#### **Public Meeting Notice**

Region 9 – Upper Colorado Regional Flood Planning Group July 29, 2021 10:00 AM CST

Notice is hereby given of a regular meeting of the Region 9 – Upper Colorado Regional Flood Planning Group to be held July 29, 2021 at 10:00 AM at the McNease Convention Center – North Meeting Room, 501 Rio Concho Drive, San Angelo, Texas, for the purpose of considering the following agenda items. Masks and social distancing recommended for in-person meeting.

Phone participation is available by the conference call information below: Call In: (325) 326–0870 Passcode / ID: 651-581-308#

The Meeting Agenda and the Agenda Packet are posted online at <u>https://www.cosatx.us/departments-services/water-utilities/region-9-upper-colorado-flood-planning-region</u>

A recording of the meeting will be available to the public in accordance with the Open Meetings Act upon written request.

Members of the public may also submit Public Comment on agenda items by sending their written comments via email to <u>allison.strube@cosatx.us</u> or <u>rfpg9.lance@gmail.com</u> by noon July 28, 2021. The subject line must be in the following format: "Public Comment, [item number] – July 29, 2021." All emails must include your name and address. Please note all Public Comment emails relevant to posted agenda items received by the deadline will be published as part of the agenda packet prior to the meeting and are therefore public record.

#### Agenda:

- 1. Call to Order
- 2. Welcome
- 3. Public comments limit 3 minutes per person
- 4. Approval of minutes from the previous meeting.
- 5. TWDB Update
- 6. Sponsoring Agency Update from City of San Angelo
  - a. Stakeholder List discussion and input
  - b. Open Meetings Act compliance for future meetings
- 7. Consultant Presentation
  - a. Task 2A Existing Flood Risk Analysis, Task 3A/3B Existing Floodplain Management Practices and Goals, and Task 10 Public Participation and Plan Adoption
  - b. Overview of presentation for RFPG members to disseminate
- 8. Public comments limit 3 minutes per person
- 9. Consider date and agenda items for next meeting
- 10. Adjourn

Additional information may be obtained from: Allison Strube

allison.strube@cosatx.us 301 W. Beauregard Ave., San Angelo, TX 76903

#### **Meeting Minutes**

#### Region 9 – Upper Colorado Regional Flood Planning Group June 24, 2021 <u>10:00 AM CST</u>

Meeting held In person\_at City Hall – East Mezzanine, 72 W. College Avenue, San Angelo, Texas. Additionally, participation was available via conference call at (325) 326-0870.

#### Roll Call:

Voting Member	Interest Category	<u>Present (x) /Absent ( ) / Alternate</u> Present (*)
Kenneth Dierschke	Agricultural interests	X
Rick Bacon	Counties	X
Henryk Alexander Olstowski	Electric generating utilities	
Christy Youker	Environmental interests	
Vacant	Flood districts	n/a
Morse Haynes	Industries	X
Lance Overstreet	Municipalities	X
David H. Loyd Jr.	Public	X
Scott McWilliams	River authorities	X
Chuck Brown	Small business	
Cole D. Walker	Water districts	X
Allison Strube	Water utilities	X

Non-voting Member	Agency	Present(x)/Absent()/ Alternate Present (*)
John McEachern	Texas Parks and Wildlife Department	
Tim Frere	Texas Division of Emergency Management	
Larissa Place	TDA	
Ben Wilde	Texas State Soil and Water Conservation	Х
	Board	
Jet Hays	General Land Office	Х
Morgan White	Texas Water Development Board (TWDB)	X-PH
Winona Henry	ona Henry Texas Commission on Environmental	
	Quality	

#### **Others Present:**

Ann Yakimovicz - Region 10 Liaison

#### Quorum:

Quorum: Yes Number of voting members or alternates representing voting members present: 8 Number required for quorum per current voting positions of 12: 7 *Meeting agendas, packets, information and recordings are avialable at the link* <u>https://www.cosatx.us/departments-services/water-utilities/region-9-upper-colorado-flood-planning-region</u>

#### • AGENDA ITEM NO. 1: Call to Order

Chair Strube called the meeting to order at 10:01 AM CST. A roll call of the planning group members was taken to record attendance, and a quorum was established prior to proceeding with the agenda.

#### • AGENDA ITEM NO. 2: Welcome, Meeting Facilitation Information and Instructions

#### • AGENDA ITEM NO. 3: Public Comments

No Public Comments were made during this item.

#### • AGENDA ITEM NO. 4: Approval of minutes from previous meeting.

Motion by Scott McWilliams and seconded by Commissioner Rick Bacon. Motion passed unanimously.

#### • AGENDA ITEM NO. 5: TWDB Update

Presented by Morgan White – Made the notification that Haley Gillespie has resigned and she Morgan will be the primary representative for Region 9 to TWDB. Ms. White also relayed that the sub contract reviews/approvals for the technical consultant is still pending.

#### • AGENDA ITEM NO. 6: Sponsor agency update from the City of San Angelo Provided by chair Allison Strube

City staff is working with HDR to finalize signatures of the contracts they are in legal reviews for final edits.

Additionally Chair Strube has been assisting in developing stakeholder comprehensive lists for contacts including city county reps, floodplain reps, soil water conservation dist., TXDOT, etc.

#### AGENDA ITEM NO. 7: Pre-Planning Public Input. No Public Comments were made during either sub-item "a" or "b" of this

No Public Comments were made during either sub-item "a" or "b" of this item.

#### • AGENDA ITEM NO. 8: Consultant Presentation (Curtis Beitel of HDR)

Mr. Beitel presented information on the basics of floodplain management, Task 2A Existing Flood Risk Analysis and Task 3A/3B Existing Floodplain Management Practices and Goals. Mr. Beitel discussed the two stages planning cycle then the formal plan being the ultimate goal.

Question from Scott McWilliams: Does HDR have all the guidelines and tables to meet the requirements? Confirmed that it is available.

Question from David Llyod: Where will the projects that meet the criteria be located locally or in the overall water shed? Response was the entire watershed.

Question from David Llyod: What does non-participating mean? Response was Nonparticipating means that the community does not participate in FEMA floodplain management or FIRM process. Mr. Beitel stated that HDR would like to have fathom data before rolling out interactive website so that there is preliminary elevation data for all communities.

Question from Commissioner Rick Bacon: When the Lidar and modelling data is available, can floodplain administrators use that data? Or would FEMA have to approve? Confirmed that if deemed best available data it could be used.

Mr. Beitel added quilt data being processed, targeting interactive website by mid-July tentatively, attempting to get stake holder information out prior to launching website for coordination.

Presentation for use by members and others should be available the next meeting.

- AGENDA ITEM NO. 9: Discussion and potential action regarding adding a non-voting position U.S. Army Corps of Engineers.
   Motion nominating U.S. Army Corps of Engineers Representative made by Scott McWilliams seconded by Cole Walker. Motion passed unanimously.
- AGENDA ITEM NO. 10: Discussion and potential action to appoint a region 10 Liaison Chuck Brown nominated by Chair Strube and second by Commissioner Rick Bacon. Motion passed unanimously.
- AGENDA ITEM NO. 11: Public Comments Limit 3 minutes per person No public comment offered.
- AGENDA ITEM NO. 12: Consider Date and Agenda Items for Next Meeting Mid July was discussed for the next meeting. Tentatively planning for the 22<sup>nd</sup>.
- AGENDA ITEM NO. 13: Adjourn Motion by Cole Walker and seconded by Scott McWilliams. Motion passed unanimously. Meeting was adjourned at 11:50 AM CST.

Approved by the Region 9 Upper Colorado RFPG at a meeting held on July 29, 2021.

Lance Overstreet, SECRETARY

Allison Strube, CHAIR



# **Upper Colorado Regional Flood Plan**

Task 1 Data Collection Kickoff Task 2A Existing Flood Risk Analysis and Task 3A/3B Practices and Goals







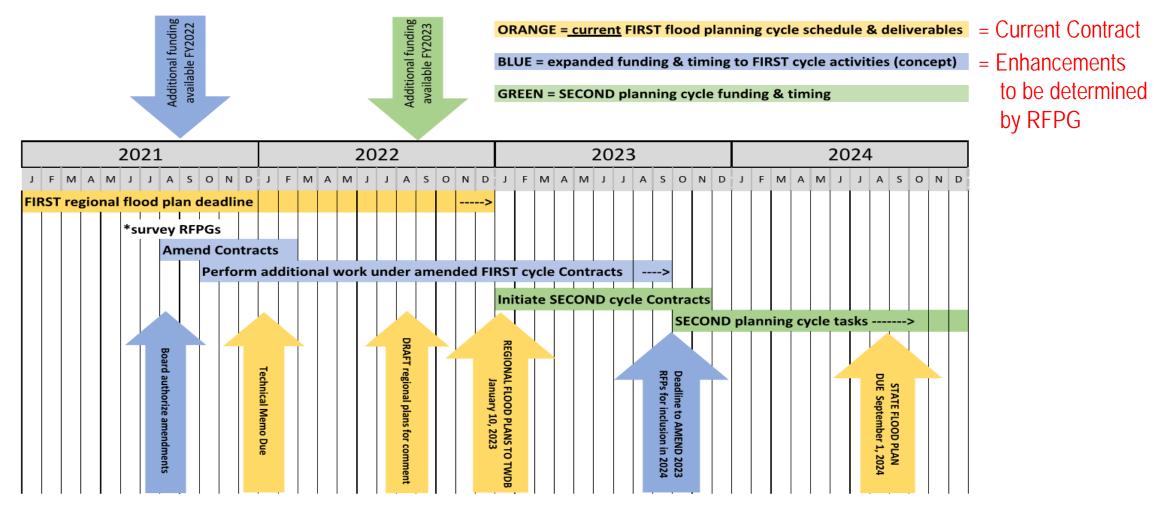
### Agenda

- 01 Schedule of Additional Funding
- 02 Expectations
- **03** Task 2A Existing Flood Risk Analyses
- **04** Task 3B Flood Planning Goals
- **05** Task 10 Outreach & Data Collection Kickoff

### **Proposed Schedule of Additional Funding**

Flood planning - working concept schedule (subject to change)

June 17, 2021 TWDB Work Session handout



# Updated Expectations Goals

- Develop Region 9 Flood Plan that meets TWDB requirements
- Establish solid foundation for future flood planning cycles

### **Likely Outcomes**

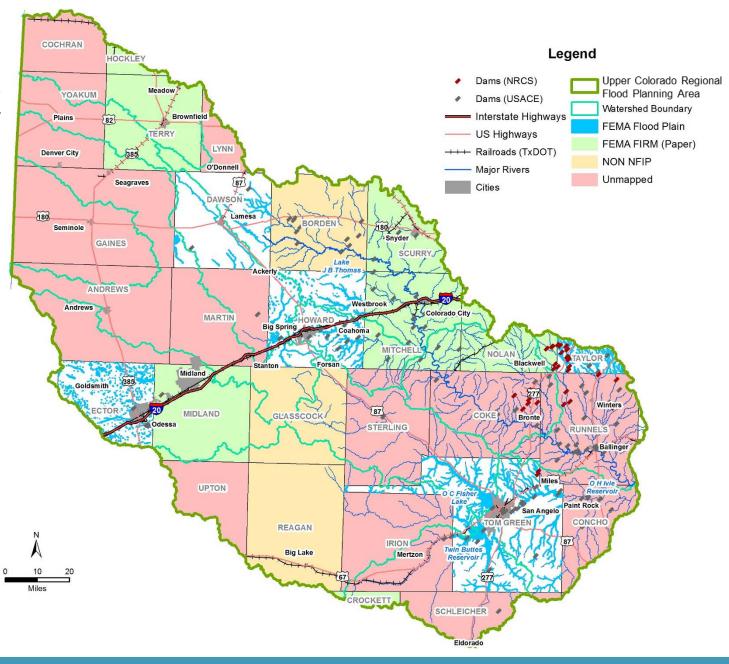
- Additional studies needed (FM Evaluations)
- Few projects will likely meet TWDB criteria to be classified as FM Projects
  - Additional details needed to meet TWDB criteria to qualify as FM Projects

#### Enhancements

- Complete a few FM Evaluations, Conduct additional outreach
- Additional details for several FM Projects to amend Region 9 Flood Plan

## Task 2A Existing Flood Risk

- Wide Range of FIRMS
  - 5 counties Digital FIRMs
  - 6 counties Paper FIRMs
  - 13 counties Unmapped
  - 3 counties Non-Participating
- NRCS dams
  - Northeastern half

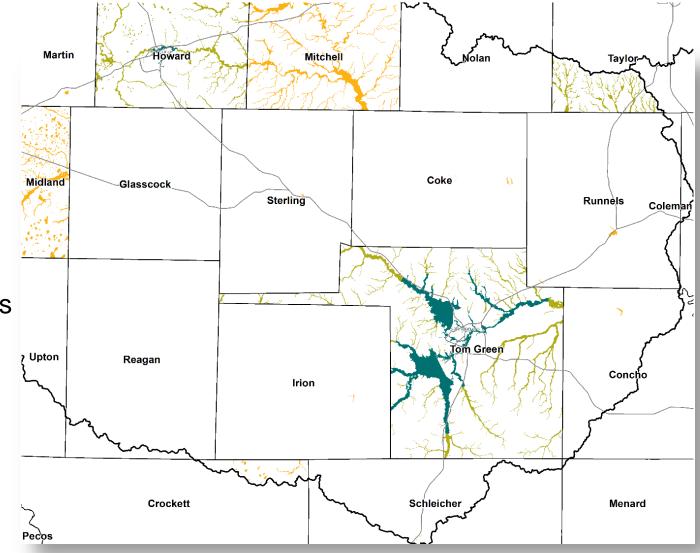


# Task 2A - Flood Risk Analyses - TWDB Floodplain Quilt

### **Lower Watershed**

- 1. National Flood Hazard Layer (NFHL) Pending
- 2. NFHL Effective (Detailed Study)
- 3. Estimated Base Level Elevation Viewer (BLE)
- 4. NFHL Effective (Approximate)
- 5. First American Flood Data Services Paper FIRM scans
- 6. Fathom Data (7/20/21)



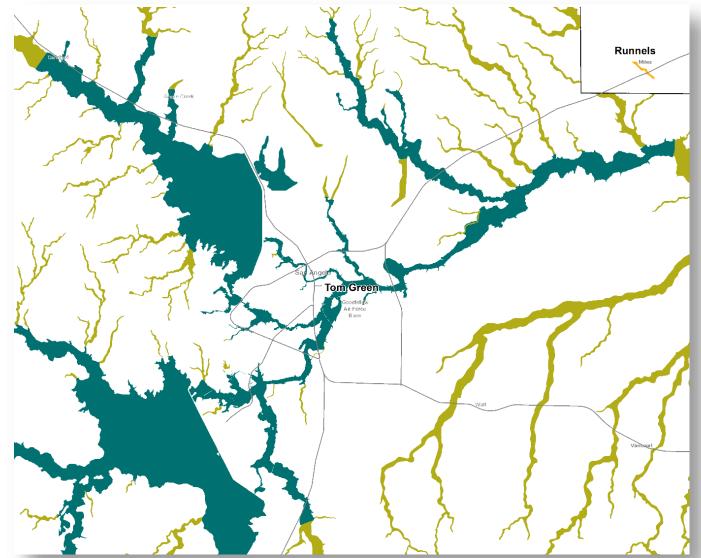


#### Upper Colorado Regional Flood Planning Group

# Task 2A - Flood Risk Analyses - TWDB Floodplain Quilt San Angelo

- 1. National Flood Hazard Layer (NFHL) Pending
- 2. NFHL Effective (Detailed Study)
- 3. Estimated Base Level Elevation Viewer (BLE)
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- 5. First American Flood Data Services Paper FIRM scans
- 6. Fathom Data (7/20/21)



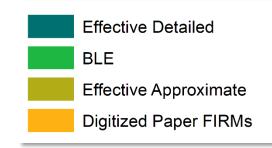


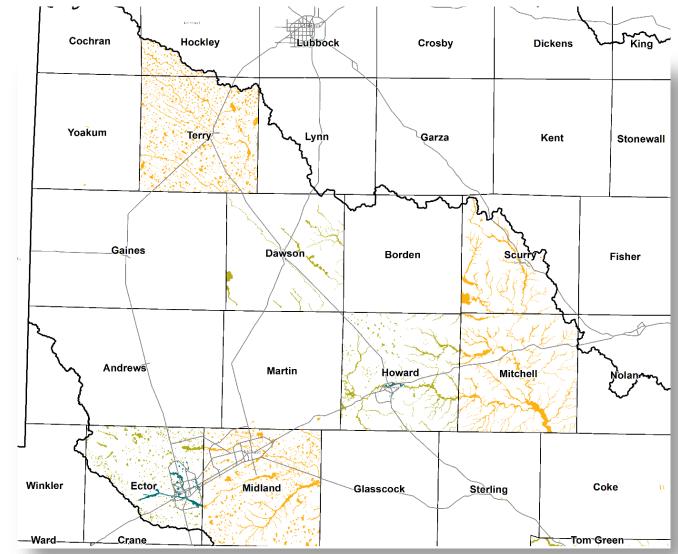
#### Upper Colorado Regional Flood Planning Group

# Task 2A - Flood Risk Analyses - TWDB Floodplain Quilt

### **Upper Watershed**

- 1. National Flood Hazard Layer (NFHL) Pending
- 2. NFHL Effective (Detailed Study)
- 3. Estimated Base Level Elevation Viewer (BLE)
- 4. NFHL Effective (Approximate)
- 5. First American Flood Data Services Paper FIRM scans
- 6. Fathom Data (7/20/21)



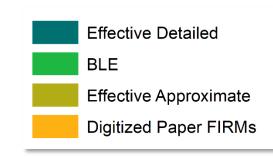


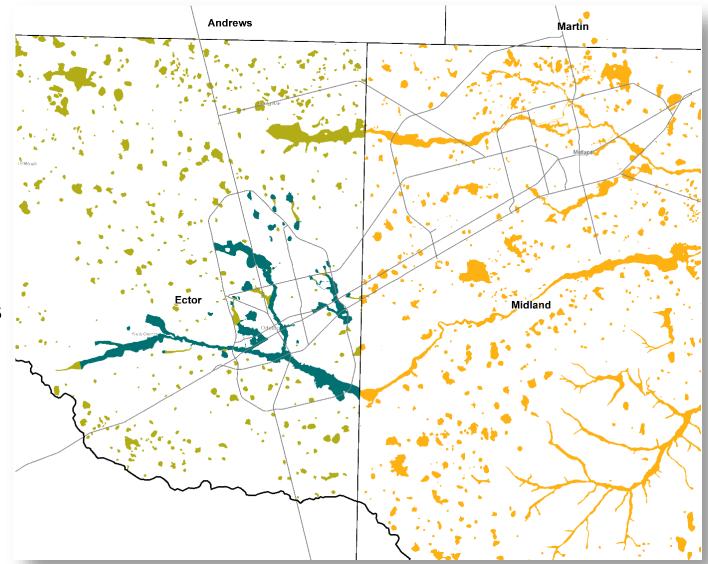
#### Upper Colorado Regional Flood Planning Group

# Task 2A - Flood Risk Analyses - TWDB Floodplain Quilt

# Midland & Odessa

- 1. National Flood Hazard Layer (NFHL) Pending
- 2. NFHL Effective (Detailed Study)
- 3. Estimated Base Level Elevation Viewer (BLE)
- 4. NFHL Effective (Approximate)
- 5. First American Flood Data Services Paper FIRM scans
- 6. Fathom Data (7/20/21)





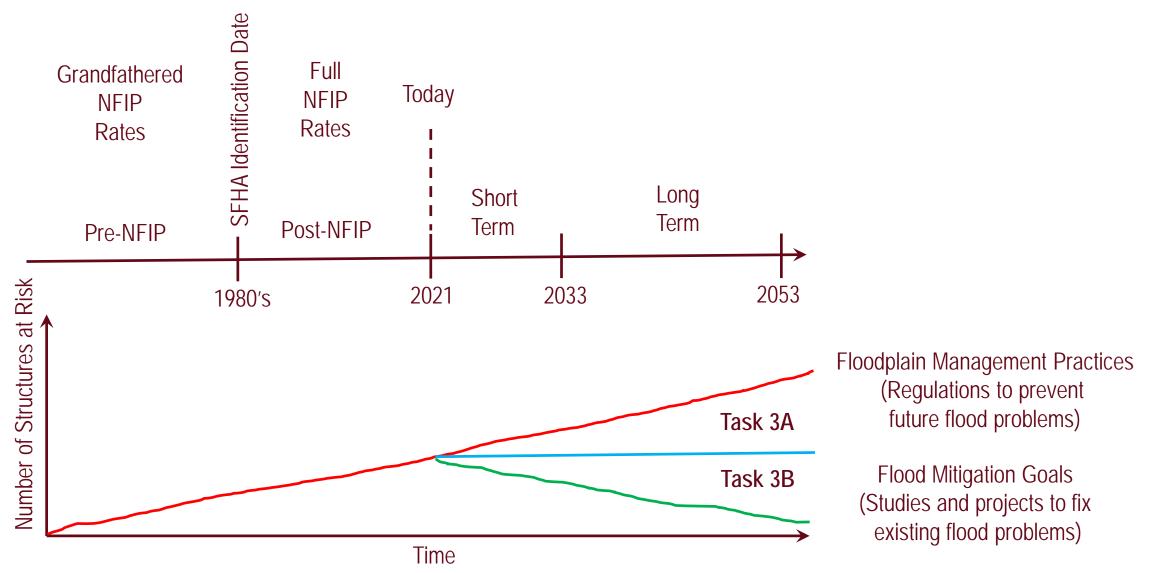
#### Upper Colorado Regional Flood Planning Group

### Task 2A - Flood Risk Analyses Existing Vulnerability

- TWDB provided structure database
  - Includes estimated day and night population for each structure
- Overlay TWDB's Floodplain Quilt and Structure Database
  - New 2020 6" Aerial Imagery
  - Verify structures
  - Identify new structures
- Intersect floodplain and structure database to count population at risk



# **Task 3B - Flood Mitigation Goals**

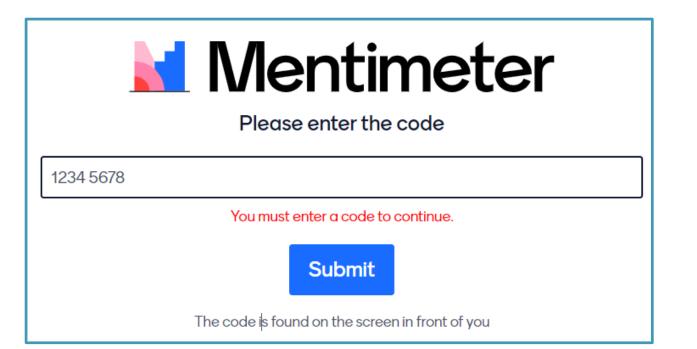


#### Upper Colorado Regional Flood Planning Group

On your phone or computer, go to:

www.menti.com

Use code: 5862 6827



Go to www.menti.com and use the code 5862 6827

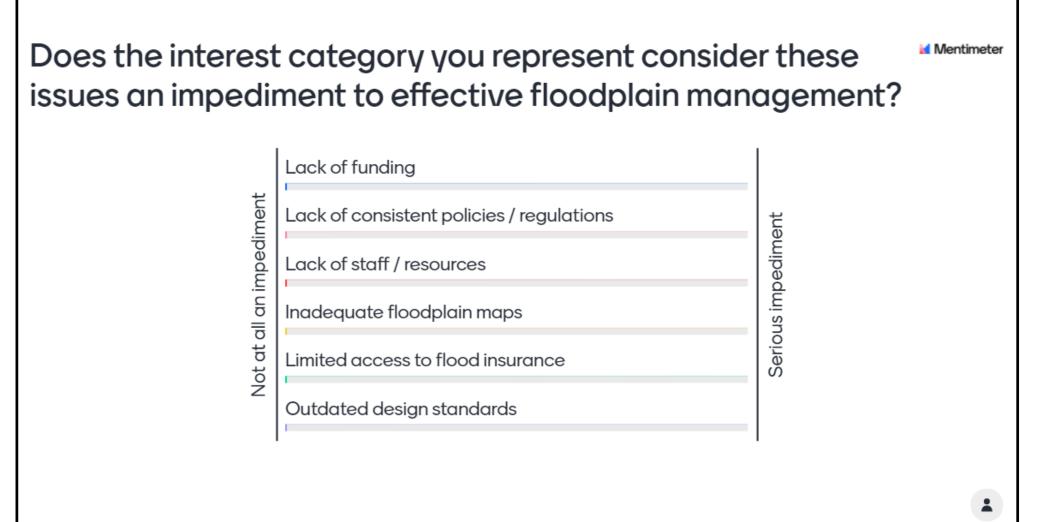
Express with one word your top priority for the Regional Flood Planning effort

1

Mentimeter

Upper Colorado Regional Flood Planning Group

Go to www.menti.com and use the code 5862 6827



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# How important are the following outcomes for a successful Regional Flood Plan?

Achieving policy / regulations improvements Increased participation in the NFIP

Securing funding for Evaluations and Projects

Regional collaboration for large scale projects

Better flood risk data

Not at all important

Reducing flood risk to life and property

Very important

Mentimeter

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#### Upper Colorado Regional Flood Planning Group

# Flood Mitigation Goals - Discussion

- Overarching goal of regional flood plans must be "to protect against the loss of life and property"
- RFPGs must:
  - Identify specific and achievable goals that, when implemented, will demonstrate progress towards this overarching goal;
  - Use goals as a guide for the flood mitigation needs analysis and recommend evaluations, strategies and projects
  - Establish goals that apply region-wide where possible.



 In cases where tailoring goals to specific geographic areas is necessary, the RFPG must choose goals that apply to no less than an entire HUC-8 watershed or coterminous groups of HUC-8 watersheds.

### **Flood Mitigation Goals - Discussion**

	Loss of Life	Property Damage
•	Reduce / eliminate flood related	(Existing Structures)
•	fatalities Reduce / eliminate flood related injuries Reduce / eliminate Low Water Crossings Percent of Low Water Crossings with warning systems	<ul> <li>Remove from 1% ACE (100-year) floodplain</li> <li>Remove Critical Structures from 0.2% ACE (500-year) floodplain</li> <li>Increase coverage of detailed flood hazard data</li> <li>Number of mitigated structures (acquired, elevated, flood proofed)</li> </ul>
	Floodplain Management	Funding
•	Percent participating in NFIP Percent adopted higher standards Number participating in Community Rating System Percent regulating future conditions floodplains	<ul> <li>Percent of region's population with a dedicated storm water utility fee or drainage district</li> <li>Percent with a documented, operational, and fully funded stormwater asset management plan and system</li> </ul>

Task 3A

Task 3B

Mitigate Existing

Prevent Future

July 29, 2021

# **Flood Mitigation Goals - Discussion**

- Goals should address specific problems
- So far, regional flooding problems are:
  - Detailed Study Areas:
    - Structures built below BFE (1% chance) of playas
    - Structures built below BFE (1% chance) of streams
    - Structures built below 0.2% chance of streams
    - Low Water Crossings below BFE (1% Chance)
    - Low Water Crossings below 2% Chance)
    - Low Water Crossings below 10% Chance)
  - Approximate Areas:
    - Structures within Zone A approximate SFHA
    - Structures within Fathom boundaries
    - Low Water Crossings across Zone A
    - Reported flooding locations





# Category 1 – Loss of Life - Discussion

- Majority associated with vehicles at Low Water Crossings
- Large culvert or bridge is too costly
- Drivers underestimate risk
  - Flow sweeps vehicle off road
  - Engine stalls
  - Vehicle becomes wedged against trees
- Can also be mitigated with flood warning systems

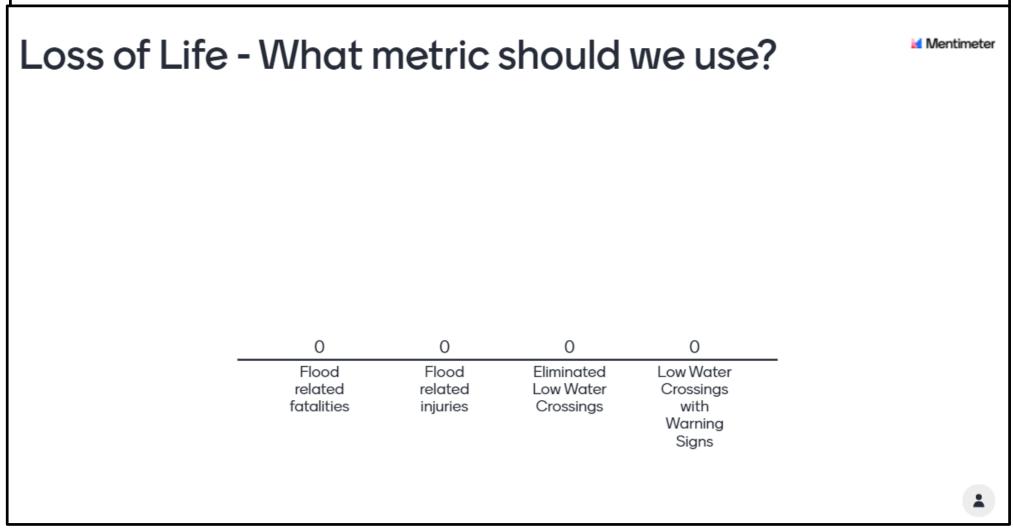


#### Upper Colorado Regional Flood Planning Group

# Category 1 – Loss of Life - Discussion

- Flood related deaths and injuries
  - Difficult to measure
  - Depends on whether it is a wet or dry year
- It is always best to eliminate a low water crossing if possible / affordable
  - Removes factor of driver's judgment
  - Adequate capacity to pass 1% without overtopping
  - May not be possible or may not be affordable
- If a low water crossing is not able to be eliminated, it can be mitigated with a range of flood warning systems
  - Flood gauge signs, Turn Around Don't Drown signs
  - Flashing lights, changeable message, gate arms

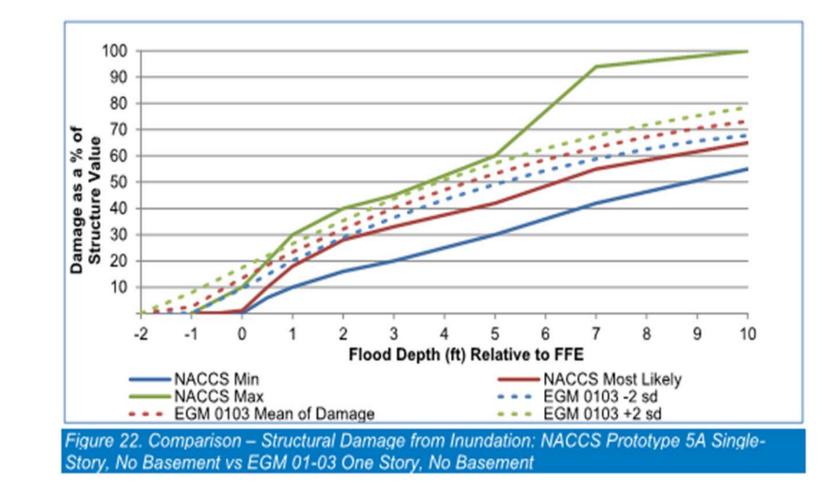
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Upper Colorado Regional Flood Planning Group

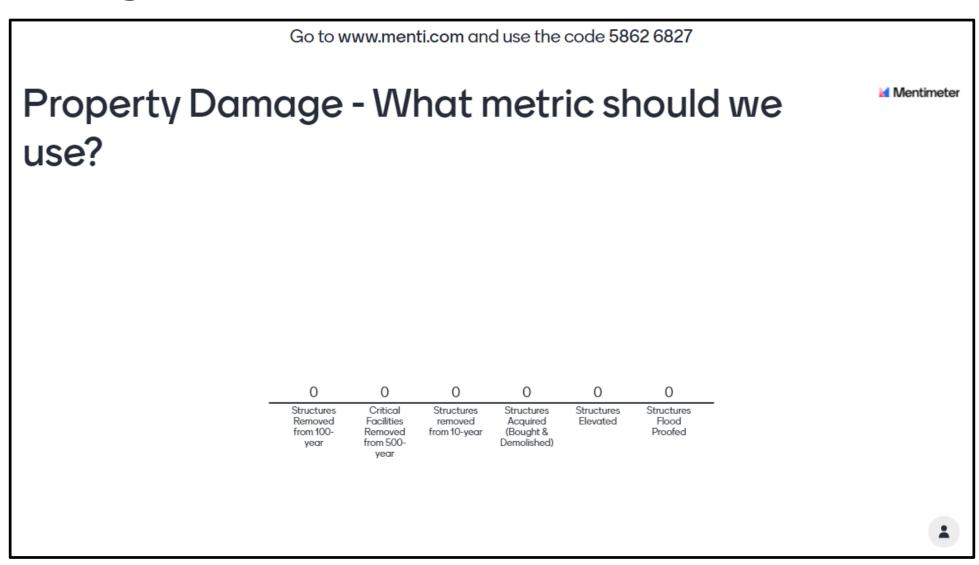
# Category 2 – Risk to Property - Discussion

- Structural flooding
- Damage to contents
- Vehicle flooding
  - Damage to electronic components
- Business interruption
- Agricultural losses



### Category 2 – Risk to Property - Discussion

- It is always best to remove a structure from the floodplain if possible / affordable
- Remove from Floodplain (Lower WSEL)
  - Lower the peak discharge (detention ponds or dams)
  - Increase capacity (channel / culvert improvements)
- What is an acceptable residual risk?
- Mitigate Structures
  - Acquire (buy out and demolish)
  - Elevate
  - Floodproof (Resistant materials below BFE)
- Critical Facilities
  - Provides essential services and functions



Upper Colorado Regional Flood Planning Group

# **Critical Facilities - Discussion**

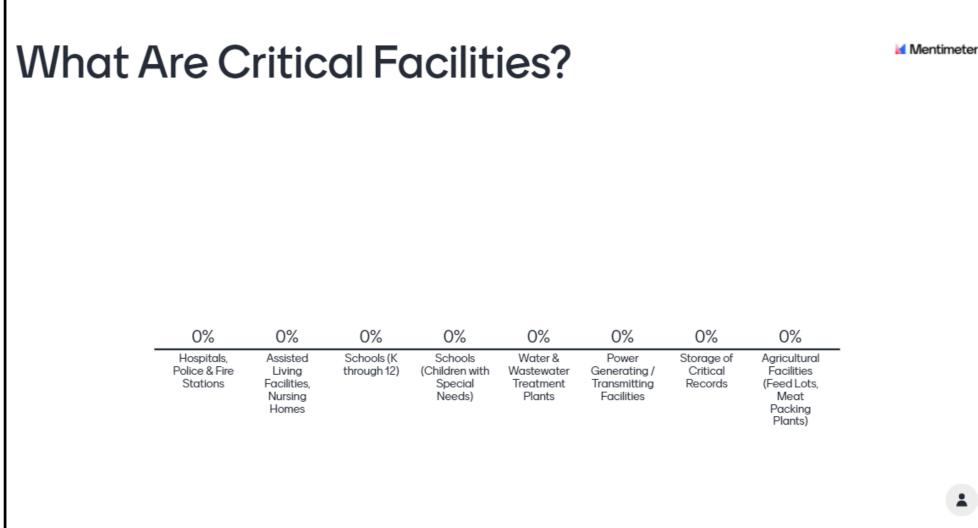
- FEMA's definition at (https://www.fema.gov/glossary/critical-facility)
  - A critical facility provides services and functions essential to a community, especially during and after a disaster.
  - Typical critical facilities include:
    - hospitals, fire stations, police stations
    - storage of critical records, and similar facilities
- TWDB's definition in Technical Guidelines also includes:
  - Schools (K through 12th), schools for children with special needs
  - Assisted living facilities, nursing homes
  - Water and wastewater treatment plants, emergency shelters
  - Power generating / transmitting facilities





#### Upper Colorado Regional Flood Planning Group

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Upper Colorado Regional Flood Planning Group

July 29, 2021

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# **Floodplain Management Policy - Discussion**

RFPGs must evaluate and recommend floodplain management practices within the flood planning region. The intent of regional flood planning is twofold:

- 1. Identify and reduce the risk and impact to life and property that already exists
- 2. Avoid increasing or creating new flood risk by addressing future development within the areas known to have existing or future flood risk

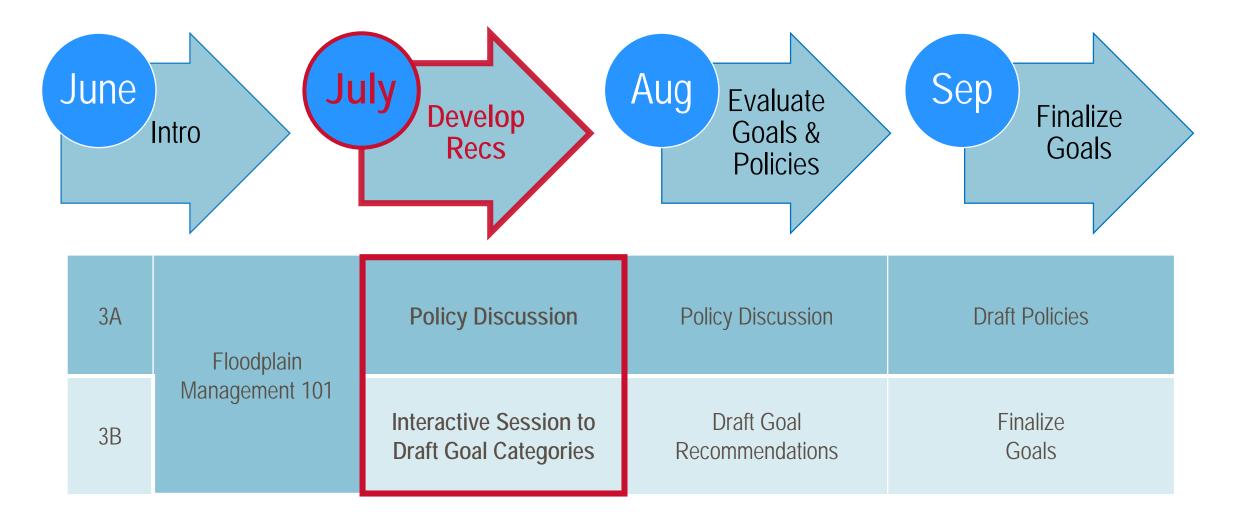
RFPGs can either:	Recommend	No pre-requisite. All FME, FMS and FMP can be considered in the Regional Flood Plan
	Adopt	Jurisdictions must meet adopted standards <u>BEFORE</u> FME, FMS or FMP can be considered for inclusion in the Regional Flood Plan

Go to www.menti.com and use the code 5862 6827

Should the Region 9 Regional Flood Plan recommend or 材 Mentimeter adopt regional floodplain management standards? Strongly disagree Strongly agree The RFPG should RECOMMEND minimum standards for entities in the region The RFPG should ADOPT minimum standards for entities to meet before that can be included in the Flood Plan

Upper Colorado Regional Flood Planning Group

### Task 3A/3B – Work Plan



#### Upper Colorado Regional Flood Planning Group

### Task 10 - Stakeholder Outreach Game Plan

#### **Initial Data Collection**

- 1. Develop Contact List Done
- 2. Initial Introduction Letter from UCRFPG
- 3. Prepare initial Flood Risk Map Done
- 4. Set up Interactive Website By 7/30/21
- 5. Emails to Contact List First week in August
- 6. Overview / Website Presentation First week in August
- 7. Phone calls to key stakeholders to follow up
- 8. Hold Public Meeting(s) Mid-September

#### **Contact Information**

#### **Planning Group Chair**

Allison Strube, PE, City of San Angelo

🐛 325-657-4261 🛛 📉 allison.strube@cosatx.us

#### **TWDB Project Manager**

Hayley Gillespie, TWDB

**Technical Consultant (HDR)** Curtis Beitel, PE, CFM – HDR Project Manager

🐛 817-333-2817 🛛 📉 Curtis.Beitel@hdrinc.com

Heather Keister, PE, CFM – Deputy Project Manager

806-543-5115 🔀 Heather.Keister@freese.com

Susan Roth, PE, PMP - Outreach Lead

512-796-6692 🔀 susan@srothconsulting.com

### Task 10 - Stakeholder Input Why should you participate?

- A plan is only as good as the input
- Your insight is valuable
- Tell us your experience, where you have seen or know of flood concerns
- The flood plan needs to represent ALL community needs
- No one size fits all solutions, unique needs for each basin in the region

#### Benefit

• Funding opportunities for your muchneeded projects

