/>
Critical Facilities: (Source: TWDB)	7	<input type="text" value="A whole number"/>
Total Stream Miles in Community (round to nearest tenth): (Source: FEMA)	3.0	<input type="text" value="3.0"/>
Number of Letters of Map Revisions: (Source: NFHL)	2	<input type="text" value="0"/>
Stormwater Utility or Drainage Fee: (Source: Western Kentucky 2020)	1	Yes <input type="button" value="v"/>
Percent of Community in 100 Year or 500 Year Floodplain: (Source: NFHL)	3.00	<input type="text" value="0"/>
<i>The RFPG is maintaining a contact list for the region. Please provide names and emails for additional people within your organization that have flood-related responsibilities.</i>		
CEO (Mayor or Judge):	<input type="text" value="Who is it?"/>

Welcome

Your Info

Backgrounder

▼ Questions

Floodplain Management/Ordinances

Flood History

Floodplain Studies / Maps

Risk Reduction Alternatives

Flood Finance

Natural Resources & Condition Changes

Hazard Mitigation & Emergency Planning

▼ Existing Infrastructure

Levees / Dams

Storm Drainage Systems

Roadways

Coastal

Critical Infrastructure

Community Questionnaire for: Floodtown

Thank you for your willingness to participate in this online data collection effort as part of the first-ever State Flood Plan for Texas. We invite you to share information to advance the regional plan development. It is not necessary to complete the entire survey when you first sign in. The survey is developed to allow the user to provide input incrementally over time. Feel free to complete one section at a time or you also have the option of assigning a section of the survey to a colleague to assist you with the input. If you need have any trouble, technical issues or wish to coordinate directly with us, [email us](#).

This survey has over 90 questions and could take about 30 minutes, however depending on how much data you upload and add to the interactive maps, it may take more time. As you navigate through this questionnaire, you will find various questions and data requests related to the topics listed in the navigation panel to the left. The navigation panel to the left may also be used to advance to different sections and go back to sections as needed.

The questionnaire is comprised of questions, data upload requests, and interactive maps as described below.

- **Questions:** The types of questions you encounter include selection of a single item from a drop-down list, selection of multiple items using check boxes, or text responses. For the text responses, you are able to enter as many items as appropriate up to 2000 characters.
- **Data Uploads:** Several sections have options to upload files such as regulations, reports, studies, shapefiles, geodatabases, land planning data, etc. In these locations, you may upload more than one file. Please note you will need to press the start button to submit each file in our system.
- **Interactive Maps:** There are nine interactive maps tied to the questionnaire regarding flood history, floodplain studies/maps, risk reduction alternatives, natural resources & condition changes, levees/dams, storm drainage systems, roadways, coastal, and critical infrastructure. Once you click the button to open a map, an interactive web map of the region will open in a separate tab in your browser. Additions and edits are saved automatically, so you are welcome to enter and exit the maps as needed.

Inside the interactive map, a search feature in the lower right corner of the map enables you to zoom to a particular address. Using the 'add feature tool', you can draw in areas and respond to questions to help populate the database. You may add as many features as needed. Similarly, the edit feature tool enables you to add or change information about particular map features you have already created.

Your participation is key to the success of the regional flood planning effort. The RFPG appreciates any information you are able to verify and provide with the understanding that it may not be possible to provide response to all items.

Next »

Welcome

Your Info

Backgrounder

▼ Questions

Floodplain Management/Ordinances

Flood History

Floodplain Studies / Maps

Risk Reduction Alternatives

Flood Finance

Natural Resources & Condition
Changes

Hazard Mitigation & Emergency
Planning

▼ Existing Infrastructure

Levees / Dams

Storm Drainage Systems

Roadways

Coastal

Critical Infrastructure

Community Questionnaire for: Floodtown

You may continue to edit, if needed, or click the next category to proceed.

Floodplain Management/Ordinances

The Federal Emergency Management Agency (FEMA) defines Floodplain Management as a “community-based effort to prevent or reduce the risk of flooding, resulting in a more resilient community.” Floodplain Management is defined in Title 31 Texas Administrative Code §361.10 as, “The operation of an overall program of corrective and preventative measures for reducing flood damage.” These measures can take a variety of forms and generally include building, subdivision, zoning, land use, or other special-purpose codes and ordinances such as flood damage prevention ordinances. In Texas, authority for enforcing floodplain management regulations lies with local governments such as cities and counties. It is important to note that RFPGs themselves do not have the authority to enact or enforce floodplain management, land use, or other infrastructure design standards. Any standards considered, recommended, and adopted by the RFPG in this task would be aimed at encouraging implementation by local entities in the region with flood-related authority. Please share your Floodplain Management standards by answering the questions below.

1. Does your entity have floodplain management regulations?

I do not know ▼

2. Has your entity adopted the minimum regulations to be eligible to participate in the National Flood Insurance Program (pursuant to Texas Water Code Section 16.3145)?

I do not know ▼

3. What regulations and/or development codes does your jurisdiction have in place to manage existing and future flood risk for developments? Select all that apply.

- Drainage Criteria Manual/Design Manual
- Land use regulations
- Ordinances (Floodplain, Drainage, Stormwater, etc.)
- Unified Development Code (UDC) and/or Zoning Ordinance with map
- Other
- None of the Above
- I do not know

Overall Progress 10%

Welcome

Your Info

Backgrounder

▼ Questions

Floodplain Management/Ordinances

Flood History

Floodplain Studies / Maps

Risk Reduction Alternatives

Flood Finance

Natural Resources & Condition Changes

Hazard Mitigation & Emergency Planning

▼ Existing Infrastructure

Levees / Dams

Storm Drainage Systems

Roadways

Coastal

Critical Infrastructure

Floodplain Studies/Maps

A floodplain quilt is provided by TWDB as a common starting point for the compilation of riverine, and coastal, and urban flood risk data. The TWDB floodplain quilt is not for regulatory purposes and is comprised of FEMA data (effective, pending, and preliminary mapping), base level engineering, and other statewide data sets. The regions are expected to confirm, update, and otherwise enhance the initial TWDB floodplain quilt information, as appropriate, to prepare the deliverables required for the flood risk analyses tasks. It should be noted that the data collected is for regional planning purposes and will not be used to the update of regulatory FEMA maps.

Questions, data requests, and web mapping requests are intended to support the identification of the best available flood risk information (floodplains) in the region. The primary objective is to identify any studies, models, or maps that can be used to enhance the TWDB floodplain quilt. Requested information may include risk identification information (floodplains) caused by any type of flood risk (riverine, coastal, urban, etc.). You are welcome to skip questions, but we greatly appreciate any information you are able to provide.

1. Which of the following is used to define best available flood risk (floodplains) in your community or jurisdiction in addition to FEMA studies and Base Level Engineering? Select all that apply.

- I do not know
- No other studies, we use FEMA maps, studies or Base Level Engineering (no need to upload these)
- Flood Protection Plan(s)
- Local Flood Study(ies)
- Master Drainage Plan(s)/Stormwater Drainage Plan(s)
- Watershed Plan(s)/Study(ies)
- LOMRS not yet approved by FEMA
- Models, including hydrology, hydraulics or any available screening level models (H&H models) that you consider to be the best available data for your jurisdiction
- Other

2. If your jurisdiction is willing to share best available flood risk (floodplain studies) that you would like considered for inclusion in the plan, please upload or provide a web link to access the data.

You may upload more than one file. If you are uploading a shapefile or geodatabase, please zip the files before uploading. Press the start button to submit each file.

Upload

+ Choose Files

View Files Already Uploaded ▼

Web Link(s)

DISCOVERY

Overall Progress 10%

- Welcome
- Your Info
- Backgrounder
- ▼ Questions
 - Floodplain Management/Ordinances
 - Flood History
 - Floodplain Studies / Maps
 - Risk Reduction Alternatives
 - Flood Finance
 - Natural Resources & Condition Changes
 - Hazard Mitigation & Emergency Planning
- ▼ Existing Infrastructure
 - Levees / Dams
 - Storm Drainage Systems
 - Roadways
 - Coastal
 - Critical Infrastructure

5. Any other comments or notes?

Answer Here

Cancel

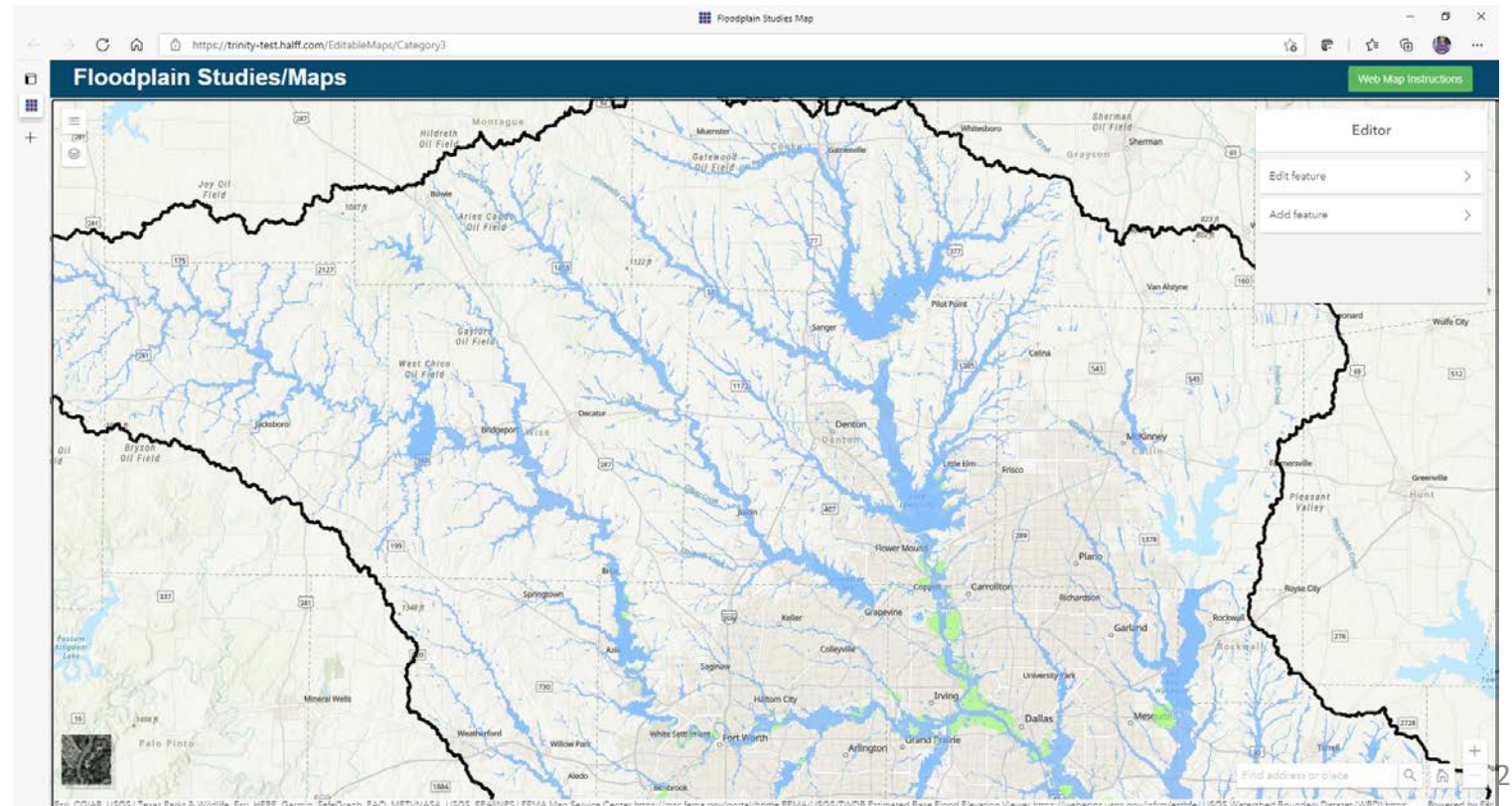
Save

Save & Continue »

Interactive Map

Use the web map link to the right to provide specific locations and details about prior studies, areas that need study and known data gap locations. Please note that you do not have to answer all questions, but please fill in as many as possible.

Go to map 



Floodplain Studies/Maps

Web Map Instructions

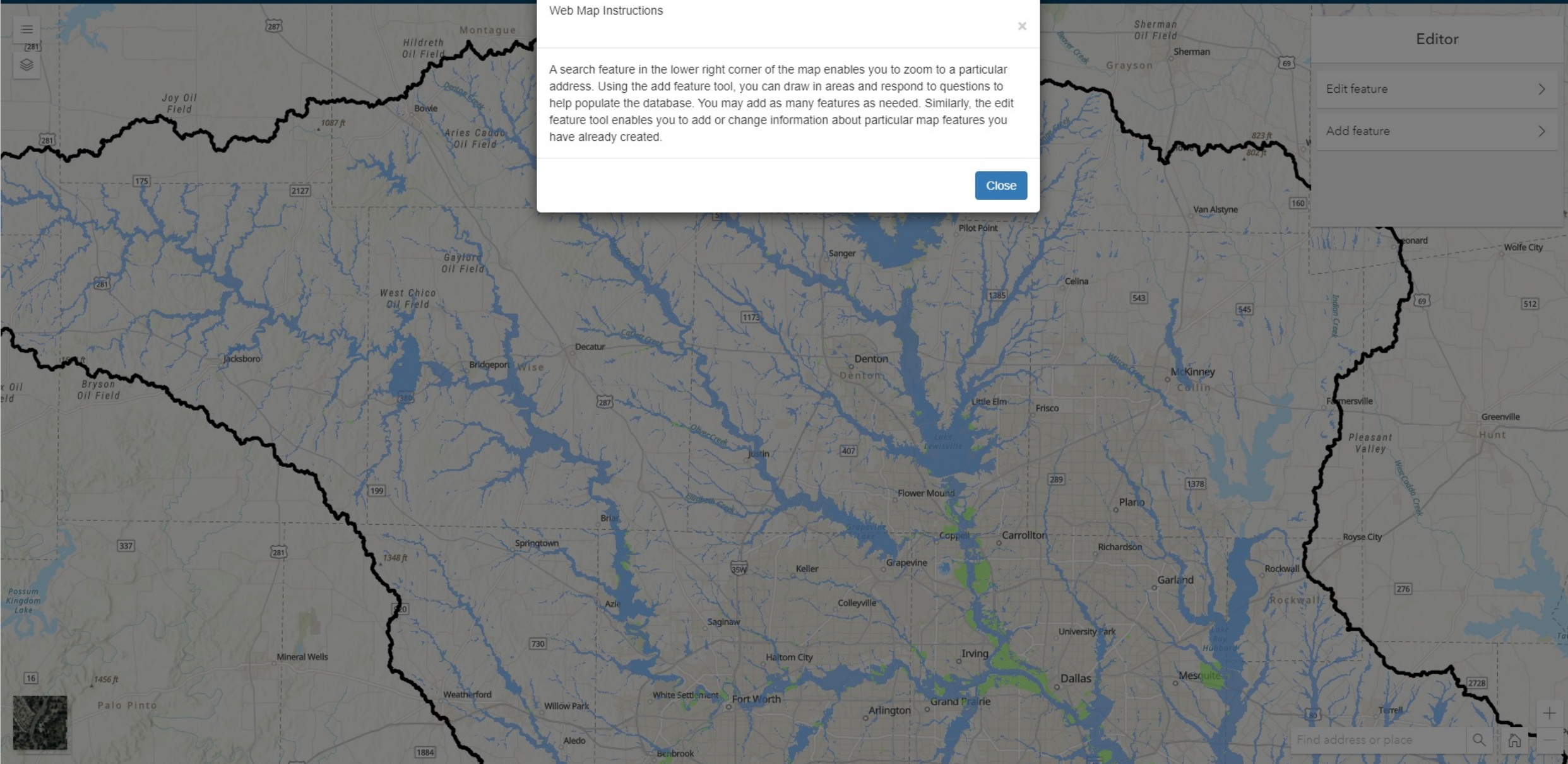
Web Map Instructions

A search feature in the lower right corner of the map enables you to zoom to a particular address. Using the add feature tool, you can draw in areas and respond to questions to help populate the database. You may add as many features as needed. Similarly, the edit feature tool enables you to add or change information about particular map features you have already created.

Close

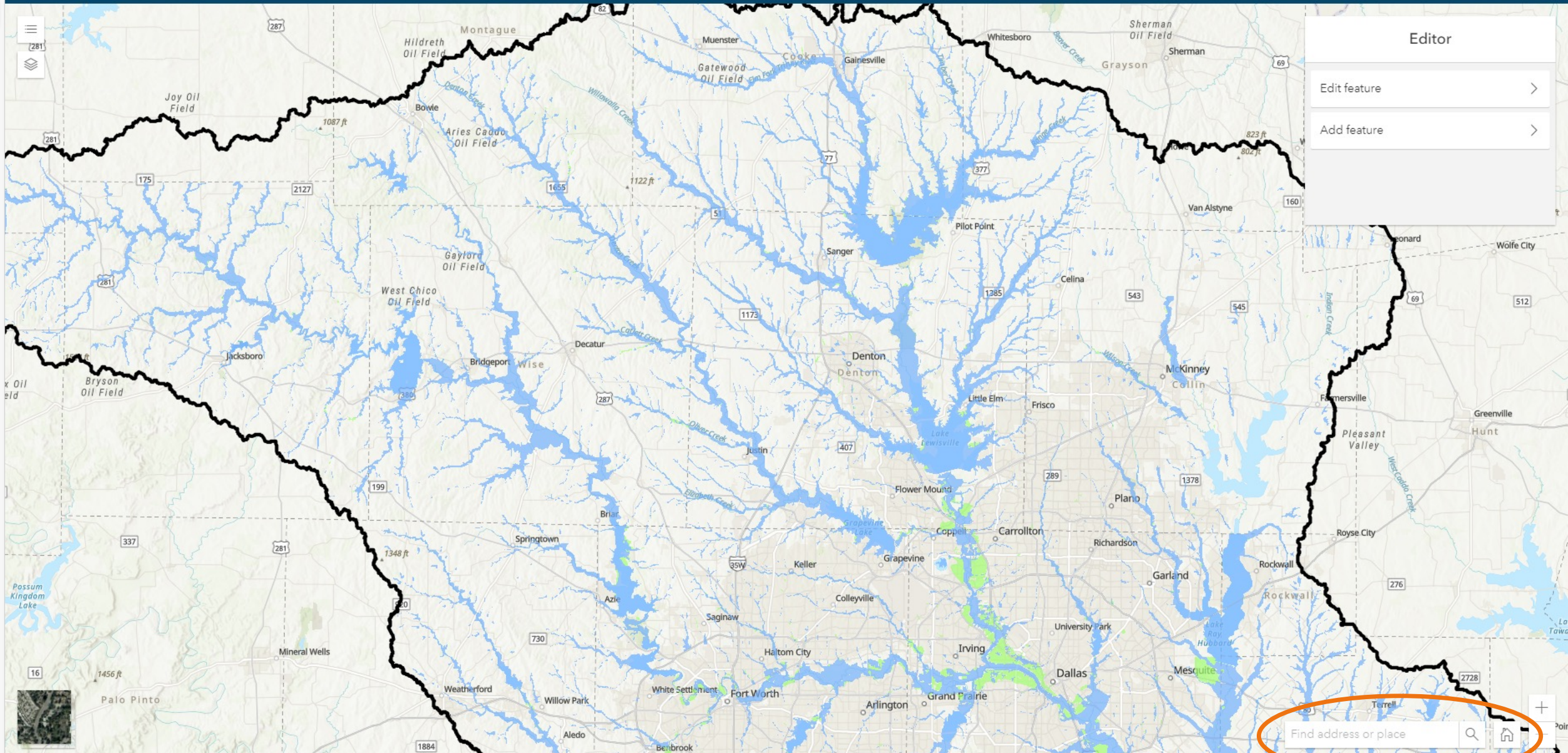
Editor

- Edit feature >
- Add feature >



Floodplain Studies/Maps

Web Map Instructions



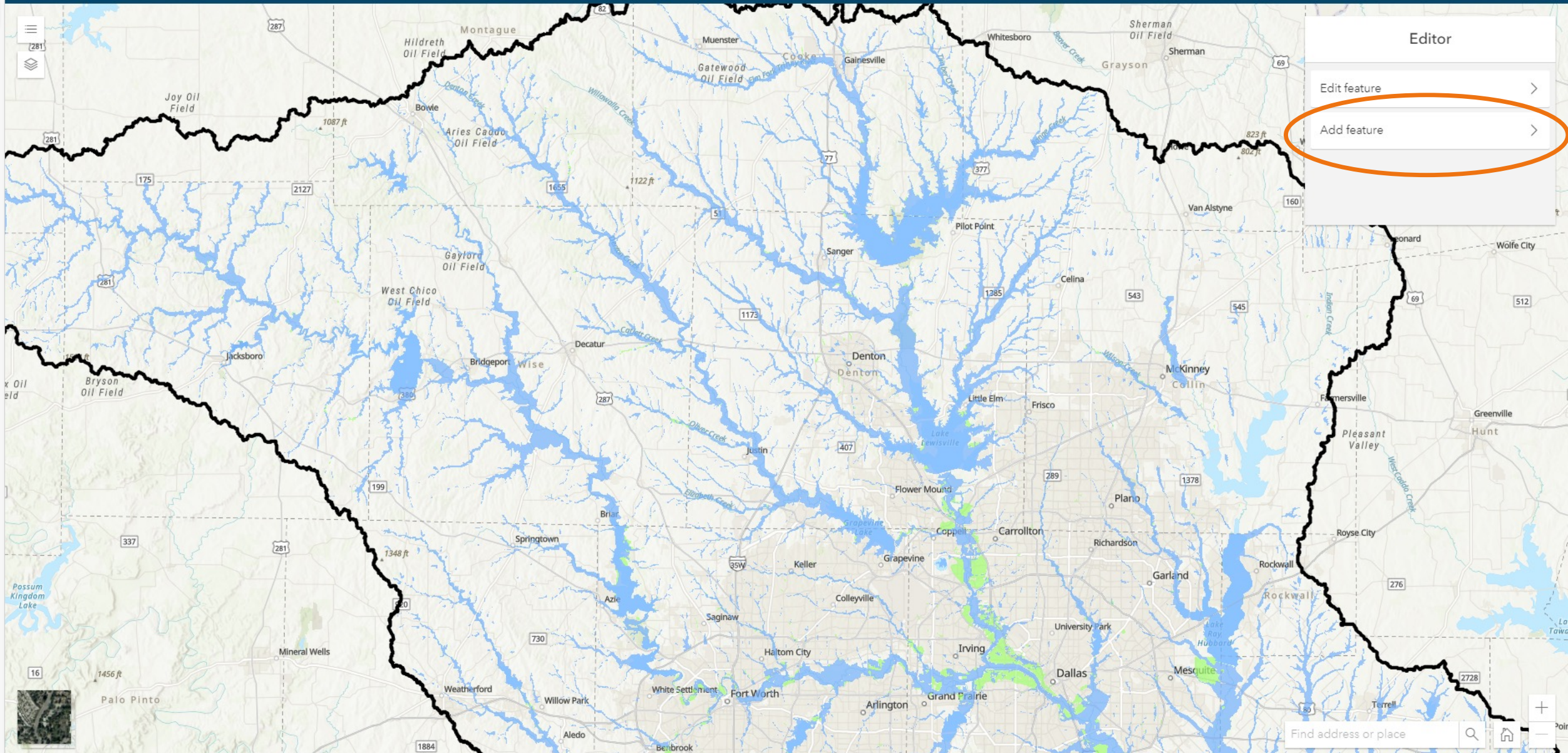
Editor

- Edit feature >
- Add feature >

Find address or place

Floodplain Studies/Maps

Web Map Instructions

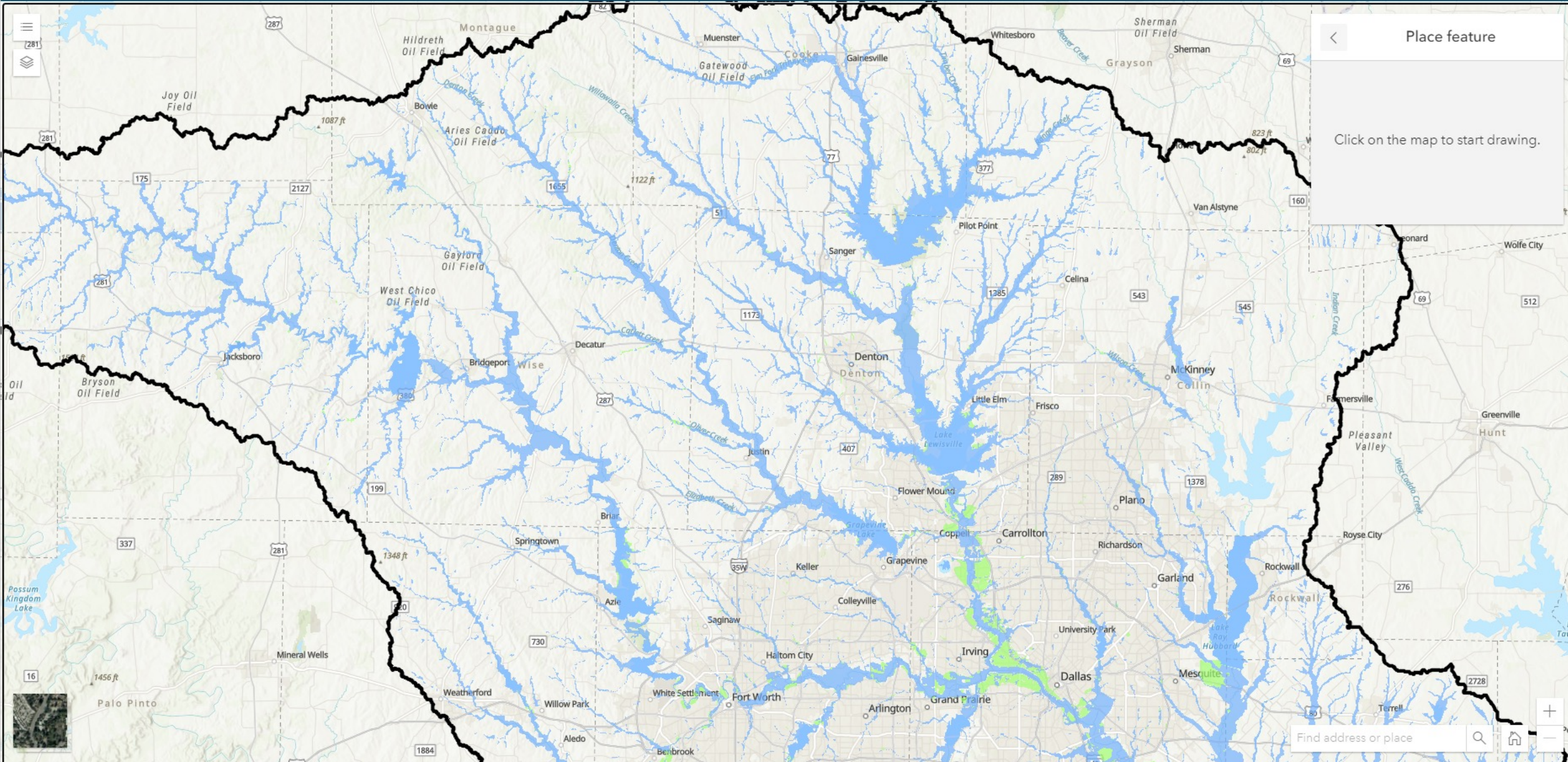


Editor

- Edit feature >
- Add feature >

Floodplain Studies/Maps

Web Map Instructions

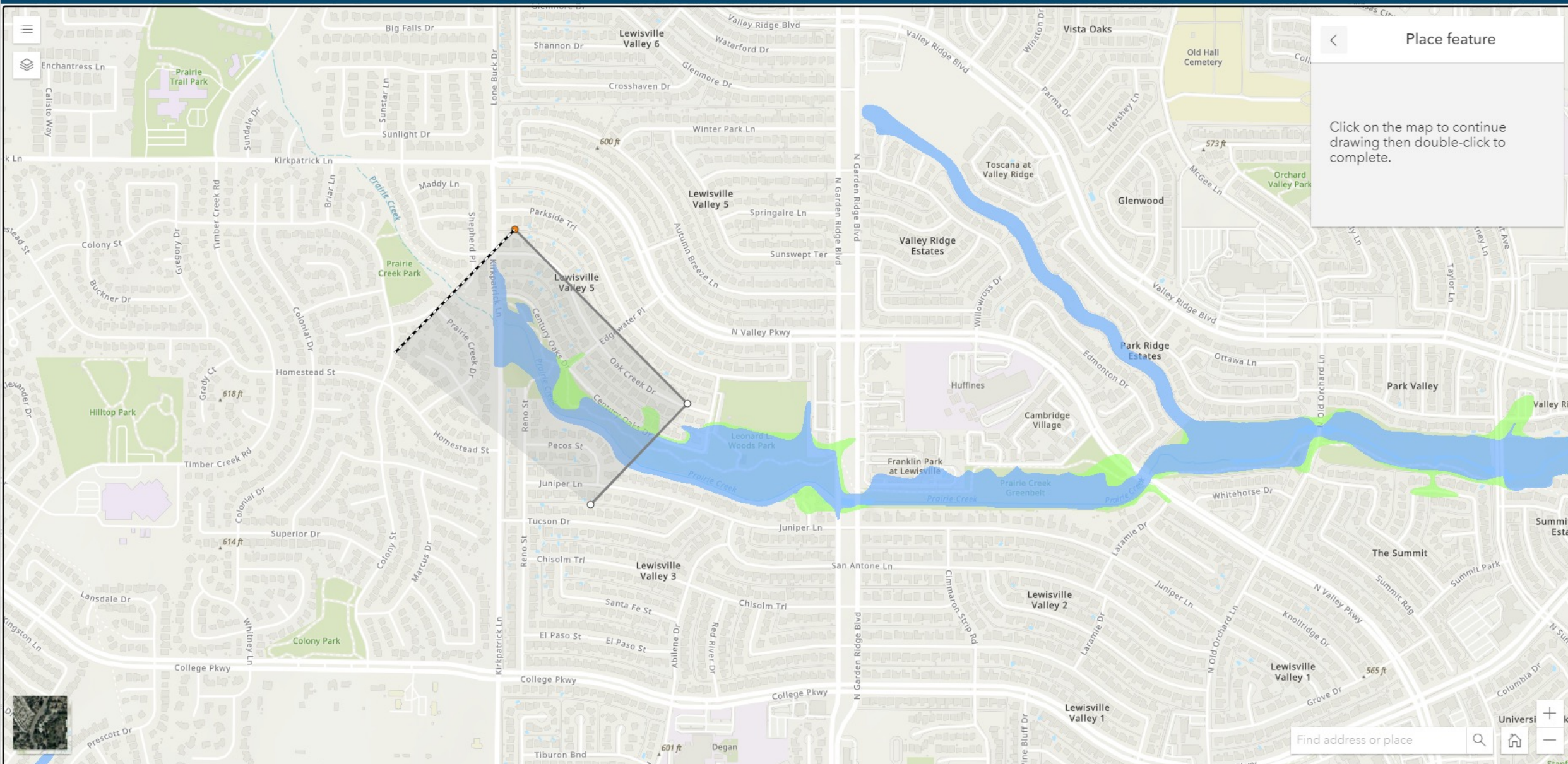


Floodplain Studies/Maps

Web Map Instructions

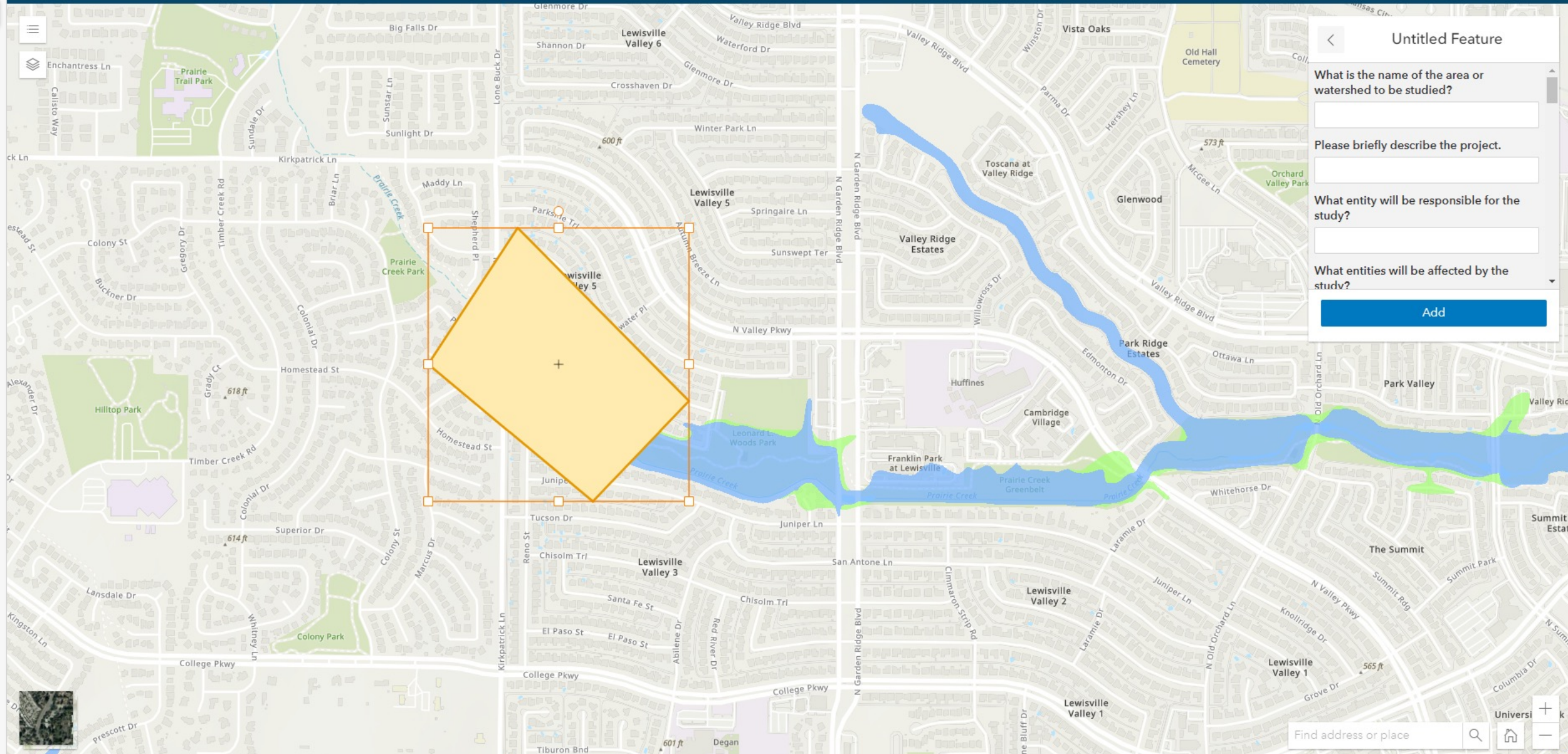
Place feature

Click on the map to continue drawing then double-click to complete.



Floodplain Studies/Maps

Web Map Instructions



Untitled Feature

What is the name of the area or watershed to be studied?

Please briefly describe the project.

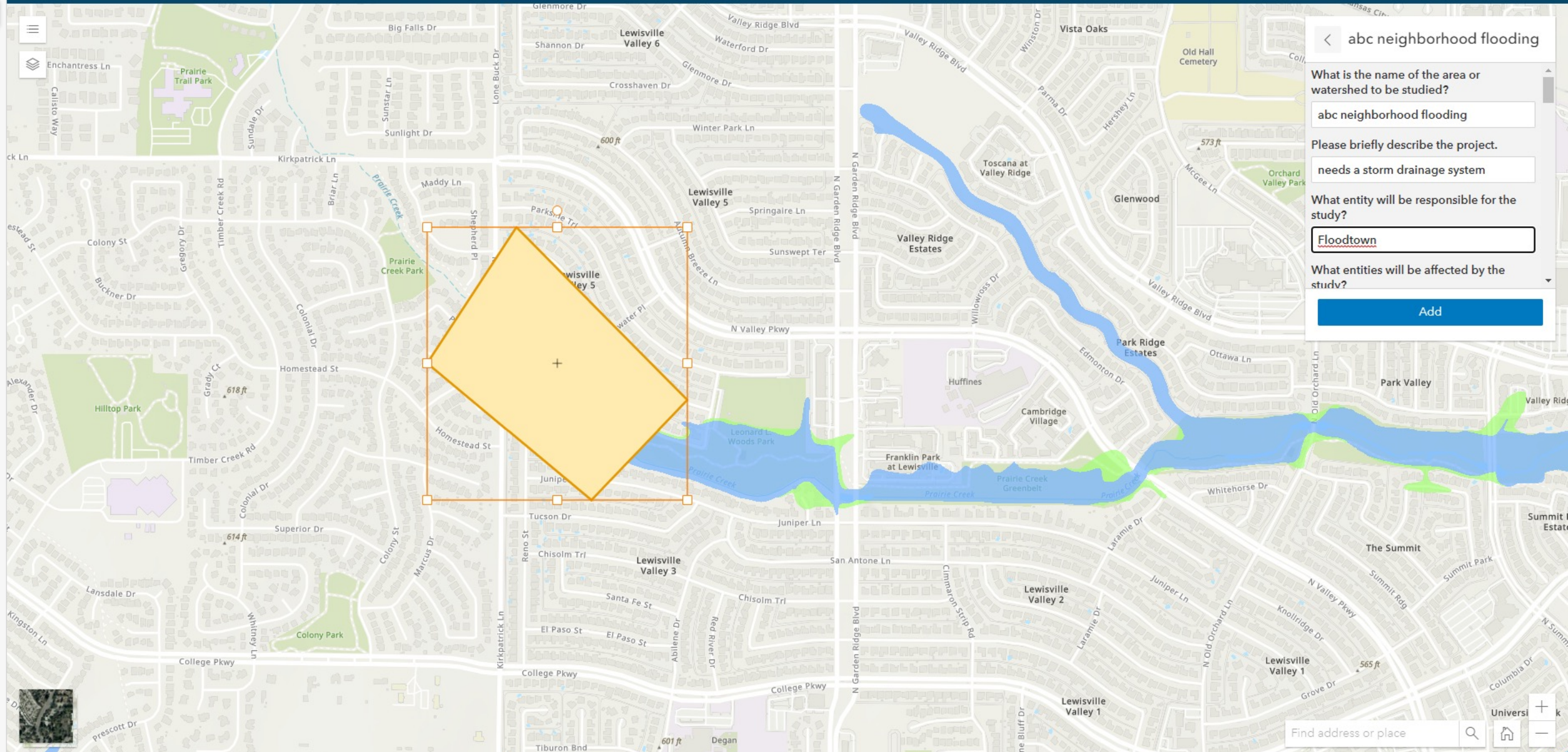
What entity will be responsible for the study?

What entities will be affected by the study?

Add

Floodplain Studies/Maps

Web Map Instructions



abc neighborhood flooding

What is the name of the area or watershed to be studied?

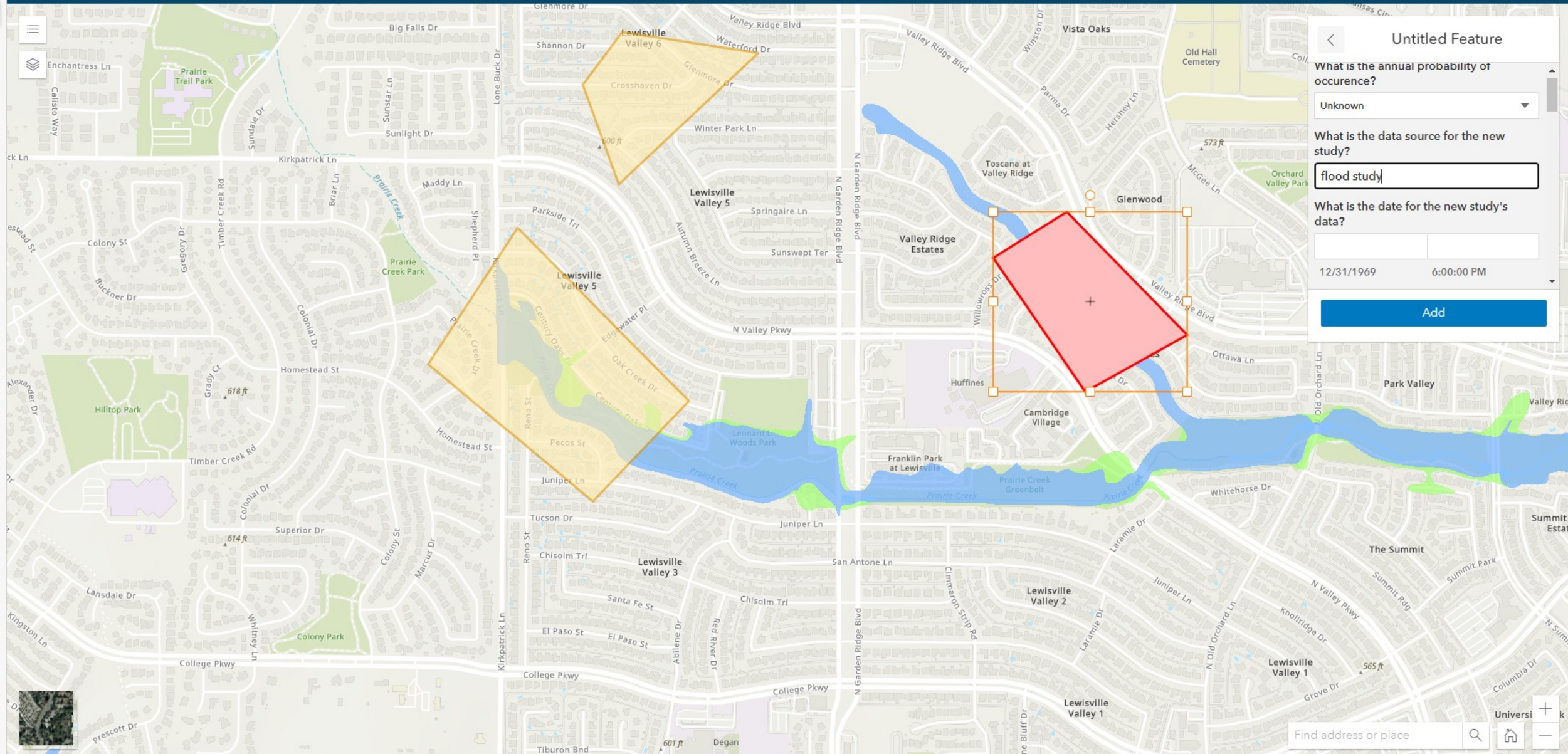
Please briefly describe the project.

What entity will be responsible for the study?

What entities will be affected by the study?

Floodplain Studies/Maps

Web Map Instructions



Untitled Feature

What is the annual probability of occurrence?

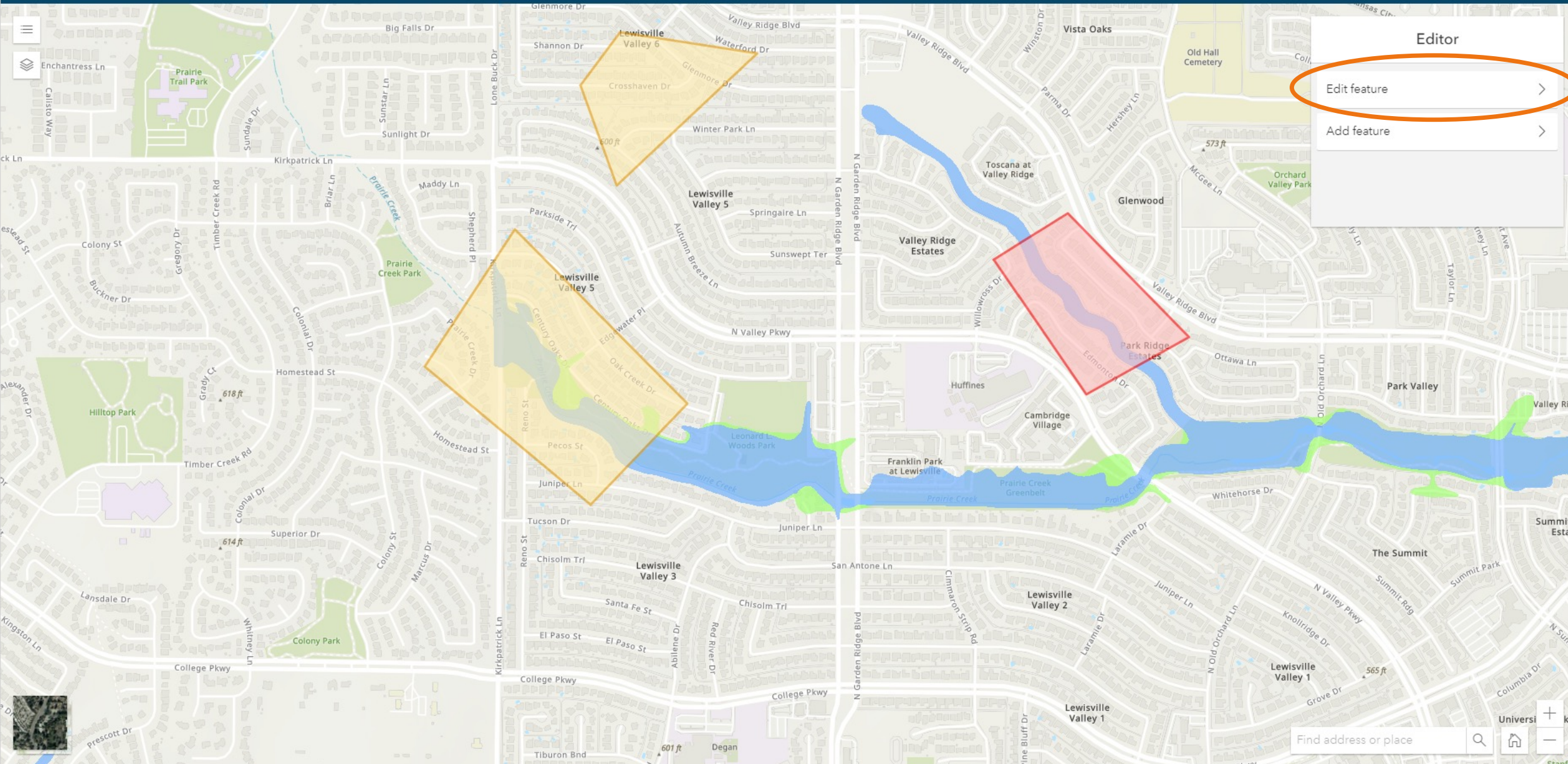
What is the data source for the new study?

What is the date for the new study's data?

Add

Floodplain Studies/Maps

Web Map Instructions



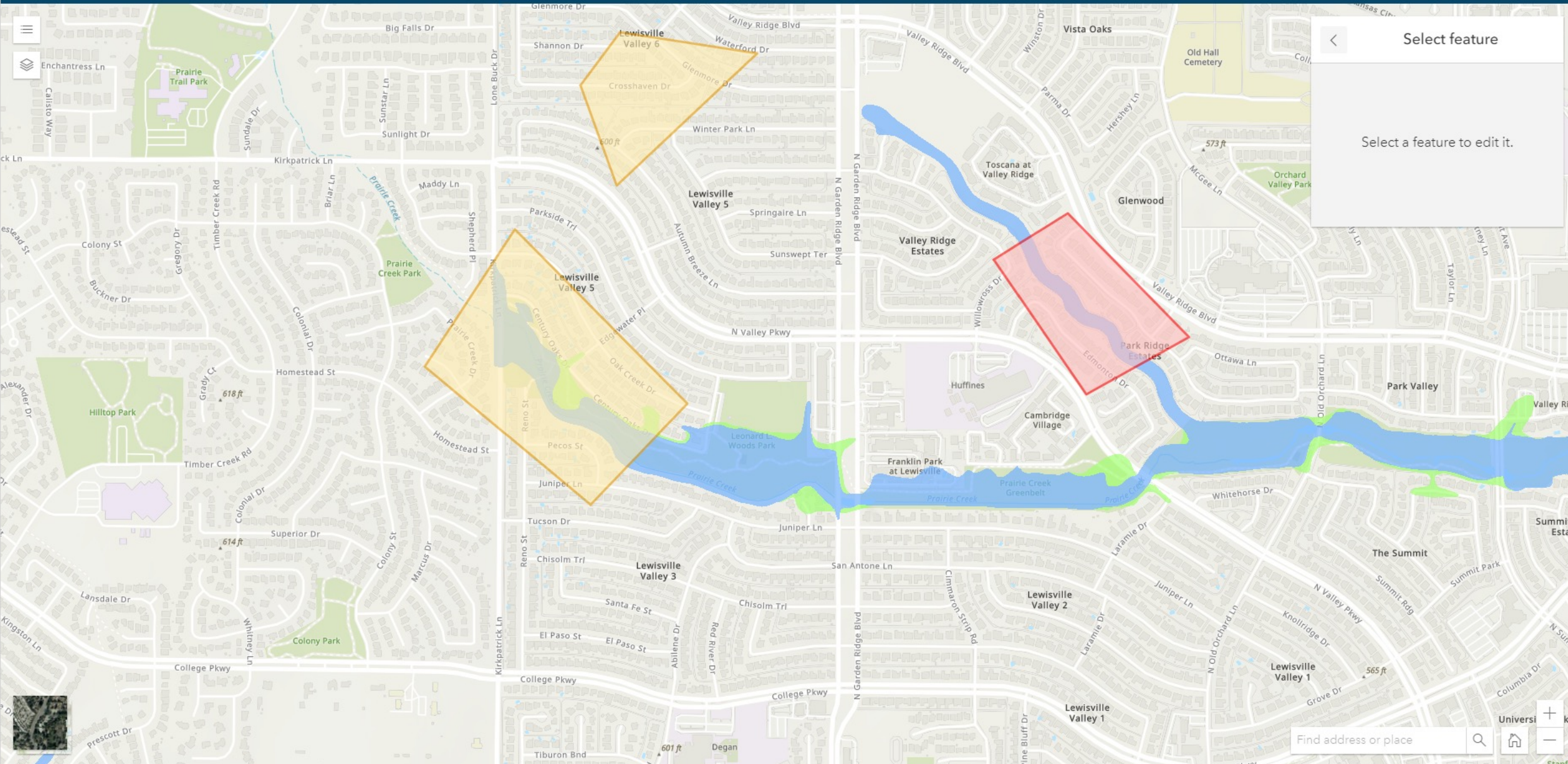
Editor

Edit feature

Add feature

Floodplain Studies/Maps

Web Map Instructions

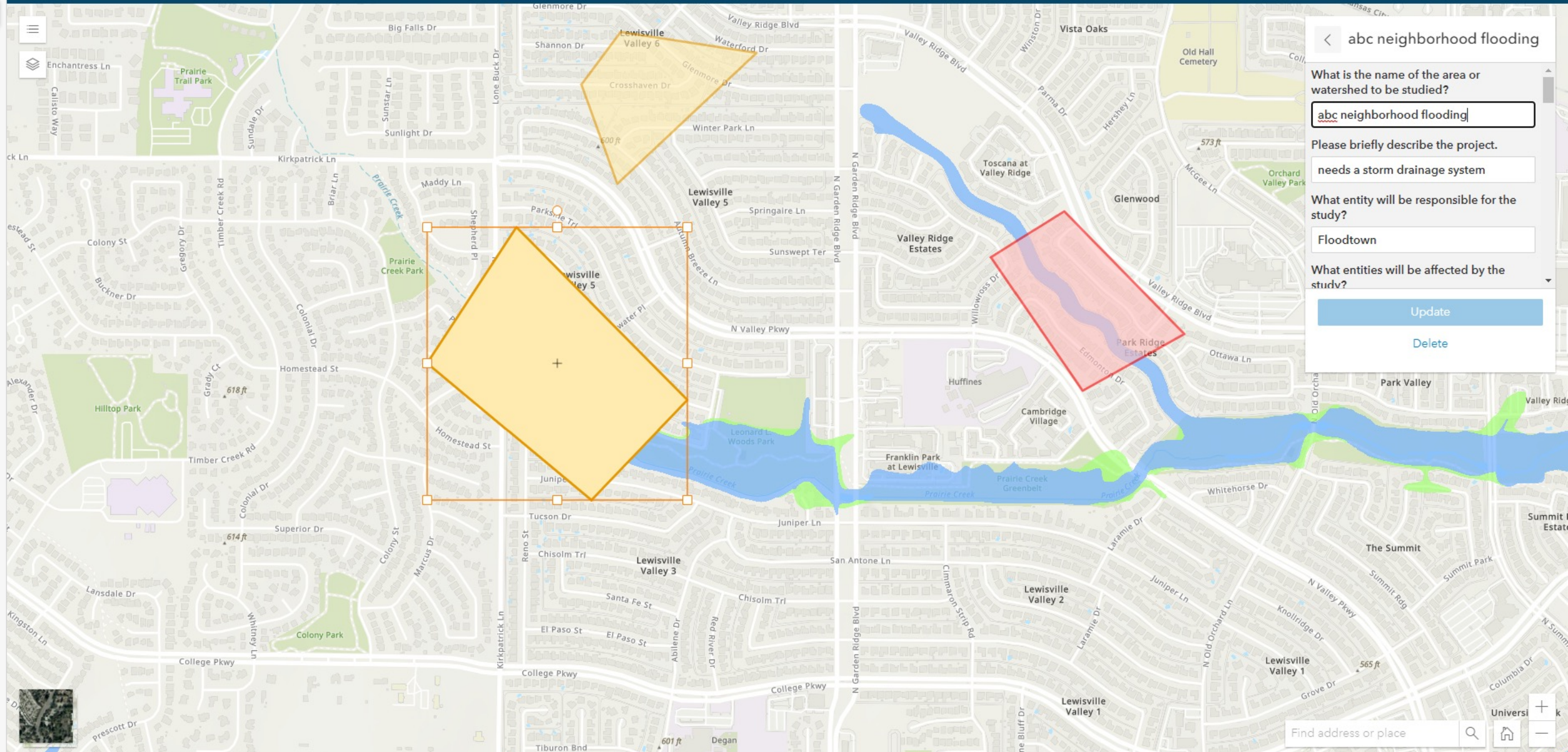


Select feature

Select a feature to edit.

Floodplain Studies/Maps

Web Map Instructions



< abc neighborhood flooding

What is the name of the area or watershed to be studied?

Please briefly describe the project.

What entity will be responsible for the study?

What entities will be affected by the study?

Update

Delete

- Welcome
- Your Info
- Backgrounder
- ▼ Questions
 - Floodplain Management/Ordinances
 - Flood History
 - Floodplain Studies / Maps
 - Risk Reduction Alternatives
 - Flood Finance
 - Natural Resources & Condition Changes
 - Hazard Mitigation & Emergency Planning
- ▼ Existing Infrastructure
 - Levees / Dams**
 - Storm Drainage Systems
 - Roadways
 - Coastal
 - Critical Infrastructure

Community Questionnaire for: Floodtown

You may continue to edit, if needed, or click the next category to proceed.

Levees/Dams

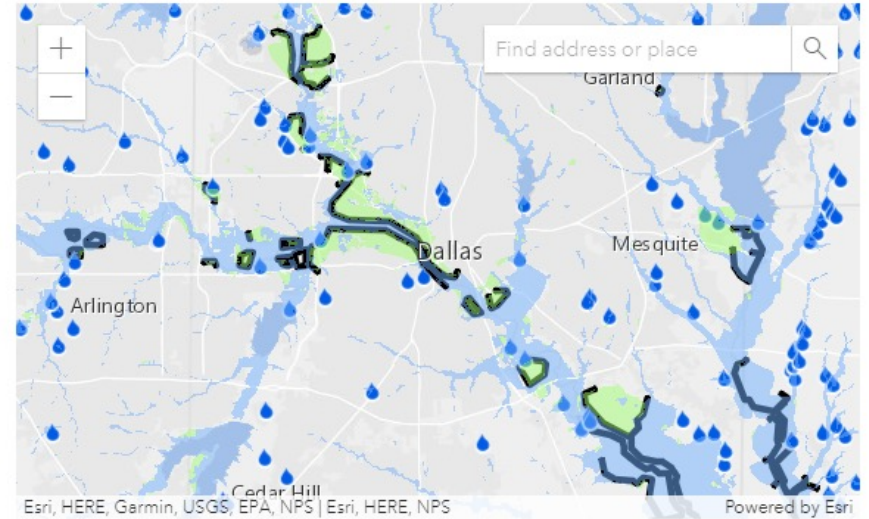
The region's database was populated with available information as identified below. Where overlap occurred, the data sources were reviewed and amended to only include a single inventory per location.

Available Data Sources:

- Dams: USACE National Inventory of Dams, TSSWCB Local Dams Listing, TCEQ Inventory of Texas Dams, TWDB Major Reservoirs, and NHD Lakes
- Levees: USACE National Levee Database and FEMA Levee Inventory


You may preview the populated datasets using the inset map on this page.

If you would like to add, remove, or edit these features, it would be best to provide input using a web mapping feature by clicking the link below. You are welcome to skip questions, but we greatly appreciate any information you are able to provide.



[Go to map](#)

[Next »](#)

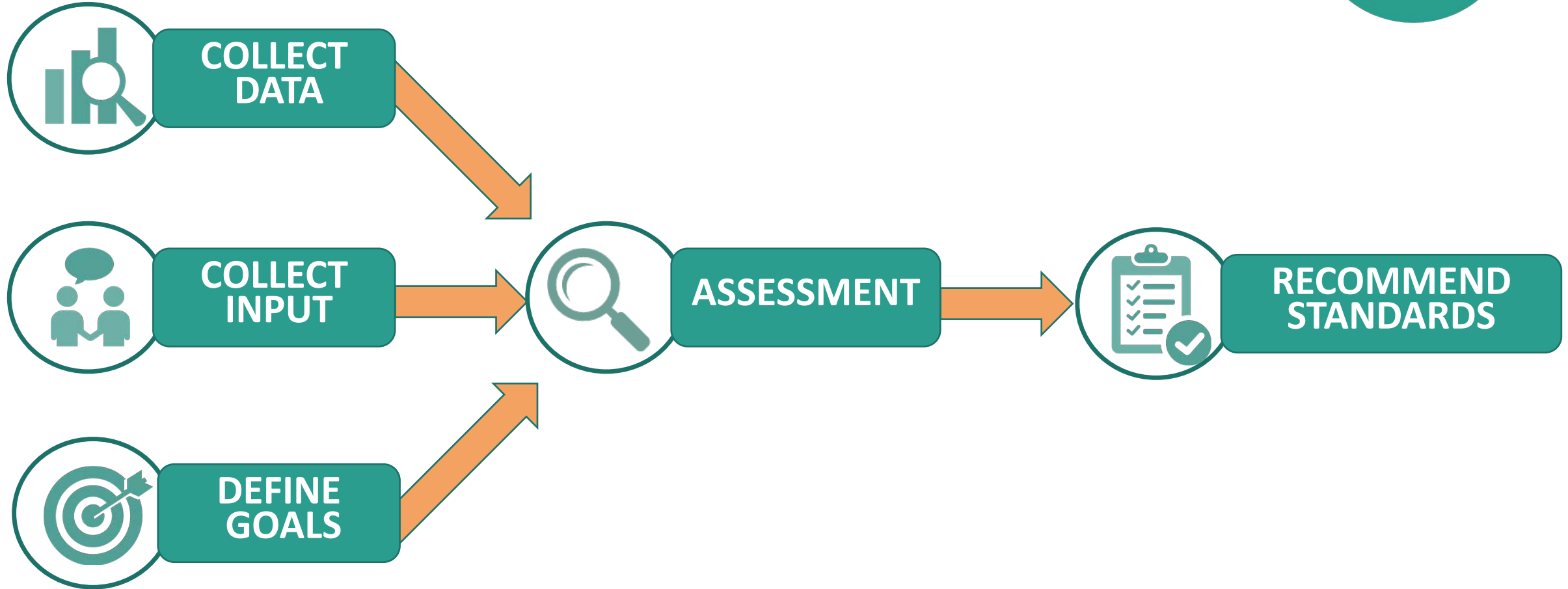


Task 3

Floodplain Management Practices & Flood Protection Goals

TASK 3 – FLOODPLAIN MANAGEMENT PRACTICES & FLOOD PROTECTION GOALS

Matt Bucchin – HALFF



COLLECT DATA



Entity	Floodplain management regulations	Adopted minimum regulations	NFIP Participant	Higher Standards Adopted	Floodplain Management Practices	Level of enforcement of practices	Existing Stormwater or Drainage Fee
County 1	Yes	Yes	Yes	No	Moderate	Moderate	Yes
City 1	No	No	No	No	Low	Low	No
Special Purpose District	Unknown	No	No	No	None	None	No

Template from TWDB – Exhibit C

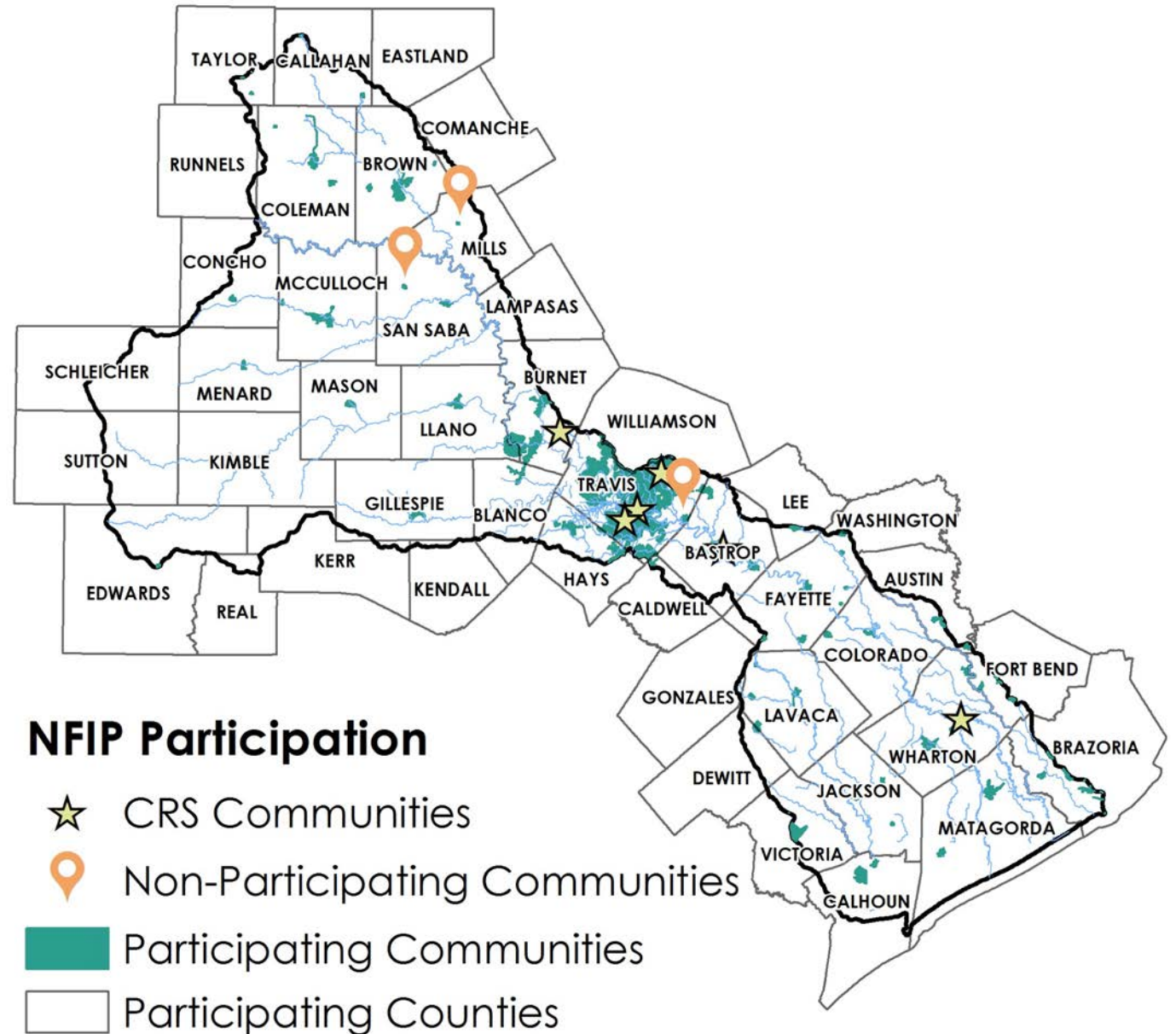
NFIP & CRS Participation

100%

of Counties
Participating
in NFIP

95%

of Cities
Participating
in NFIP



Current State of Floodplain Management

THE GOOD NEWS

- Almost all communities regulate within floodplain
- Good benefit for citizens, including cost savings
- Most communities are regulating to the minimum standards

AREAS FOR IMPROVEMENT

- Minimum standards may not provide need levels of prevention and protection
- Enforcement is not consistent
- Lack resources and training for participants
- CRS participation very low
- Property owner participation in NFIP very low

100%

of Counties
Participating
in NFIP

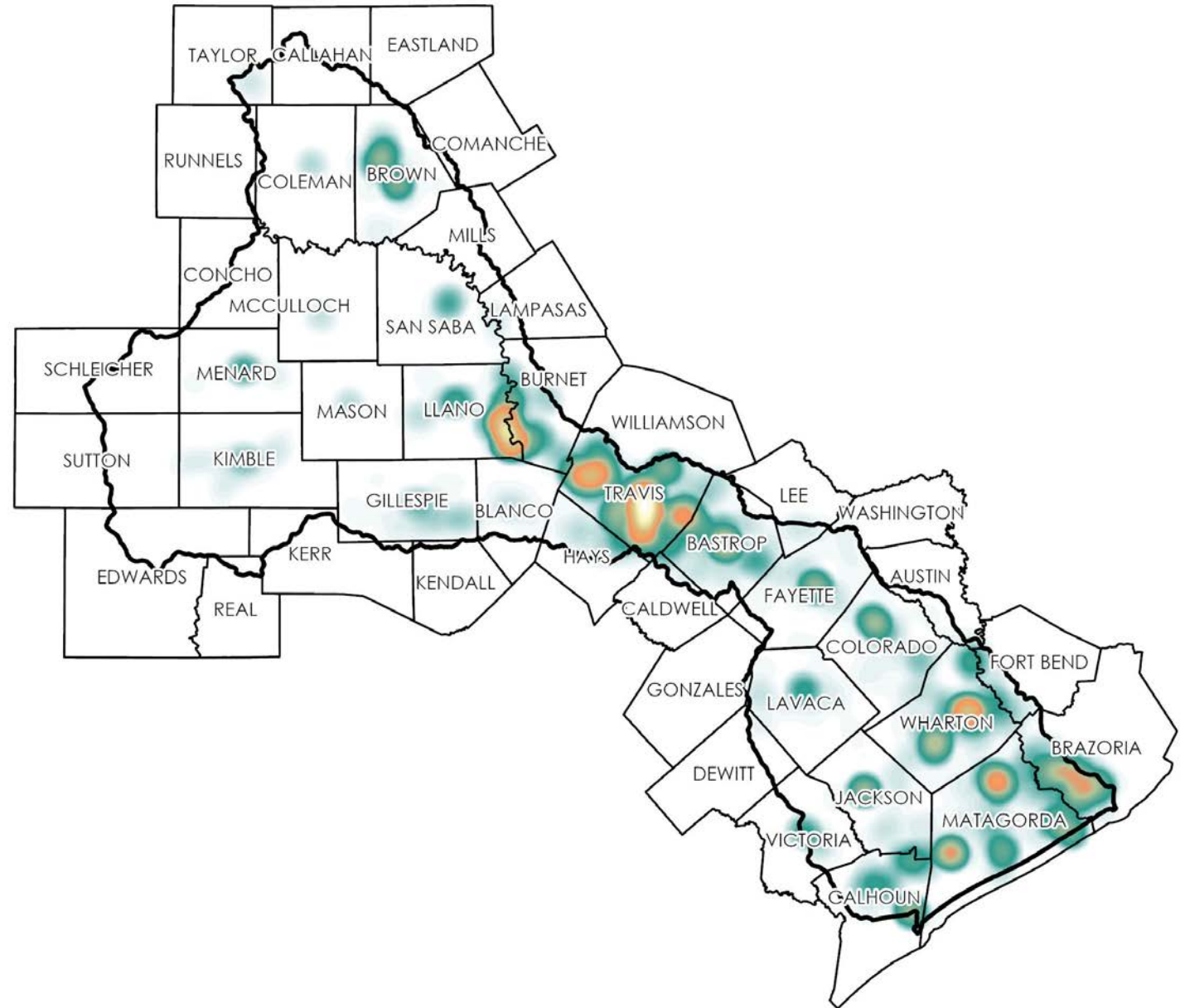
95%

of Cities
Participating
in NFIP

of Buildings within the Regulatory Floodplains

101,400

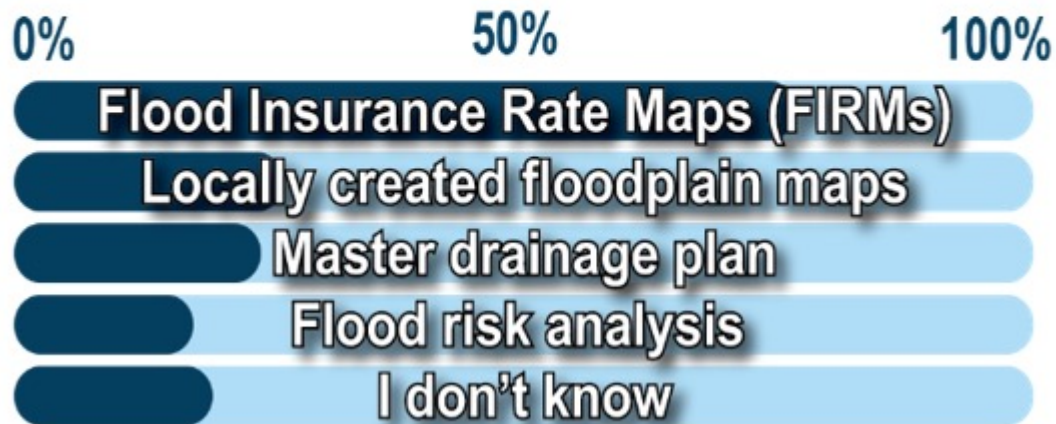
of Buildings within
the Regulatory
Floodplains



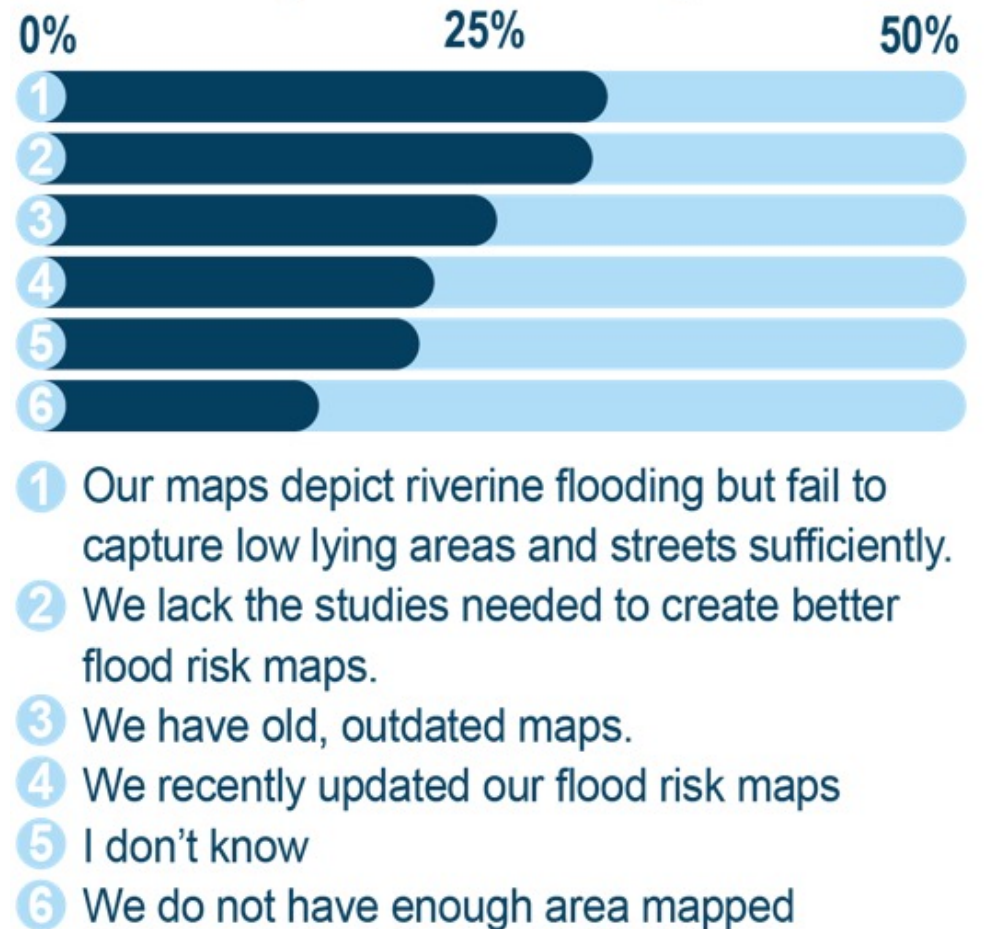
2018 STATE FLOOD ASSESSMENT

Key Takeaways

Which of the following is used to define flood risk within your community or jurisdiction?



With regard to flood risk maps, which of the following accurately describes your community?



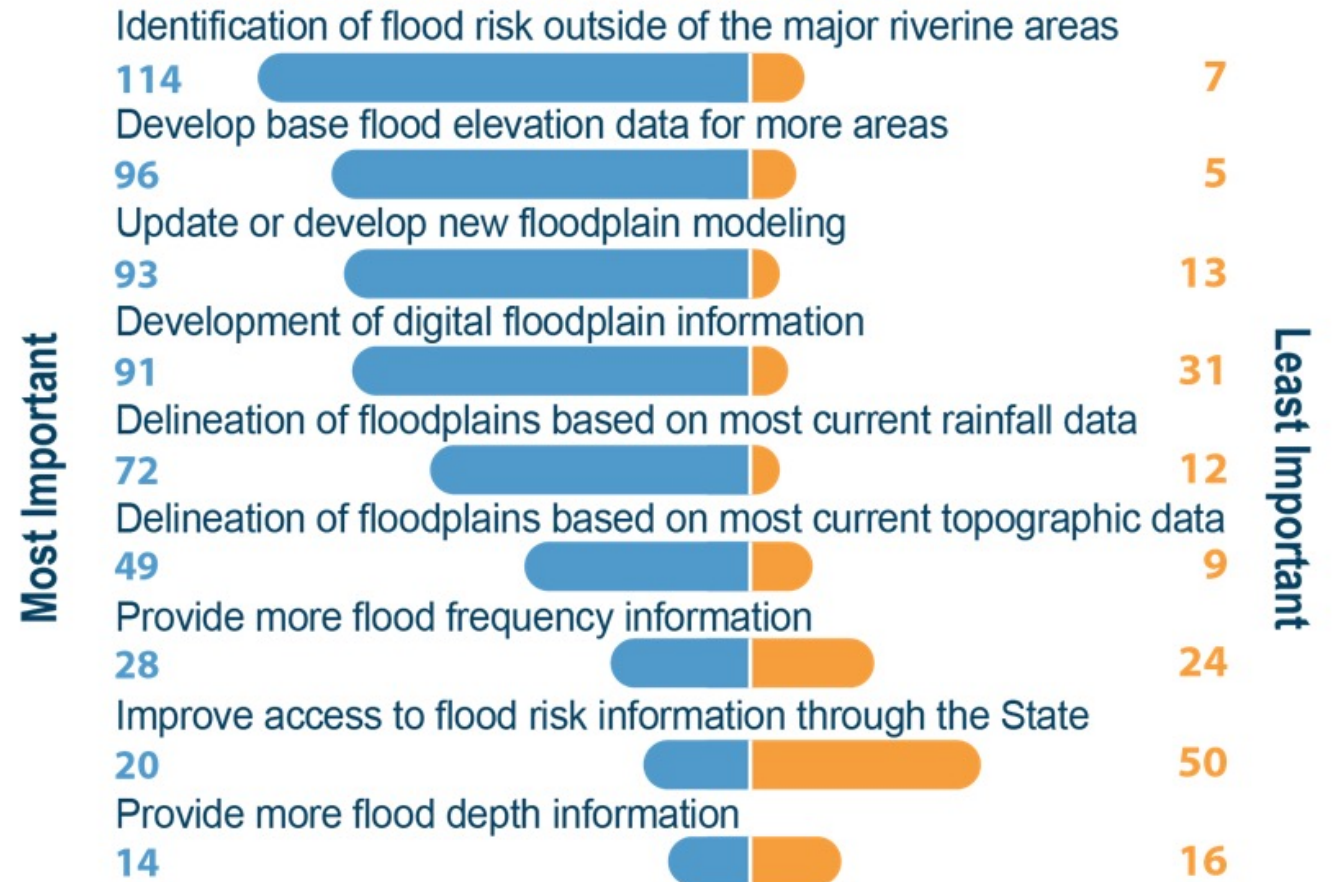
2018 STATE FLOOD ASSESSMENT

Key Takeaways

My community or jurisdiction would most benefit from more state resources directed at:

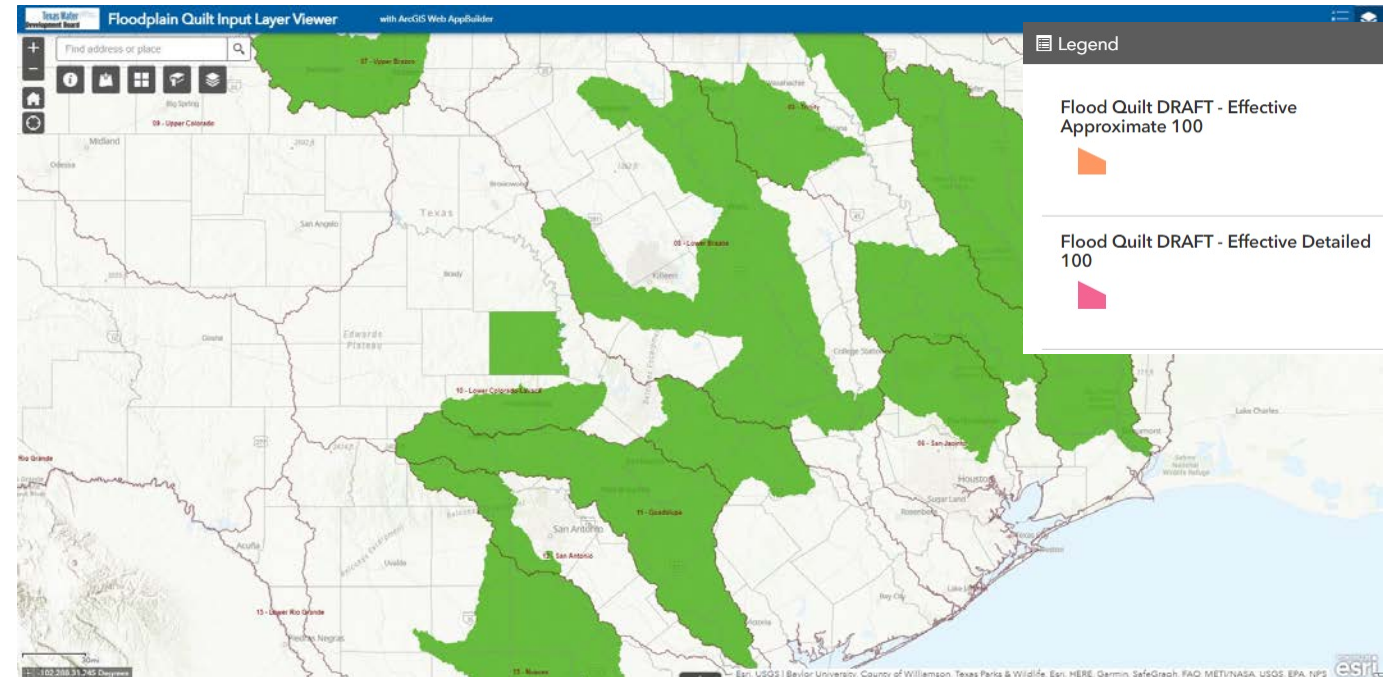
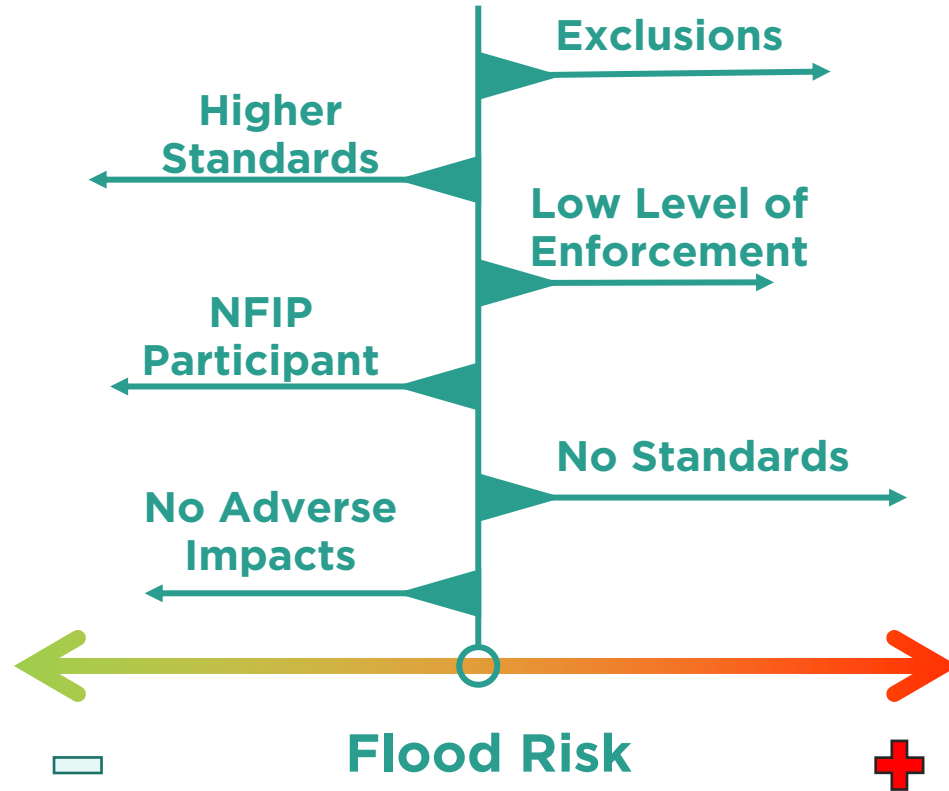


With regard to your community's flood risk maps, how important are these activities?



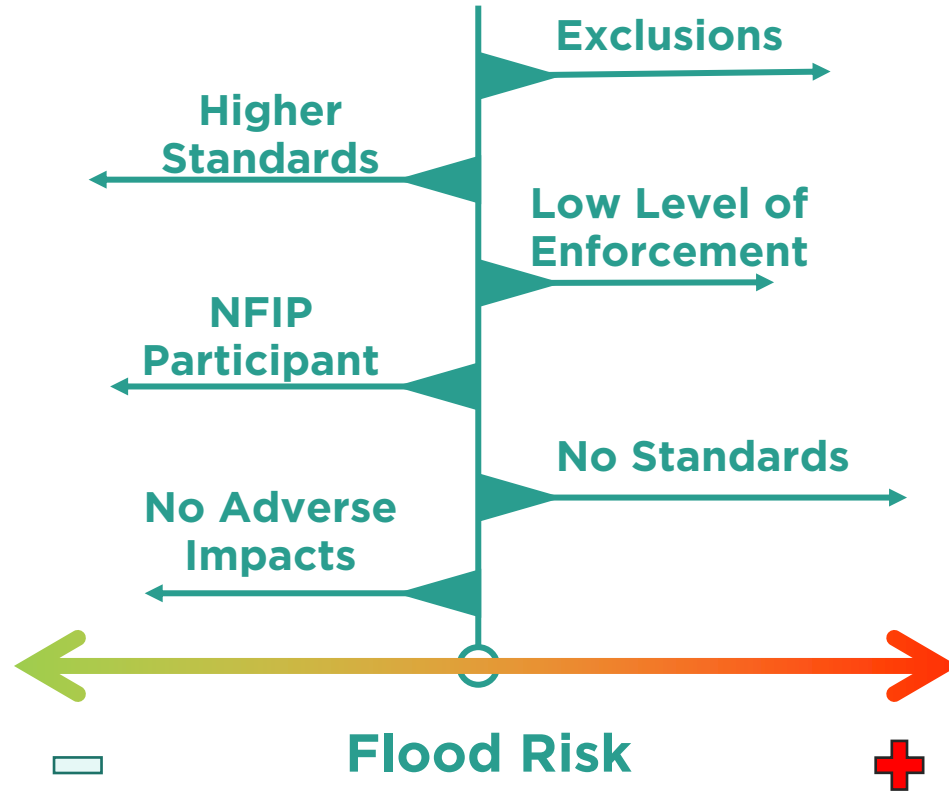
ASSESSMENT

Existing Conditions



ASSESSMENT

Future Conditions



ASSESSMENT

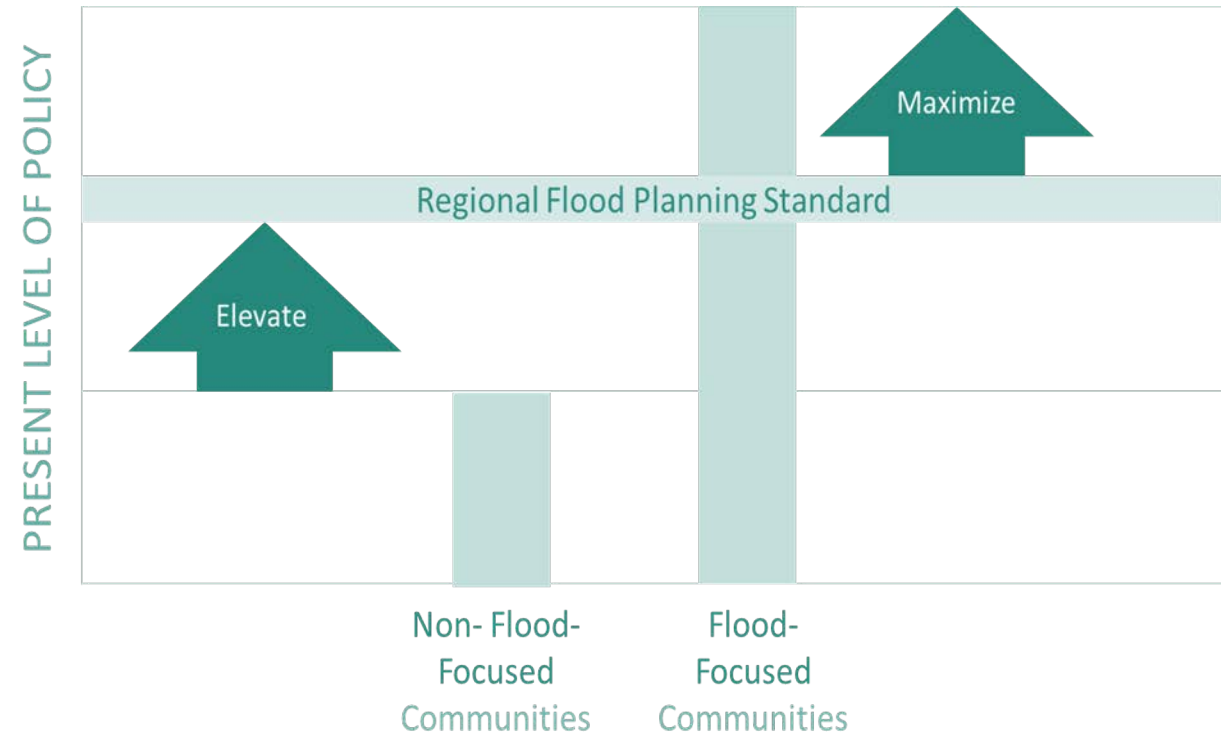
Identification of Gaps & Issues


Identify Gaps

- Standards/policies
- Quantify risk reduction (life & property)
- Restore failing infrastructure
- Flood warning and response
- Floodplain protection

Identify Issues

- Local floodplain
- Valley storage
- Cumulative impacts of developments
- Natural area protection
- Flood duration





Task 3

Goal Setting

UNDERSTANDING YOUR VALUES

POLL EVERYWHERE

We will be using the virtual engagement tool **Poll Everywhere** during today's meeting to start to explore your values. Please participate using one of the following methods:

APP

Username: halffpolls



WEB

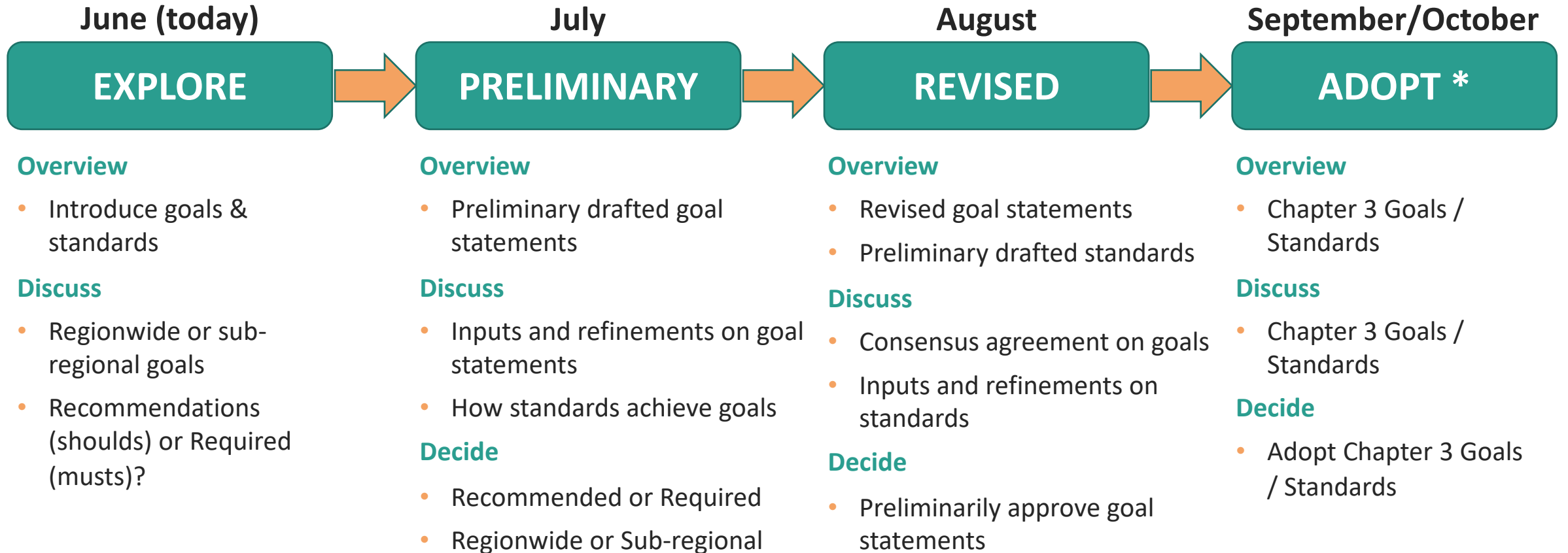
Pollev.com/halffpolls



TEXT

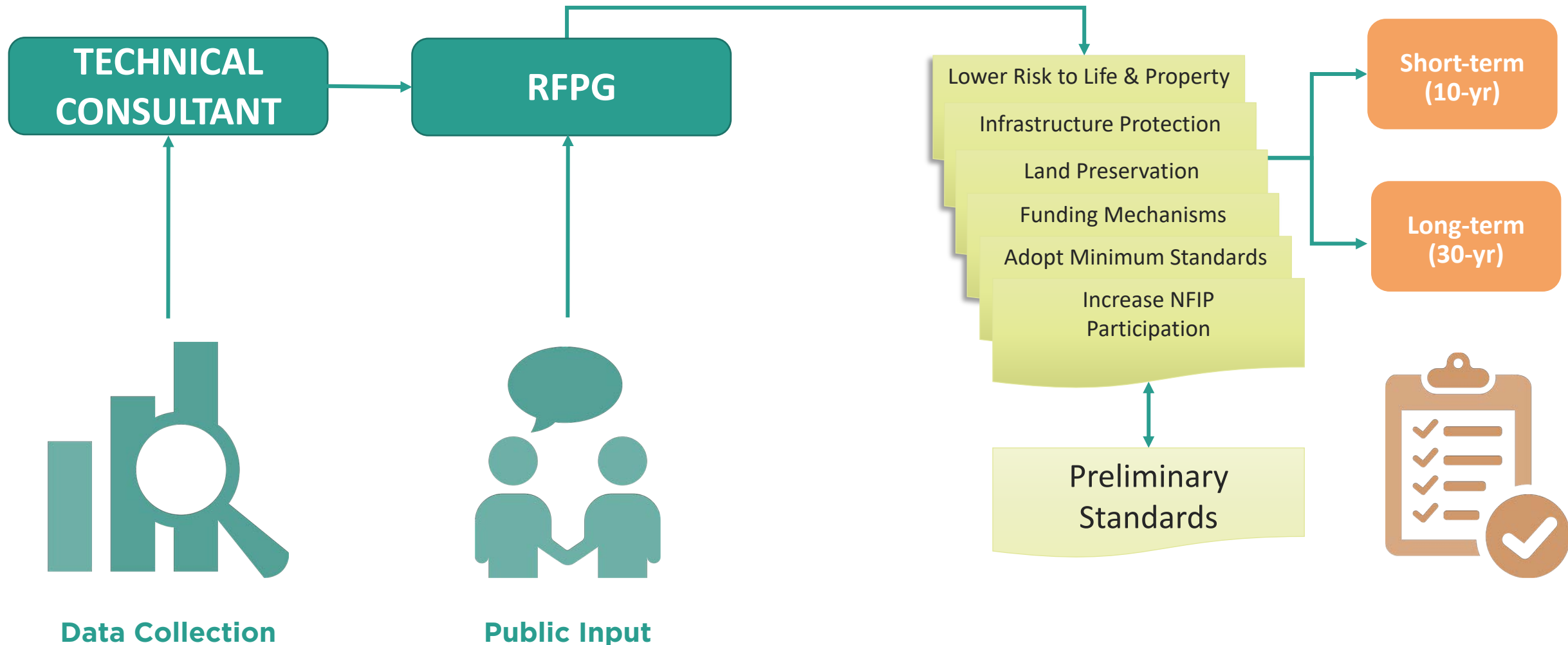
Text HALFFPOLLS to
22333 once to join

TASK 3 DEVELOPMENT OF FLOODPLAIN MITIGATION AND MANAGEMENT GOALS & STANDARDS



**Revisions may occur past these month*

GOAL SETTING PROCESS



EXAMPLE GOALS

Goal	Term of Goal	Target Year	Applicable to	Overarching Goal
50% of the region’s population is part of a municipality that has a dedicated funding mechanism for drainage projects.	Short Term	2033	Entire Region	Protect against the loss of life and property
Consider and incorporate nature-based practices in flood risk reduction projects.	Short Term	2033	Entire Region	Protect against the loss of life and property
Enroll 50% of non-participating communities into the National Flood Insurance Program.	Short Term	2033	Entire Region	Protect against the loss of life and property



Specific & Achievable



Short-term (10 years) &/or Long-Term (30 years)



Residual Risk

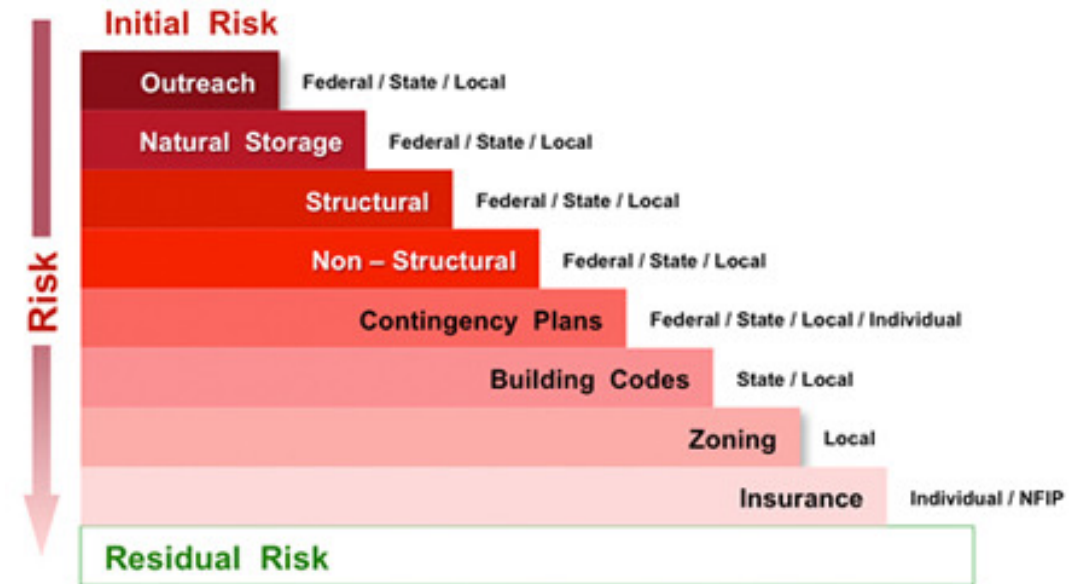
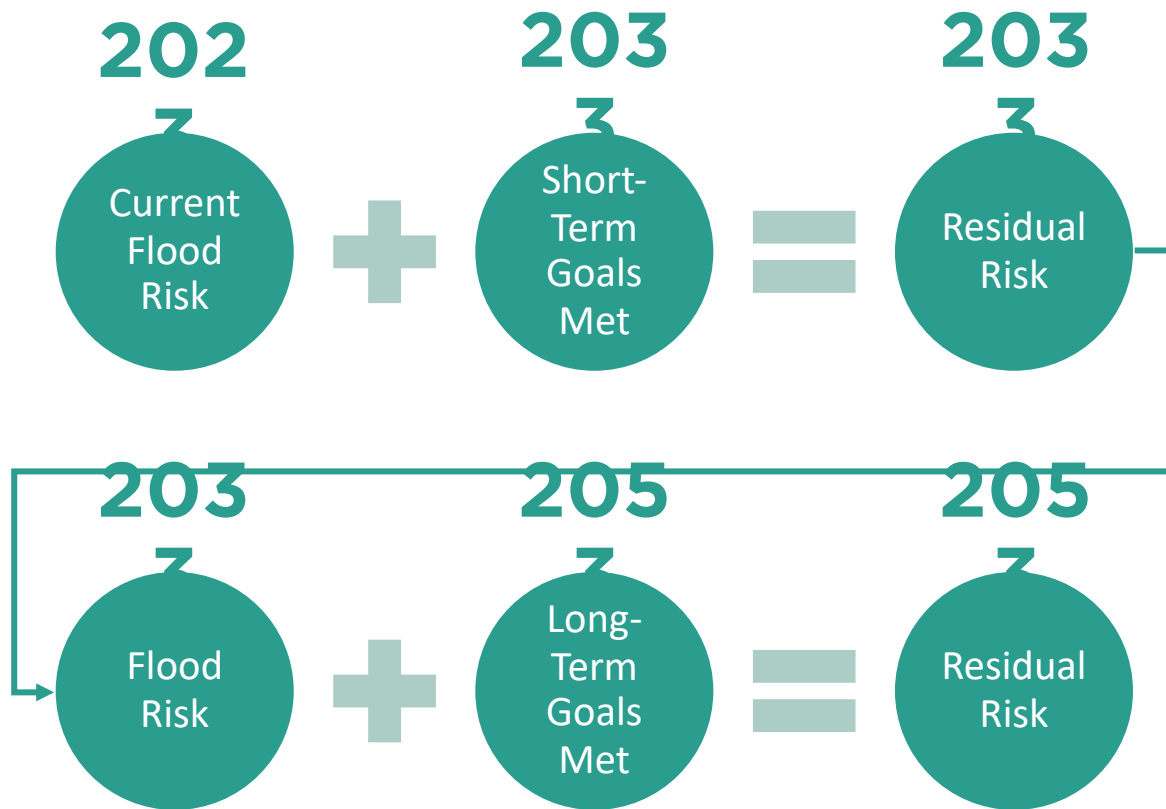


Recommended or Required



Regionwide Or Subregional

RESIDUAL RISK



Source: USACE [Partners in Shared Responsibility \(army.mil\)](https://www.army.mil)

UNDERSTANDING YOUR VALUES

POLL EVERYWHERE

We will be using the virtual engagement tool **Poll Everywhere** during today's meeting to start to explore your values. Please participate using one of the following methods:

APP

Username: halffpolls



WEB

PolleEv.com/halffpolls



TEXT

Text HALFFPOLLS to
22333 once to join

VALUES – GETTING TO GOALS

Discussion

Which is a higher priority to you?

- Solving existing problems
- Preventing future problems
- Both are equally important

VALUES – GETTING TO GOALS

Discussion

Which outcomes are a priority to you? (choose all that apply)

- Early warning system expansion/improvements
- Economic development
- Environmental protection
- Flood claim reductions
- Flood insurance policy increases
- Flood study increases
- Floodplain preservation
- Enhancement of riparian ecological functions
- Historic preservation
- Water supply benefits

VALUES – GETTING TO GOALS

Discussion

Which is a higher priority to you?

- Consistent regionwide goals
- Subregional applicability

VALUES – GETTING TO GOALS

DISCUSSION

Which is your gut preference for standards?

- Recommended “*Shoulds*”
- Required “*Musts*”

TASK 3 – FLOODPLAIN MANAGEMENT PRACTICES & FLOOD PROTECTION GOALS

Goals



Select Short- and Long-Term Goals



Protect life and property
Specific
Actionable
Measurable



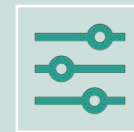
Structural
Non-Structural
Policy
Funding

Standards



Recommend or Adopt
minimum standards?

Yes: Need to set
preference
No: No further
action



Preference

A) Recommend
B) Adopt



Specific minimum standards to
Recommend or Adopt
(Region-wide and/or Sub-Region)



Look-Ahead Calendar

July – December 2021

JULY 2021

RFPG Meeting

- Present and discuss approach to Task 2A/2B - Existing and Future Condition Flood Risk Analysis
- Present and discuss approach to Task 8 - Administrative, Regulatory, and Legislative Recommendations (aka, policy)
- Continue discussion re: Task 3B floodplain management goals
- Briefing and discussion re: FMEs, FMSs and FMPs

AUGUST 2021

RFPG Meeting

- Present and discuss preliminary results of Task 1 - Planning Area Description
- Present and discuss preliminary results of Task 2A - Existing Condition Flood Risk Analysis
- Present and discuss preliminary results of Task 3A - Floodplain Management Practices (Chapter 3)
- Conclude discussion of Task 3B - Floodplain Management Goals (Chapter 3)
- Present and discuss approach to Tasks 4A and 4B – Screening of Alternatives
- Present and discuss screening criteria for FMEs, FMSs and FMPs

SEPTEMBER 2021

RFPG Meeting

- Approve submittal of preliminary draft Chapter 1 - Planning Area Description
- Present and discuss preliminary results of Task 2B results - Future Condition Flood Risk Analysis
- Approve submittal of preliminary draft Chapter 3 - Floodplain Management Practices and Goals
- Present and discuss preliminary results of Task 4A

OCTOBER–DECEMBER 2021

RFPG Meeting

October

- Approve submittal of preliminary draft Chapter 2 - Existing and Future Flood Risk Analysis and associated maps/tables
- Present and discuss preliminary results of Task 4B

November

- Present and discuss preliminary draft Chapter 4

December

- Discuss and approve submittal of Technical Memo (due Jan 7, 2022)



Wrap Up

Region 10 Lower Colorado-Lavaca RFPG

- 10. Discussion and possible action regarding public and stakeholder engagement strategies, including potential creation of a subcommittee, selection of members, and authorization of the subcommittee's duties**

Region 10 Lower Colorado-Lavaca RFPG

11. Public comments– limit 3 minutes per person

12. Consider date and agenda items for next meeting

13. Adjourn