

Public Meeting Notice

Region 9 – Upper Colorado Regional Flood Planning Group

September 2, 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 September 2, 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 for public and non-voting representatives by the conference call information below:

Call In: (325) 326-0870

Passcode / ID: 733-924-895#

The Meeting Agenda and the Agenda Packet are posted online at

<https://www.cosatx.us/departments-services/water-utilities/region-9-upper-colorado-flood-planning-region>

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 allison.strube@cosatx.us or rfgp9.lance@gmail.com by noon September 1, 2021. The subject line must be in the following format: "Public Comment, [item number] – September 2, 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
7. Consideration and possible action regarding an application received for Environmental Interest voting member vacancy position
8. 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 RFGP members to disseminate
9. Public comments – limit 3 minutes per person
10. Consider date and agenda items for next meeting
11. 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

July 29, 2021

10:00 AM CST

Meeting held In person at McNease Convention Center – North Meeting Room, 501 Rio Concho Drive, San Angelo, Texas. Additionally, participation was available via conference call at (325) 326-0870.

Roll Call:

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

<u>Non-voting Member</u>	<u>Agency</u>	<u>Present(x)/Absent()/ Alternate Present (*)</u>
John McEachern	Texas Parks and Wildlife Department	X - Phone
Tim Frere	Texas Division of Emergency Management	
Larissa Place	Texas Department of Agriculture	
Ben Wilde	Texas State Soil and Water Conservation Board	X - Phone
Jet Hays	General Land Office	X - Phone
Morgan White	Texas Water Development Board (TWDB)	X - Phone
Reem Zoun	Texas Water Development Board (TWDB)	X - Phone
Winona Henry	Texas Commission on Environmental Quality	X - Phone
Ann Yakimovicz	Region 10 Liaison	X - Phone

Others Present:

Curtis Beitel – HDR (Consultant): In-Person

Heather Keister – Freese & Nichols (Consultant): Phone

Susan Roth – Susan Roth Consulting (Consultant): In-Person

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 available at the link

<https://www.cosatx.us/departments-services/water-utilities/region-9-upper-colorado-flood-planning-region>

- **AGENDA ITEM NO. 1: Call to Order**

Chair Strube called the meeting to order at 10:03 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 Kenneth Dierschke and seconded by Commissioner Rick Bacon. Motion passed unanimously.

- **AGENDA ITEM NO. 5: TWDB Update**

Presented by Morgan White – informed the group that Texas State legislature was appropriating additional \$10 million funds towards the Regional flood plans and would be available September 1st. The breakdown of the allocation per region is to be determined.

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

a. Chair Strube read list of developed stakeholders to coordinate efforts, notifications data gathering and desire to have agriculture interests on list. Discussion ensued regarding entities that weren't listed.

a. Kenneth Dierske recommended Texas Farm Bureau – Bill Howe

b. Scott McWilliams recommended Soil and Water Districts

c. Commissioner Bacon recommend Chamber of Commerces

d. Lance Overstreet recommended FAA, Bases, schools systems and state and federal entities.

e. More discussion ensued on potentials groups and persons

b. Chair Strube presented to the planning group that the state legislative waiver of the Open Meetings Act allowing remote or video participation would be expiring and that future meetings may have to revert to the regulation requiring quorums be met by in person attendees.

a. Lance Overstreet recommend that an RSVP communication be sent out via email asking for planned verification of attendance to Chair Strube for the purpose of establishing a quorum prior to the actual meeting for verifying quorum.

- **AGENDA ITEM NO. 7: Consultant Presentation (Curtis Beitel of HDR)**

Mr. Beitel presented information on Task 2A Existing Flood Risk Analysis and Task 3A/3B Existing Floodplain Management Practices and Goals. Task 10 Public Participation and Plan

Adoption was also presented. Mr. Beitel also discussed the status of the overview presentation being prepared for RFPG members to disseminate.

- **AGENDA ITEM NO. 8: Public Comments – Limit 3 minutes per person**
Scott McWilliams asked the question if there was going to be a list of who would be coordinating the members on the coordination list. Response by Chair Strube and Mr. Beitel that yes there would be a list and that HDR would be point on coordinating the contacting the members from the list.
- **AGENDA ITEM NO. 9: Consider Date and Agenda Items for Next Meeting**
Late August was discussed for the next meeting.
- **AGENDA ITEM NO. 10: Adjourn**
Motion by Scott McWilliams and seconded by David Lloyd. Motion passed unanimously. Meeting was adjourned at 12:01 PM CST.

Approved by the Region 9 Upper Colorado RFPG at a meeting held on September 2, 2021.

Lance Overstreet, SECRETARY

Allison Strube, CHAIR

NOMINATION FORM

REGIONAL 9 UPPER COLORADO FLOOD PLANNING GROUP MEMBER

Date: 8/23/2021

Name of individual being nominated (nominee): Shannon McMillan

Nominee phone number: 409-200-8074

Nominee email: shannon@plan.design

Nominee mailing address: 1203 Wallace Ln. San Angelo, TX 79605

County in which the individual nominee resides: Tom Green

Current occupation of nominee: Planner

Professional qualifications of nominee (attach resume or CV, optional):

Resume attached

Brief bio and summary of qualifications of the nominee:

I am a native West Texan from Snyder, TX, and a graduate of West Texas A&M with a Bachelor of Science in Agriculture. After undergrad, I accepted an Agriculture and Natural Resources County Agent position in Tyler County, Texas. This position offered invaluable experience working with the public and educating farmers and ranchers on best management practices and new innovations to improve their operations. After moving back to west Texas, I was given the opportunity to work for the Texas Commission on Environmental Quality's (TCEQ) Small Business and Local Government Assistance Division. This position launched my career path into all things environmental and allowed me to assist small businesses and small governments in working through the environmental permitting process and complians. While at TCEQ, I decided to expand my environmental knowledge by obtaining a Master of Science in Environmental Health and Safety with an emphasis on emergency management from Eastern Kentucky University. During this time, I began a new position with the City of San Angelo as their Stormwater Program Administrator. While at the City, I obtained my Certified Floodplain Manager certificate and assisted with the City's compliance for storwater quality and floodplain management. I currently work as a Planner for centurion Planning & Design, working on munisipal and airport planning and environmental compliance with NEPA and other state environmental agencies. In my free time, I am a member of East Angelo Lions Club and serve on their Board of Directors and serve on the Board of Directors for Keep San Angelo Beautiful. I look forward to the opportunity to serve on the Region 9 Flood Planning Board.

General type of flood-related knowledge, experience, and approximately number of years of being involved in flood-related issues:

Master Certificate in Emergency Management
Certified Floodplain Manager
Six years of flood-related experience

Previous public service and/or leadership experience and roles:

Tyler County Extension Agent - 5 years
TCEQ Small Business and Local Government Assistance - 3 years
City of San Angelo Stormwater Program Administrator - 4 years

Description of why nominee is interested in membership, how they could contribute most as RFPG member, and how they otherwise meet the Executive Administrator's criteria for selection:

I am interested in this membership because I understand the importance of flood planing. This board will play a pivotal role in ensuring the reduction of loss of life and property from flooding. I have a passion to serve others and feel my background will allow me to serve this area well.

Does the nominee reside within the region for which they are being nominated? YES NO

If no, does the nominee's professional or other activities occur within the region for which they are being nominated? YES NO

If yes, in what county(s) does this occur: Tom Green

Please list any endorsements from individuals and/or organizations for this nominee and attach any supporting information:

Provide two references (name, title/affiliation, phone number):

Russell Pehl - Senior Engineer/Centurion Planning and Design; (325)262-5957

Andy Vecellio - Assistant Water Utilities Director/City of San Angelo; (325)301-2400

Does this submission include attachments? YES NO

If yes, please email attachments to allison.strube@cosatx.us

Shannon L. McMillan

San Angelo, Texas 76905 (409) 200 – 8074 shannonleac@gmail.com

Personal Objective:

Detail-oriented environmental compliance administrator with over seven years of experience in environmental compliance and regulations.

Career Experience:

- Seven years of experience in a supervisory role
- Experienced in writing stormwater management plans, pollution prevention plans, and emergency action plans
- Proficient in air, water, and waste environmental permitting in Texas
- Certified Stormwater Inspector
- Certified LID/Green Infrastructure Inspector
- Certified Floodplain Manager
- Five years of experience with floodplain and drainage projects

Relevant Work History:

Centurion Planning and Design

Planner

San Angelo, Texas

January 2021- Present

- Project Management – Responsible for ensuring planning and engineering projects have proper permits, regulatory compliance, and adhere to local, state, and federal regulations.
- Environmental Planning/Consulting – Develop environmental regulatory documents for each project's local, state, and federal environmental regulations. Assist client with environmental compliance and coordination with environmental agencies.
- Data Analyst – Develop graphs, charts, and technical documents to show results of analyzed data for various aviation projects.

City of San Angelo

Stormwater Program Administrator

San Angelo, Texas

July 2016 – January 2021

- Program Management - Responsible for ensuring compliance with state and federal environmental permits. Specifically, NPDES/TPDES General MS4 Stormwater Permit. Project manager for stormwater/drainage-related projects.
- Project Management – Responsible for ensuring drainage and stormwater quality projects/programs are completed according to approved plans and contract agreements.
- Reporting/Environmental Compliance - Liaison between City departments and the Texas Commission on Environmental Quality. Develop monthly and annual reports to show compliance with environmental permitting requirements.
- Floodplain Management - A Certified Floodplain Manager working with the City Engineer to ensure compliance with the NFIP and FEMA floodplain regulations.

Specific Projects:

- Sunset Lake Environmental Assessment
- Development/Implementation of Illicit Discharge Ordinance
- Development/Implementation of TPDES MS4 Stormwater Management Plan
- Drainage Plan Review – Commercial and Residential
- Development/Implementation of Spill Reporting Program
- Floodplain Permitting and Regulation Liaison

Texas Commission on Environmental Quality

Natural Resource Specialist III – Compliance Assistance

San Angelo, Texas

December 2013 – July 2016

- Compliance Assistance – Assist customers in the technical aspect of completing and submitting permit applications to TCEQ. Collectively work with investigators, litigation, and program area staff to stay informed of all regulations within TCEQ and experienced in air, water, and waste regulations.
- Project Management – Project lead for the oil and gas team, help other staff answer technical questions regarding the oil and gas industry, update the website to reflect regulation changes. I also assisted in the planning and implementation of the Bexar County Open House for new air regulations enforced by EPA.

Specific Projects:

- Project Lead – Oil and Gas Team
- Small Public Water Supply – Compliance Assistance
- Project Lead – Dry Cleaner Facility Registration Outreach
- Drought Contingency Planning – Small Public Water Supplies
- Project Lead for Two Superfund Sites – Compliance and Recordkeeping
- Presenter at Educational Outreach Events
- Assisted in Developing Temporary Permit for Above Ground On-site Sewage Facilities

Education:

Eastern Kentucky University
 Master of Science - Occupational Health and Safety/Emergency Management (GPA 4.0)

Richmond, Kentucky
 August 2018

West Texas A&M University
 Bachelor of Science – Agriculture/Secondary Education (GPA 3.4)

Canyon, Texas
 August 2007

Activities and Honors:

- Promoted to Stormwater Program Administrator within the second year with the City of San Angelo
- Awarded a merit raise due to exceptional performance within the first year at TCEQ
- Member of the East Angelo Lions Club
- Volunteer for Meals for the Elderly
- Voting Board Member for Keep San Angelo Beautiful
- Voting Board Member for East Angelo Lions Club



Upper Colorado Regional Flood Plan

Task 2A Existing Flood Risk Analysis
Task 3B / 3A Goals and Standards and
Task 10 Data Collection Outreach Campaign



September 2, 2021



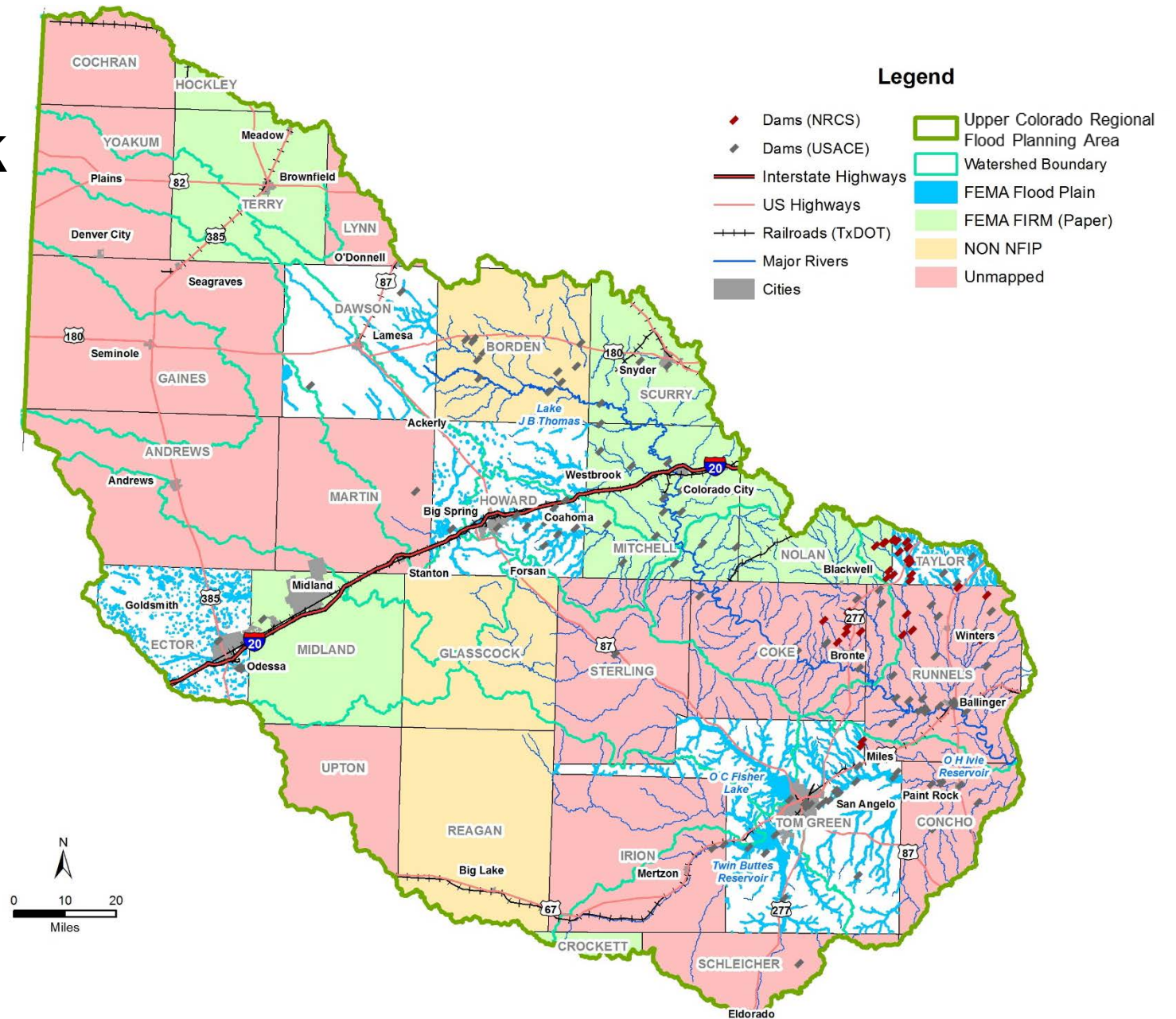
Agenda

- 01** Task 2A – Existing Flood Risk Analyses
- 02** Task 3B – Flood Planning Goals
- 03** Task 3A – Floodplain Management Practices
- 04** Task 10 – Outreach & Data Collection Status

Task 2A

Existing Flood Risk

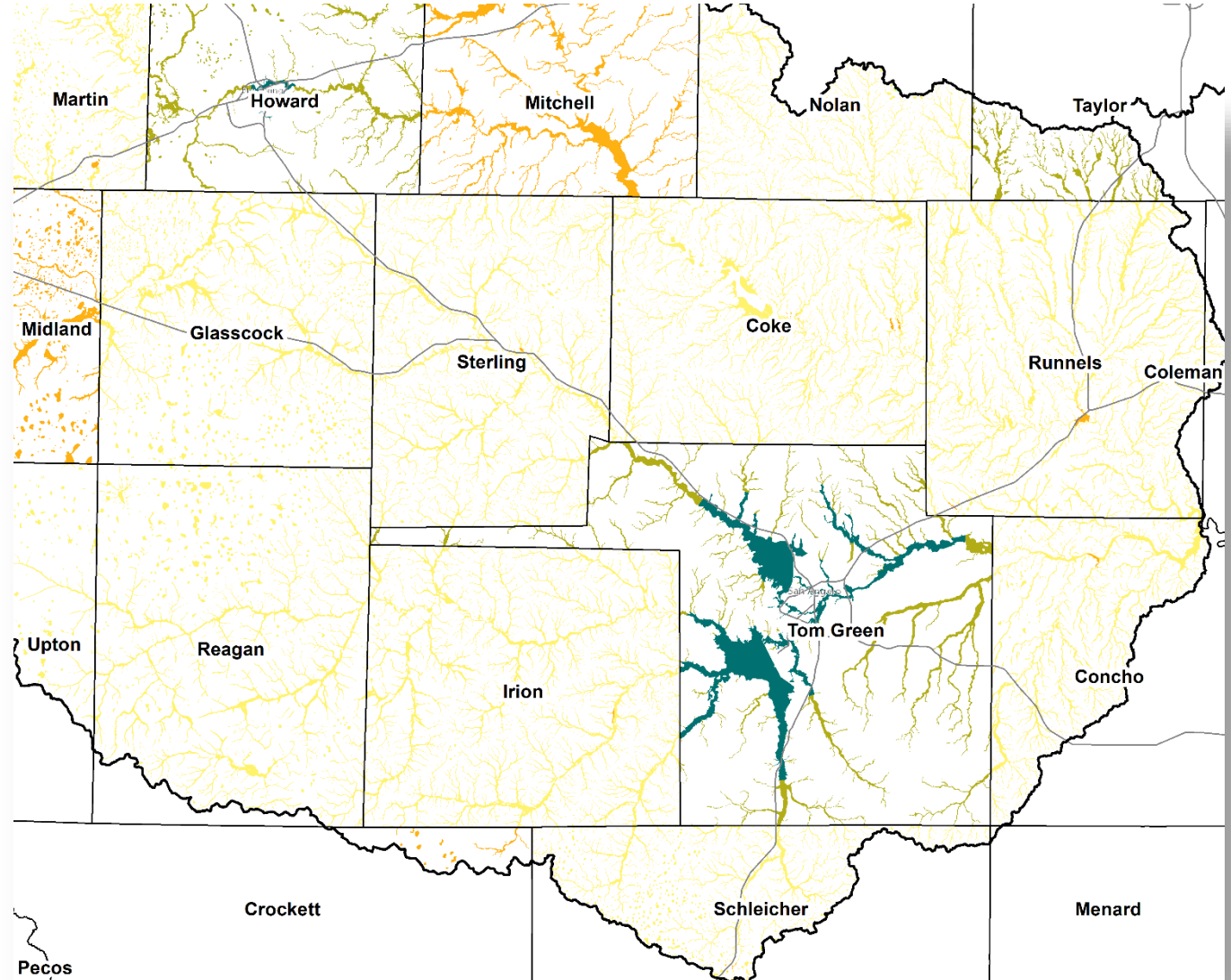
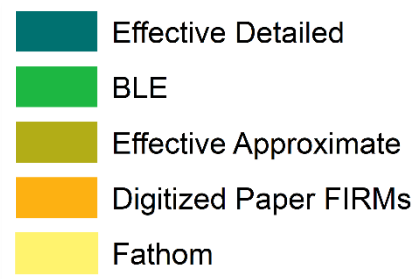
- Wide Range of FIRMS
 - 5 counties Digital FIRMs
 - 6 counties Paper FIRMs
 - 13 counties Unmapped
 - 3 counties Non-Participating
- NRCS dams
 - Northeastern half



Task 2A - Flood Risk Analyses - TWDB Floodplain Quilt

Lower Watershed

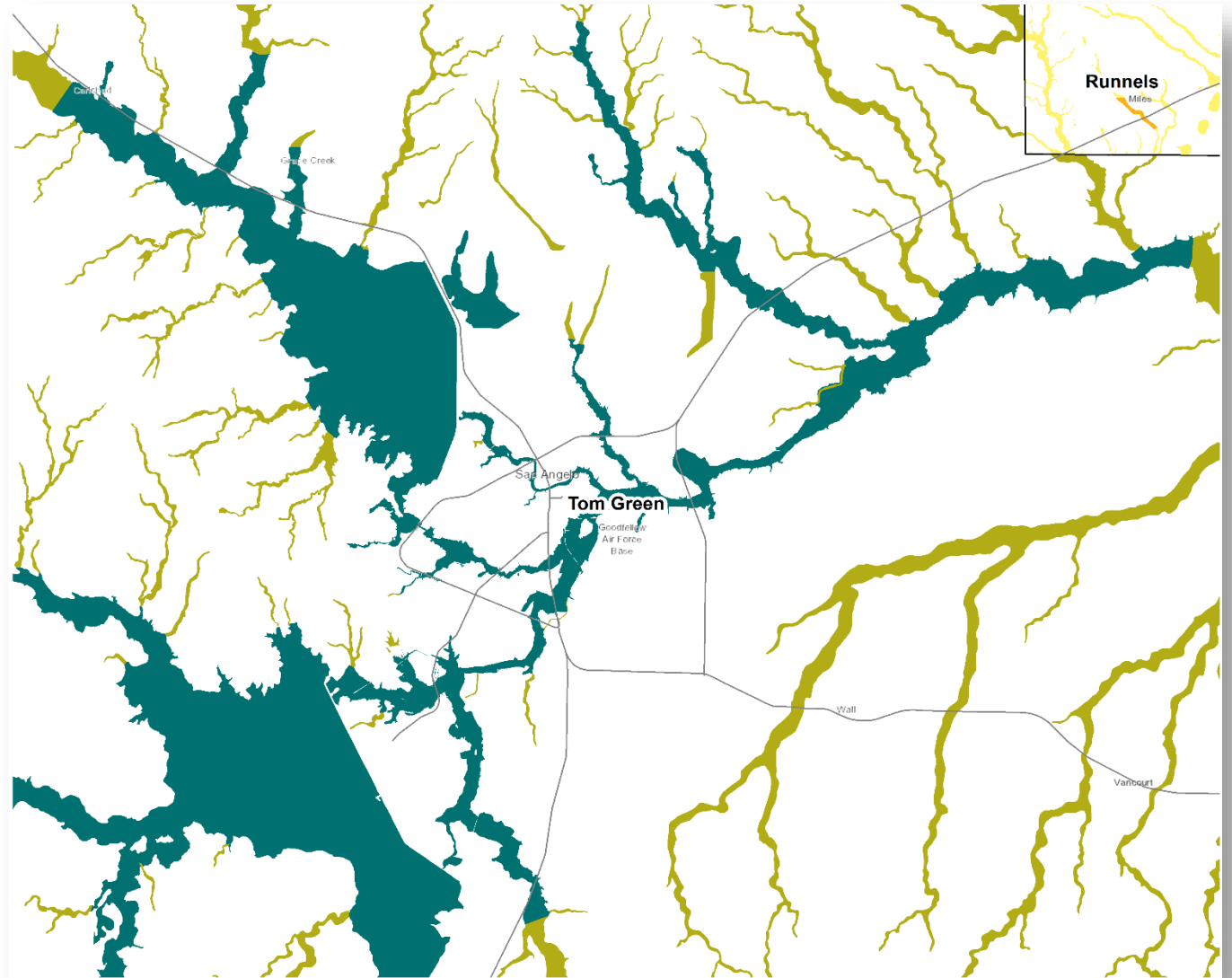
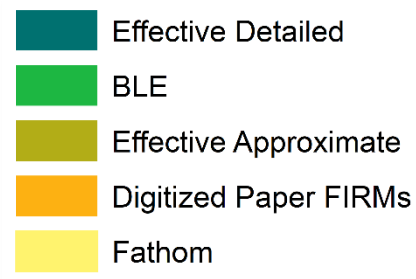
1. National Flood Hazard Layer (NFHL) Pending
2. NFHL Effective (Detailed Study)
3. Estimated Base Level Elevation Viewer (BLE)
4. NFHL Effective (Approximate)
5. First American Flood Data Services Paper FIRM scans
6. Fathom Data (7/20/21)



Task 2A - Flood Risk Analyses - TWDB Floodplain Quilt

San Angelo

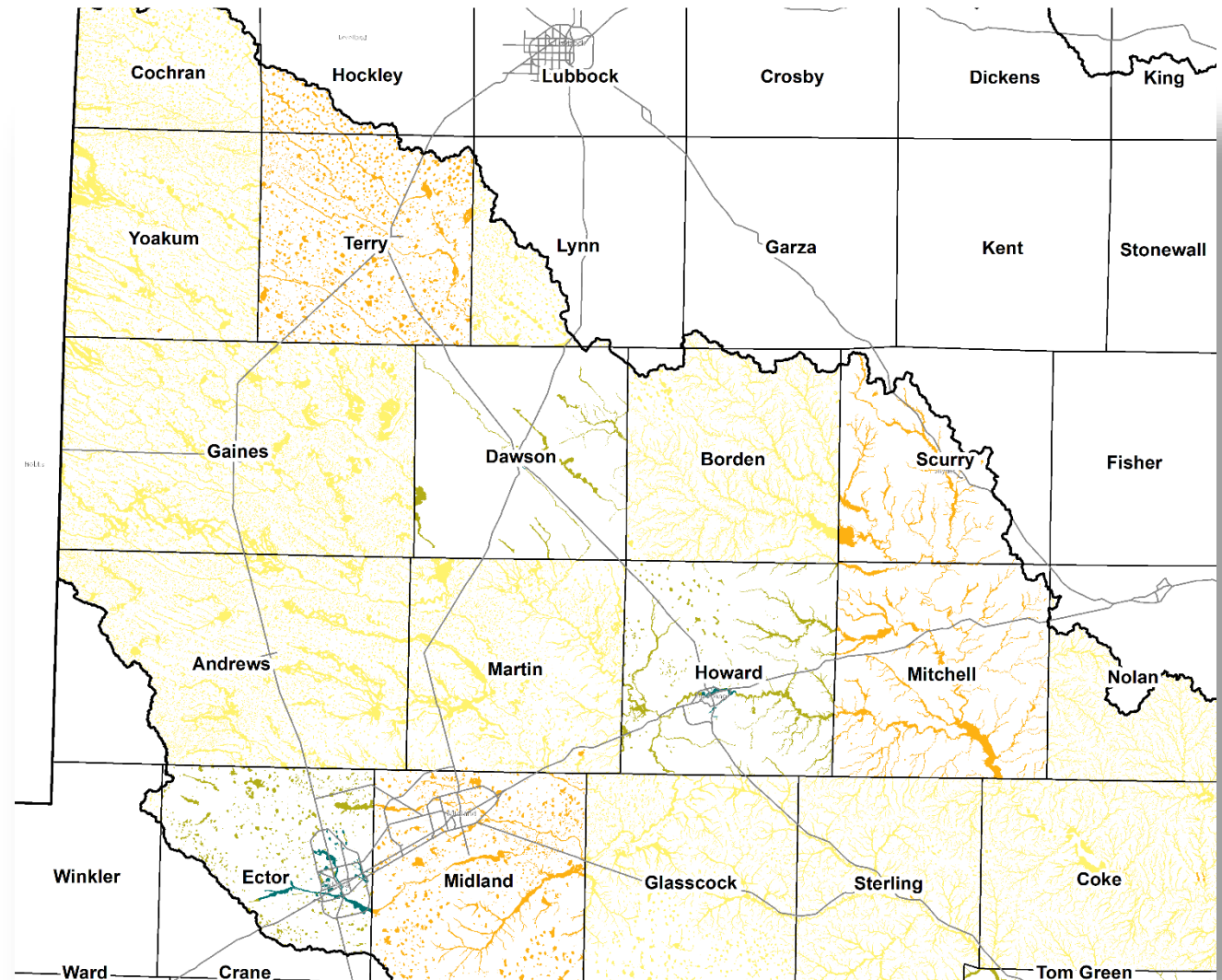
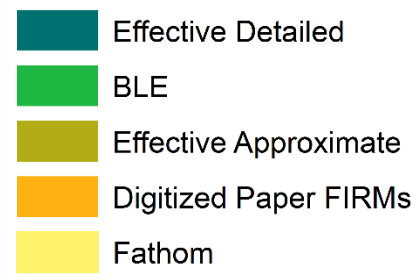
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2. NFHL Effective (Detailed Study)
3. Estimated Base Level Elevation Viewer (BLE)
4. NFHL Effective (Approximate)
5. First American Flood Data Services Paper FIRM scans
6. Fathom Data (7/20/21)



Task 2A - Flood Risk Analyses - TWDB Floodplain Quilt

Upper Watershed

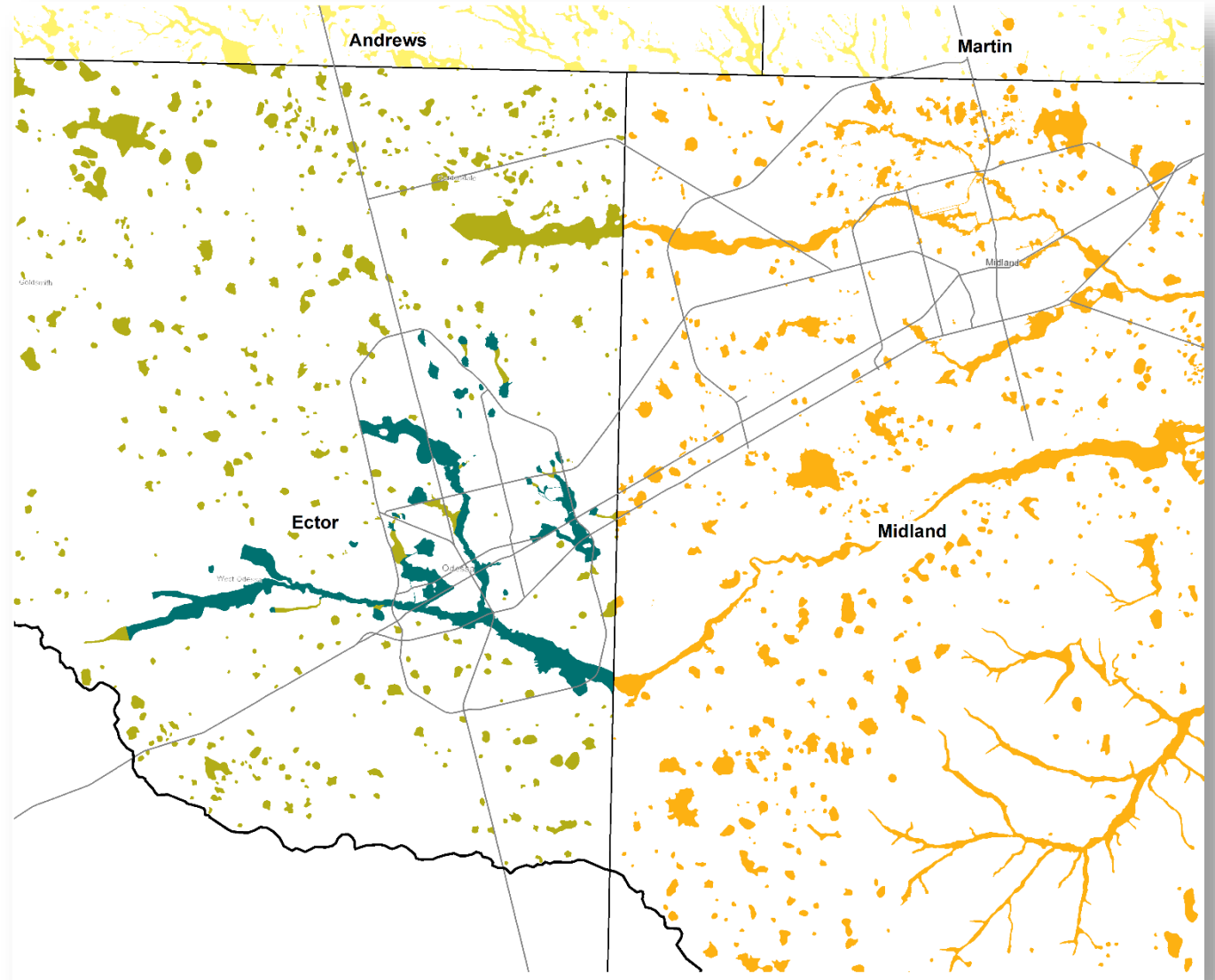
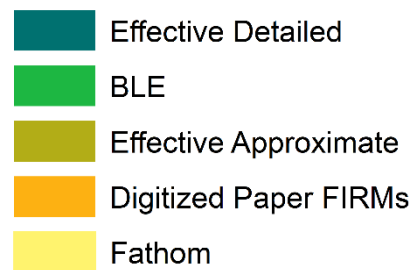
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4. NFHL Effective (Approximate)
5. First American Flood Data Services Paper FIRM scans
6. Fathom Data (7/20/21)



Task 2A - Flood Risk Analyses - TWDB Floodplain Quilt

Midland & Odessa

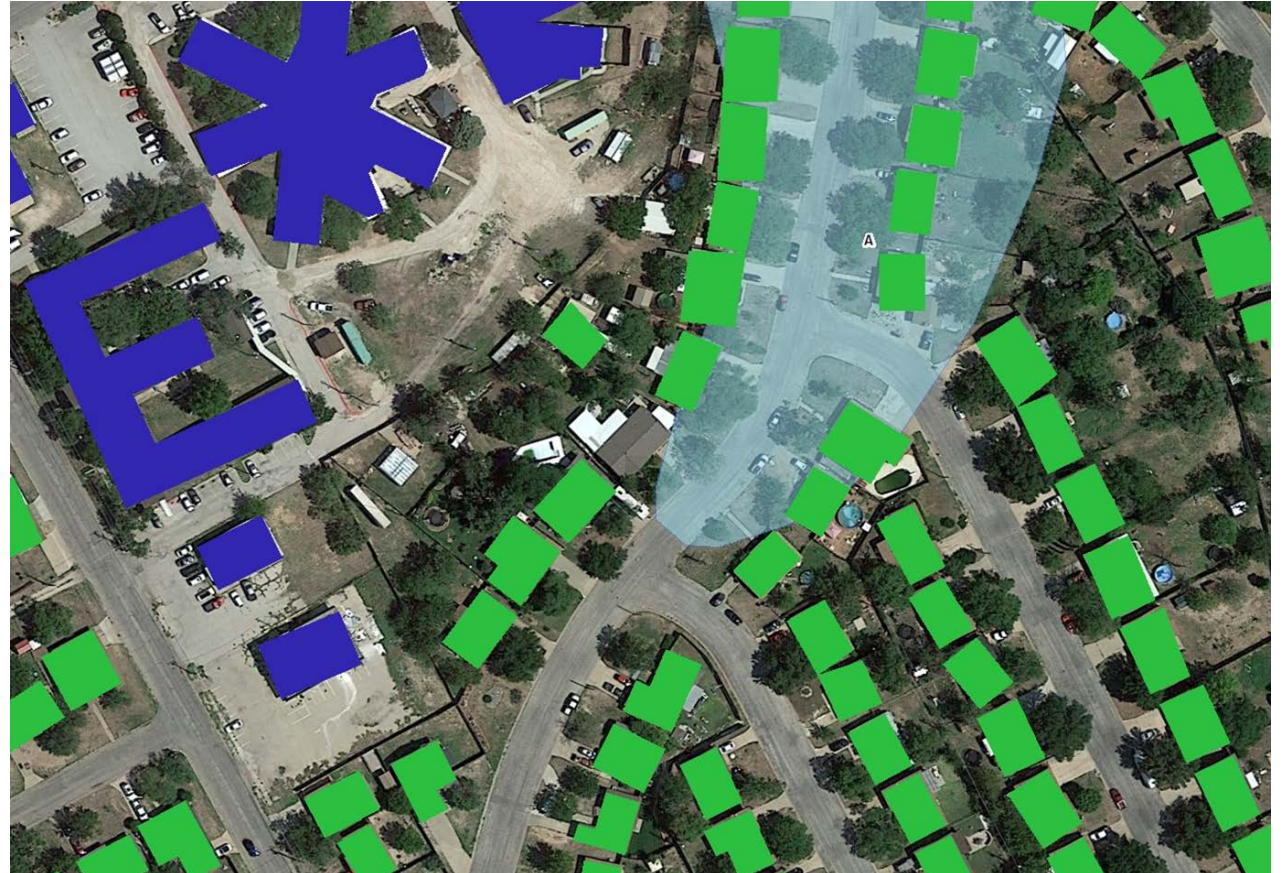
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6. Fathom Data (7/20/21)



Task 2A - Flood Risk Analyses

Existing Vulnerability

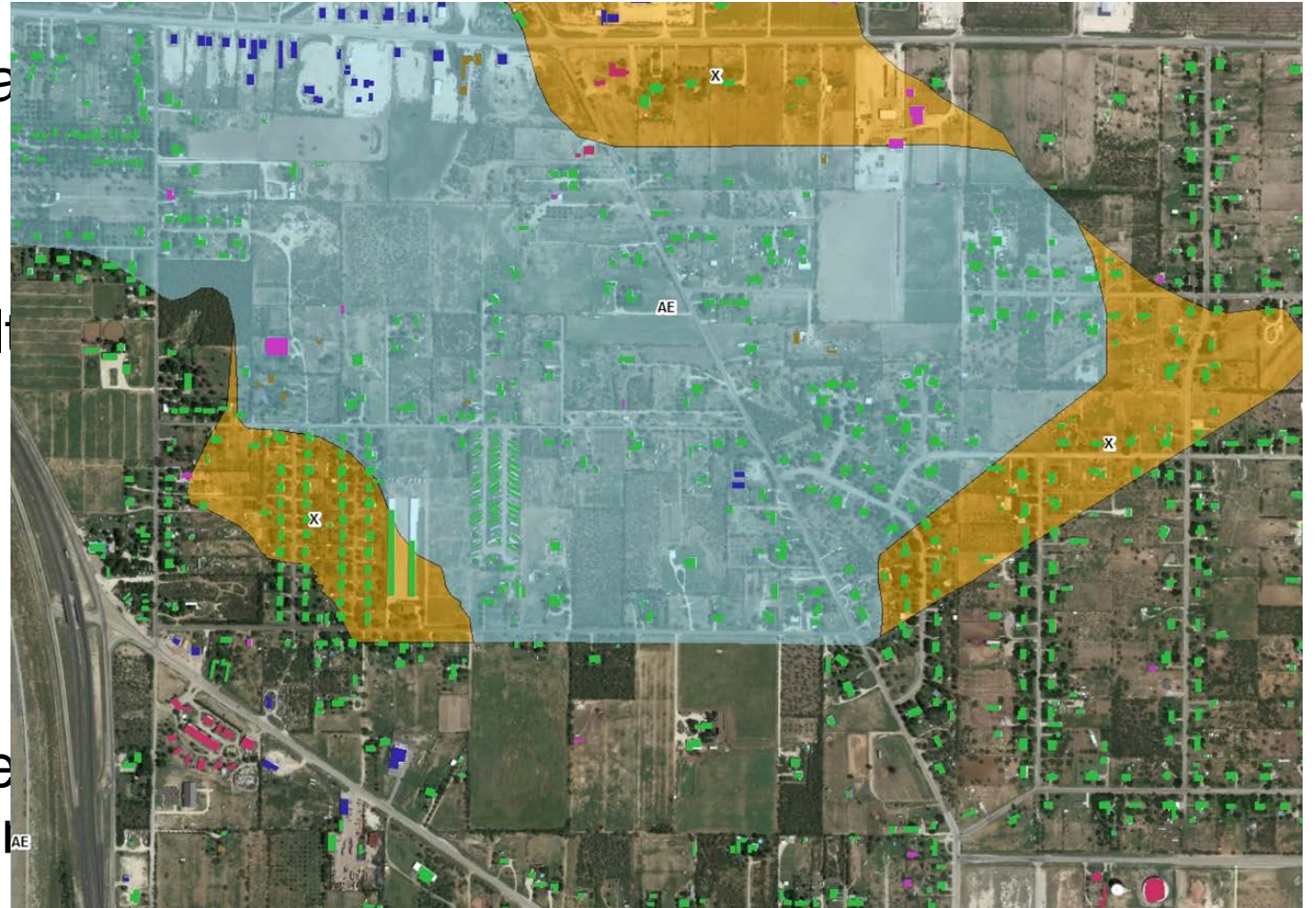
- TWDB provided structure database
 - Includes estimated day and night population for each structure
- Overlay TWDB's Floodplain Quilt and Structure Database
 - New 2020 6" Aerial Imagery
 - Verify structures
 - Identify new structures
- Intersect floodplain and structure database to count population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



Task 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 2A - Flood Risk Analyses

Existing Vulnerability

- Initial statistics from the structure database

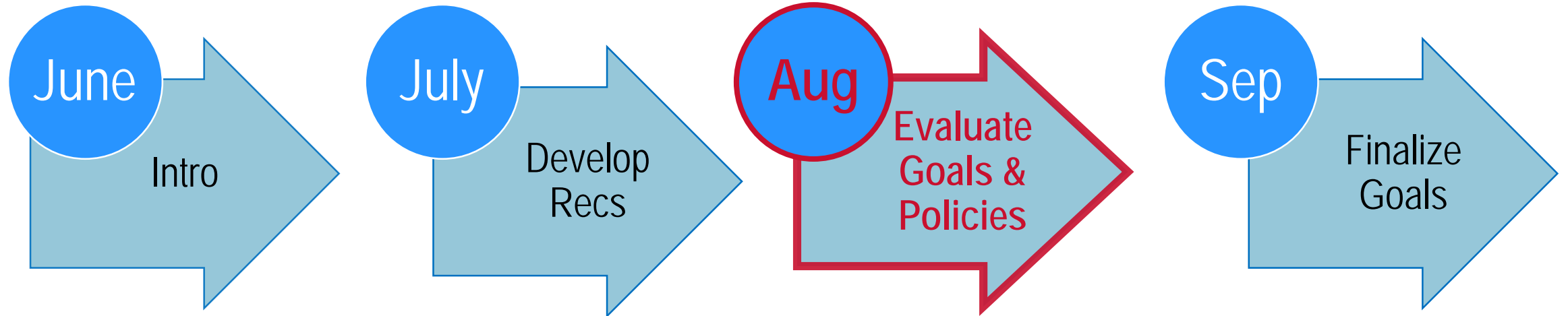
Upper Colorado - Buildings in Existing 100-Year Flood Hazard Layer

Flood Hazard Type	Residential	Vacant or Unknown	Commerical	Agricultural	Industrial	Public	Total
NFHL - Detailed Study Areas	5,816	537	909	282	666	128	8,338
NFHL - Approximate Areas	1,520	245	302	326	201	58	2,652
Fathom Approximate Areas	4,062	856	718	413	33	298	6,380

17,370

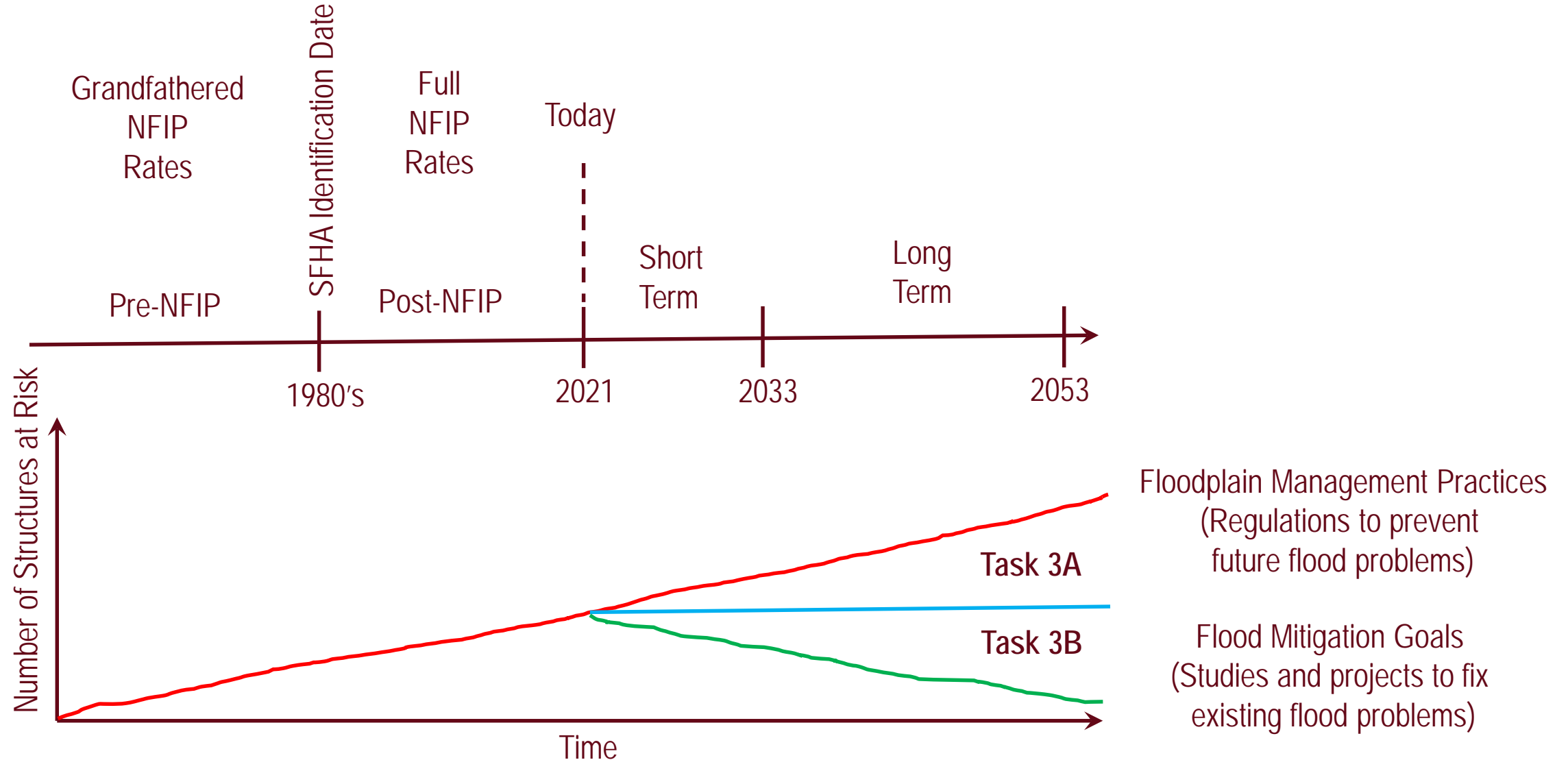
- We are still refining the initial 30-meter Fathom 100-year layer
- Number of structures will be updated once the 3-meter Fathom layer is received in October

Task 3A/3B – Work Plan



3A	Floodplain Management 101	Policy Discussion	Draft Standards	Draft Policies
3B		Interactive Session to Draft Goal Categories	Draft Goal Recommendations	Finalize Goals

Task 3B - Flood Mitigation Goals



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

Task 3B	Mitigate Existing	<p style="text-align: center;">Loss of Life</p> <ul style="list-style-type: none"> • Reduce / eliminate flood related fatalities • Reduce / eliminate flood related injuries • Reduce / eliminate Low Water Crossings • Percent of Low Water Crossings with warning systems 	<p style="text-align: center;">Property Damage (Existing Structures)</p> <ul style="list-style-type: none"> • Remove from 1% ACE (100-year) floodplain • Remove Critical Structures from 0.2% ACE (500-year) floodplain • Increase coverage of detailed flood hazard data • Number of mitigated structures (acquired, elevated, flood proofed)
		Task 3A	Prevent Future

Goal #1 – Flood Risk Evaluation



Upper Colorado - Buildings in Existing 100-Year Flood Hazard Layer

Flood Hazard Type	Residential	Vacant or Unknown	Commerical	Agricultural	Industrial	Public	Total
NFHL - Detailed Study Areas	5,816	537	909	282	666	128	8,338
NFHL - Approximate Areas	1,520	245	302	326	201	58	2,652
Fathom Approximate Areas	4,062	856	718	413	33	298	6,380

17,370

- Approximate study areas require detailed study to confirm flood risk prior to development of flood mitigation projects
- Proposed Goal #1 = Evaluations to confirm flood risk
 - 10 Year = Evaluate watersheds of 50% of the Approximate structures
 - 30 Year = Evaluate watersheds of 100% of the Approximate structures

Goal #2 – Property Flood Damage



Upper Colorado - Buildings in Existing 100-Year Flood Hazard Layer

Flood Hazard Type	Residential	Vacant or Unknown	Commerical	Agricultural	Industrial	Public	Total
NFHL - Detailed Study Areas	5,816	537	909	282	666	128	8,338
NFHL - Approximate Areas	1,520	245	302	326	201	58	2,652
Fathom Approximate Areas	4,062	856	718	413	33	298	6,380
							17,370

- Proposed Goal #2 – Reduce Number of Structures within Detailed Study 1% Existing Floodplain
 - 10 Year = 20% Reduction
 - 30 Year = 50% Reduction

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



Goal #2 – Property Flood Damage



- Remove Structures from 1% Existing Floodplain
 - Lower the peak discharge (regional detention or flood control dams)
 - Increase capacity (channel, culvert or storage improvements)

- Mitigate Structures in 1% Existing Floodplain
 - Acquire (buy out and demolish)
 - Elevate
 - Floodproof (Resistant materials below BFE)

Goal #3 – Loss of Life



Loss of Life occurs primarily at low water crossings and high hazard dams

Roughly 300 Low Water Crossings and 30 High Hazard Dams

- Proposed Goal #3 – Improve Safety at Low Water Crossings and High Hazard Dams through structural improvements or warning systems
 - 10 Year = 20% of Low Water Crossings and 50% of High Hazard Dams
 - 30 Year = 50% of Low Water Crossings and 100% of High Hazard Dams

Goal #4 – Flood Insurance Availability



Participation in NFIP
(or equivalent standards)

- Current NFIP participation
 - 23 of 28 counties (82%)
 - 40 of 48 communities (83%)

- NFIP Participation allows residents to purchase flood insurance and improves floodplain management
- Proposed Goal #4 – Increase NFIP Participation
 - 10 Year = 90% communities / 90% counties
 - 8 communities / 6 counties in first 10 years
 - 30 Year = 100% communities / 100% counties
 - 8 communities / 12 counties in next 20 years

Goal #5 – Dedicated Funding Sources



- Flood Infrastructure Fund for FM Projects will be primarily in the form of a low interest loan
- Each community needs to establish a dedicated funding source for operations & maintenance
- Proposed Goal #5 – Dedicated Funding Sources
 - 10 Year = 20% communities / 10% counties
 - 10 communities / 3 counties in first 10 years
 - 30 Year = 40% communities / 20% counties
 - 20 communities / 6 counties in next 20 years
- Current Dedicated Funding Sources
 - 4 of 48 Communities (8%)
 - 0 of 28 Counties (0%)

Goal #6 – Environmental Stewardship



- Flood Mitigation Projects can also enhance water quality and habitat
- Proposed Goal #6 – Environmental Stewardship
 - 10 Year = 25% of FM Projects consider & incorporate nature-based practices
 - 30 Year = 50% of FM Projects consider & incorporate nature-based practices

Summary of Flood Mitigation Goals



	Preliminary Proposed Goals	10-Year	30-Year
1	Evaluations to Confirm Flood Risk	Study 50% of Approx Structures	Study 100% of Approx Structures
2	Reduce Structures in 1% Existing Floodplain	Remove 20% of Detailed Structures	Remove 50% of Detailed Structures
3	Improve Safety at Low Water Crossings and Dams	20% of Crossings & 50% HH Dams	50% of Crossings & 100% HH Dams
4	Improved Standards (NFIP or Equivalent)	90% Communities & 90% Counties	100% Communities & 100% Counties
5	Dedicated Funding Sources	20% Communities & 10% Counties	40% Communities & 20% Counties
6	Environmental Stewardship	25% of FM Projects include nature based	50% of FM Projects include nature based

Task 3A 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 BEFORE FME, FMS or FMP can be considered for inclusion in the Regional Flood Plan

Task 3A Floodplain Management Practices

- 7 Communities
 - Most are 1 foot above BFE
 - Some use fully developed
 - Some require 1 to 2 feet above street or curb

Communities Adopting Higher Standards (Sources: 2018/2019 TFMA Higher Standards Survey, TWDB data, CEP Tool data and CAC Tracker Data)								
CID	Region	City or County Name	County	Feet above Fully Developed BFE	Feet above Existing BFE	Zone X(B) (Shaded) Above Street or Curb	Zone X(C) (Unshaded) Above Street or Curb	Special Notes
480549	9	Ballinger	Runnels	0	0	0	0	Elevation Certificate required before CO
480354	9	Levelland	Hockley	0	0	1	0	
480477	9	Midland	Midland	0	1	0	0	Playas Lowest floor must be +1' above overflow elevation or BFE whichever is higher. No import of fill is allowed in Playas. This is difficult to enforce. Midland is CRS 8
	9	Odessa	Ector	0	1	0	1	(1) Developer must conduct a study to establish both BFE and floodway in Zone A areas (2) Detention is required to mitigate development.(3) Developer must mitigate downstream impacts. (4) Development in Zone X must be elevated a minimum of 1' above NG and above the crown of the nearest street (5) EC required after construction is completed and prior to CO. (6) Biggest problems are determining the BFE for unnumbered A zones in already developed areas and localized flooding
	9	San Angelo	Tom Green	0	1	2	0	Lowest Floor elevated +1' above BFE on FIRM
	9	Taylor County	Taylor	1	0	0	0	
	9	Tom Green County	Tom Green	0	0	0.5	0	(1) Developer must establish BFE in Zone A. (2) Developer must mitigate all fill placed in floodway. (3) EC is required prior to framing/pouring lowest floor, when construction is completed and prior to CO. One (1) CFM on staff

Task 3A Floodplain Management Policy - Discussion

- Best to use existing conditions Base Flood Elevations
 - Existing BFEs are shown on FIRM maps
 - In 2024 Base Level Engineering will be available to determine existing BFEs

Recommended Practices:

- Goal #1 - Evaluations to Confirm Flood Risk
 - Developers building in a Zone A must provide a study establishing the BFE
- Goal #2 – Reduce Property Damage
 - Finished floor 1 foot above existing BFE (100-year)
 - Finished floor 1.5 feet above street or curb
- Goal #3 – Reduce Loss of Life
 - New culverts or bridges must have 1 foot of freeboard above the BFE

Task 10 - Stakeholder Outreach Status

Initial Outreach Campaign

1. Develop Contact List **Done**
2. Initial Introduction Email from UCRFPG **Done**
3. Prepare initial Flood Risk Map **Done**
4. Set up Interactive Website **Done**
5. Emails to Contact List **Last week in August**
6. Overview / Website Presentation **Today**
7. Phone calls to key stakeholders to follow up
8. Hold City Meeting(s) **September 9-10**

Contact Information



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Task 10 - Stakeholder Outreach Status

Finalized Survey Forms

1. Short and specific
2. Survey forms for:
 - (10) General Stakeholders
 - (15) City or County Officials
 - (22) Floodplain Administrators
 - (13) Independent School Districts
 - (10) Existing Project / Study
3. We will also use during meetings with cities to document the discussions

Region 9 Upper Colorado Regional Flood Plan
Stakeholder Survey

In 2019, the Texas Legislature and Governor Abbott expanded the Texas Water Development Board's (TWDB) role in flood planning and financing, to include administering a new regional flood plan process by river basin. *Local and regional flood mitigation projects must be in the flood plan to be eligible for state funding programs.* The Upper Colorado (Region 9) Flood Planning Region includes a 29-county (partial or full) area influenced by the Colorado River and its associated tributaries upstream of O.H. Ivie Reservoir.

The Regional Flood Plan due in 2023 will focus on identifying both existing and future condition flood risks, evaluate flood hazard exposure to life and property, identify and evaluate potentially feasible flood management strategies and flood mitigation projects, and present recommended projects that provide effective and economical project options to reduce flood risk to people, properties, communities, and environment.

We are reaching out to begin this conversation and gather your input to help focus flood planning efforts and future outreach communication. *Please complete this survey by September 14. It should take less than 10 minutes.*

Please provide us with the following as you get started:

Full Name

First Name Last Name

Region 9 Upper Colorado Regional Flood Plan
Floodplain Administrator Survey

Existing Floodplain Management Practices and Flood Planning Needs

Thank you for your input regarding the Region 9 Flood Plan. Your feedback regarding existing floodplain management practices is important as the project team collects and analyzes data.

Please complete all fields in each section of the form below and submit your project for review.

Entity Information

What are current floodplain management practices in your community/county?

Entity Name

Ex: Tom Green County, City of San Angelo

Does your entity have floodplain management regulations?

Yes
 No
 Unknown

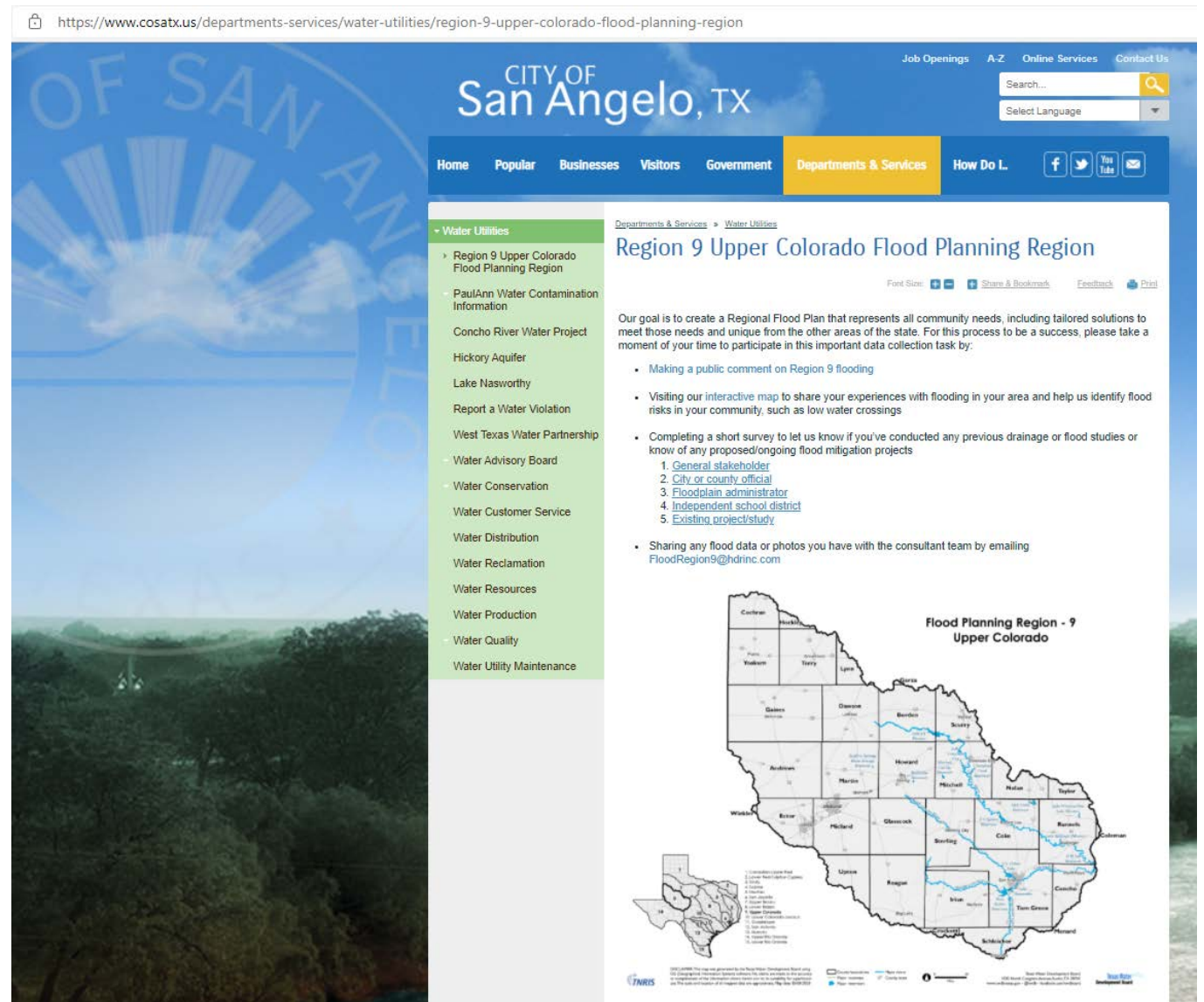
Has your organization adopted minimum regulations pursuant to Texas Water Code Section 16.3145?

Yes
 No

Task 10 - Stakeholder Outreach Status

Region 9 Website Update

1. Introduction and link to interactive website
2. Links to survey forms for:
 - General Stakeholders
 - City or County Officials
 - Floodplain Administrators
 - Independent School Districts
 - Existing Project / Study
3. Regional contact email



Task 10 - Stakeholder Outreach Status

Constant Contact Email Campaign

1. Sent out to:
 - a. City and County Officials
 - b. Floodplain Administrators
 - c. TXDOT offices
 - d. Independent School Districts
2. Able to monitor who opens and reads
3. Follow up with phone calls

Region 9 Upper Colorado Flood Planning Region

Flood Planning Stakeholders,

After the historic flooding across Texas, the Texas Legislature passed legislation in 2019 to create Texas' first-ever regional and state flood planning process. The 2019 legislation also created a new fund to provide financial assistance for flood mitigation studies and projects. As a result, the Texas Water Development Board (TWDB) was charged with creating flood planning regions based on river basins and establishing a statewide flood planning framework to better manage flood risk and reduce loss of life and property from flooding. Going forward, only the projects listed in the 2023 State Flood Plan will be eligible for state funding support through TWDB's Flood Infrastructure Fund.

Your area is located in the watershed of the Colorado River upstream of O.H. Ivie Reservoir, which is referred to as the Upper Colorado River Basin, or Region 9 in this statewide planning effort. We're reaching out to you to make sure that West Texas flood mitigation projects, strategies and your priorities are represented in the Regional Flood Plan and ultimately, the 2023 State Flood Plan.

The Region 9-Upper Colorado Regional Flood Planning Group is seeking input from community leaders and floodplain administrators as we work to develop a Regional Flood Plan that accurately identifies flood risks, establishes flood mitigation and floodplain management goals, and recommends strategies, and projects to reduce flood risks in our communities. Our goal is to create a Regional Flood Plan that represents *all* community needs, including tailored solutions to meet those needs that are unique from the other areas of the state. In order for this process to be a success, please take a moment of your time to participate in this important data collection task by:

1. Visiting our [interactive map](#) to share your experiences with flooding and help us identify flood risks in your community such as low water crossings;
2. Completing a short [survey](#) to let us know you've conducted any past drainage or flood studies or know of any proposed and ongoing flood mitigation projects; and
3. Sharing any flood data you have with the consultant team by emailing FloodRegion9@hdrinc.com.

[See Interactive Map](#)[Take Our Survey](#)[Email Flood Data](#)

Task 10 - Stakeholder Outreach Status

Constant Contact Email Campaign

Updated Statistics

[See Interactive Map](#)

[Take Our Survey](#)

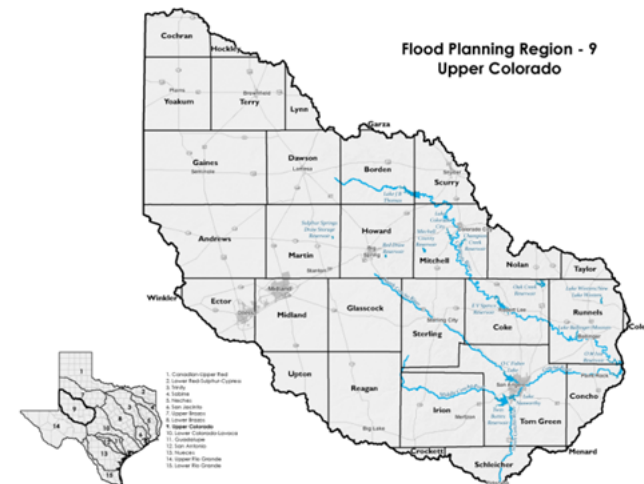
[Email Flood Data](#)

Feel free to upload flood photos and even news articles on the interactive map site about your experience with flooding issues in your area. Additional information about the Region 9-Upper Colorado RFPG and the TWDB Regional Flood Planning Process is available on the [Region 9 Flood Planning website](#).

Your participation is critical to the success of this planning effort to safeguard our Region against flood risks in our communities. If you have any questions or concerns, please contact us at FloodRegion9@hdrinc.com. We greatly appreciate your input and thank you for your valuable time.

Thank you,

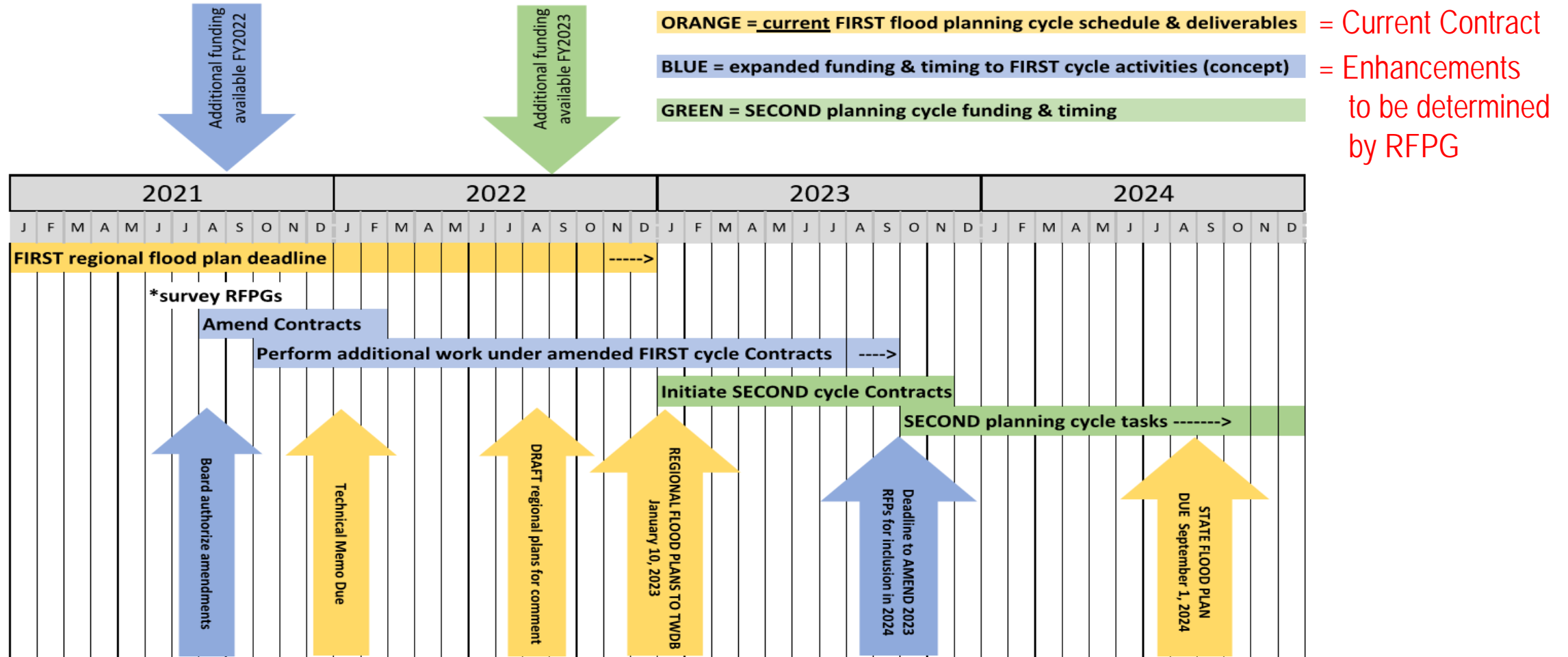
Allison Strube, PE
Chair, Region 9-Upper Colorado Regional Flood Planning Group
Director of Water Utilities
City of San Angelo, Texas
(325) 657-4209 (w)
www.cosatx.us



Proposed Schedule of Additional Funding

Flood planning - working concept schedule (subject to change)

June 17, 2021 TWDB Work Session handout





Region 9 Upper Colorado Regional Flood Plan

September 2021



What is the Region 9 Regional Flood Plan?

- Historic Flooding – Realized the need for flood planning
- The 2019 Texas legislature created and funded the first-ever regional and state flood planning process
- Schedule
 - Regional Flood Plans must be delivered by January 10, 2023
 - Legislature will adopt State Flood Plan by September 1, 2024
- Updated every 5 years like State Water Plan
- TWDB Flood Planning website:

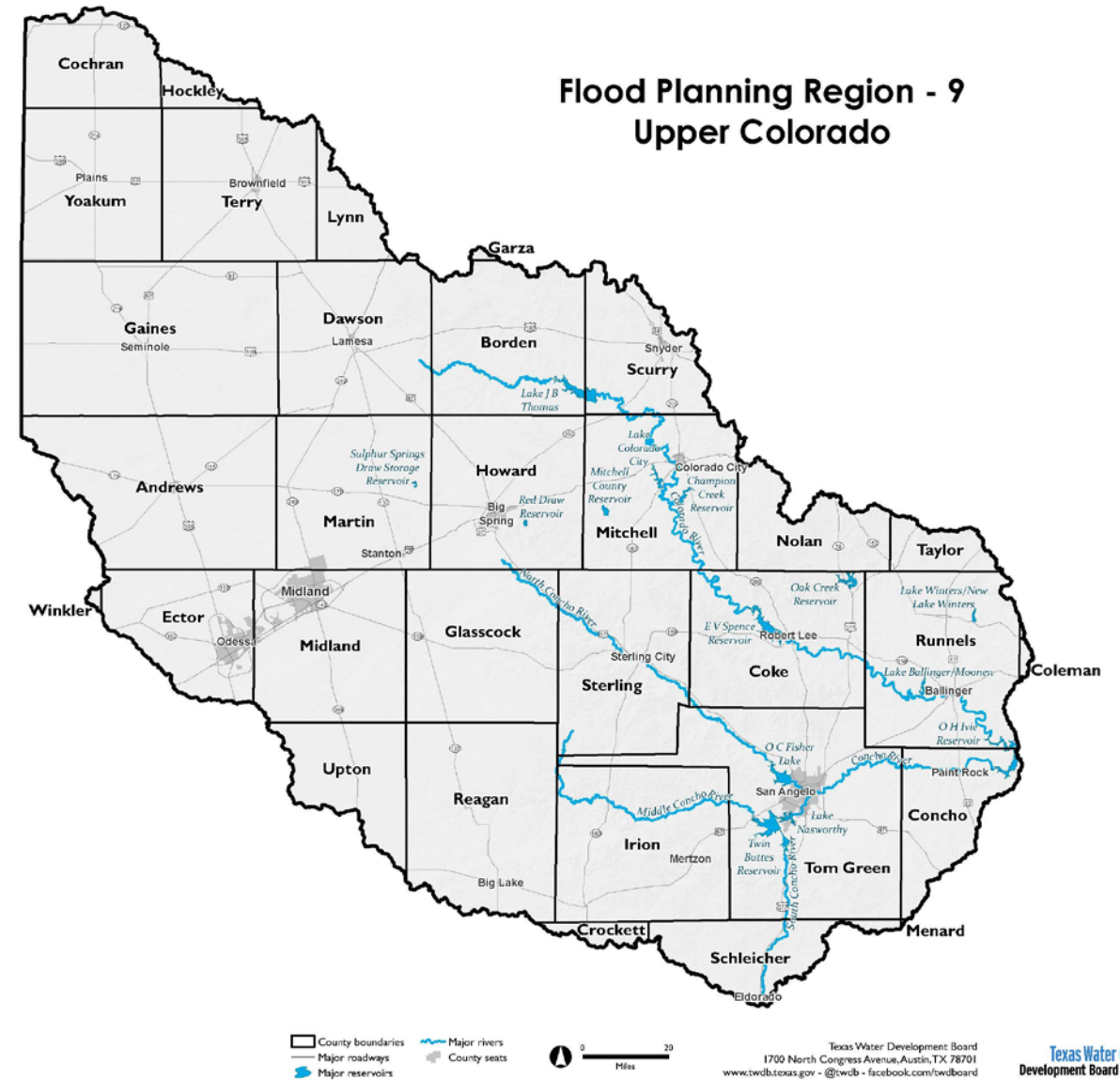
<https://www.twdb.texas.gov/flood/planning/index.asp>

Plan Objectives

- Document existing flood infrastructure and preparedness
- Identify current and future flood hazard risks
- Develop flood mitigation/management goals
- Identify and evaluate flood management strategies and mitigation projects
- Evaluate benefits/impacts to water supply, environment and economics

Benefit

- Funding pathway for much-needed flood mitigation projects



Stakeholder Input

Why should you participate?

- Your insight is valuable
 - Tell us your experience, where you have seen or know of flood concerns
 - A plan is only as good as the input
 - 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 to fix your flooding problems



Stakeholder Input

- City of San Angelo Water Utilities
- Region 9 website
 - Interactive Map to share your flooding experiences
 - Fill out Survey Forms
 - Follow Up Contact

https://www.cosatx.us/departments-services/water-utilities/region-9-upper-colorado-flood-planning-region

CITY OF San Angelo, TX

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Water Utilities

- Region 9 Upper Colorado Flood Planning Region
- PaulAnn Water Contamination Information
- Concho River Water Project
- Hickory Aquifer
- Lake Nasworthy
- Report a Water Violation
- West Texas Water Partnership
- Water Advisory Board
- Water Conservation
- Water Customer Service
- Water Distribution
- Water Reclamation

Departments & Services > Water Utilities

Region 9 Upper Colorado Flood Planning Region

Font Size: + - Share & Bookmark Feedback Print

Our goal is to create a Regional Flood Plan that represents all community needs, including tailored solutions to meet those needs and unique from the other areas of the state. For this process to be a success, please take a moment of your time to participate in this important data collection task by:

- Making a public comment on Region 9 flooding
- Visiting our interactive map to share your experiences with flooding in your area and help us identify flood risks in your community, such as low water crossings
- Completing a short survey to let us know if you've conducted any previous drainage or flood studies or know of any proposed/ongoing flood mitigation projects
 1. General stakeholder
 2. City or county official
 3. Floodplain administrator
 4. Independent school district
 5. Existing project/study
- Sharing any flood data or photos you have with the consultant team by emailing FloodRegion9@hdrinc.com

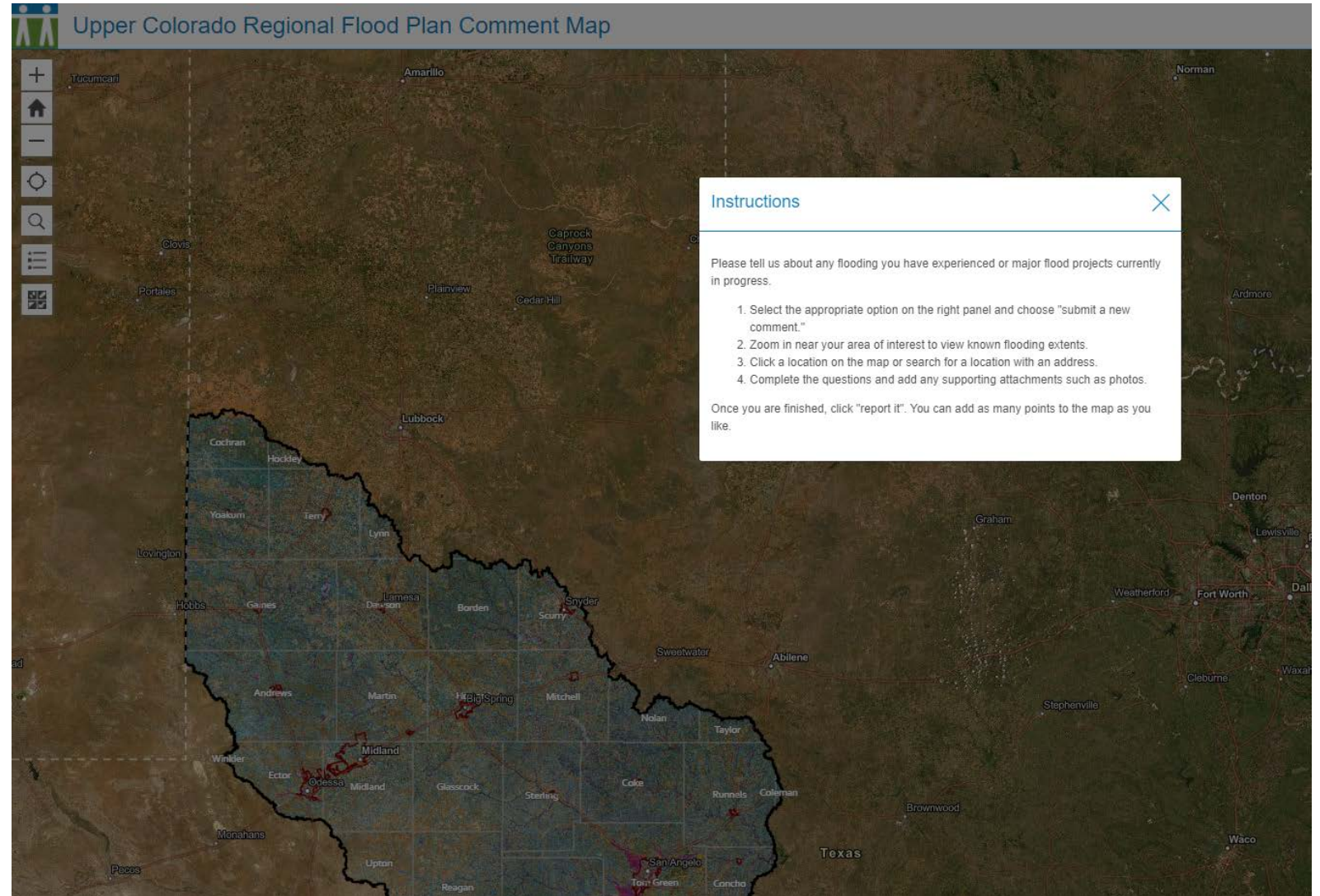
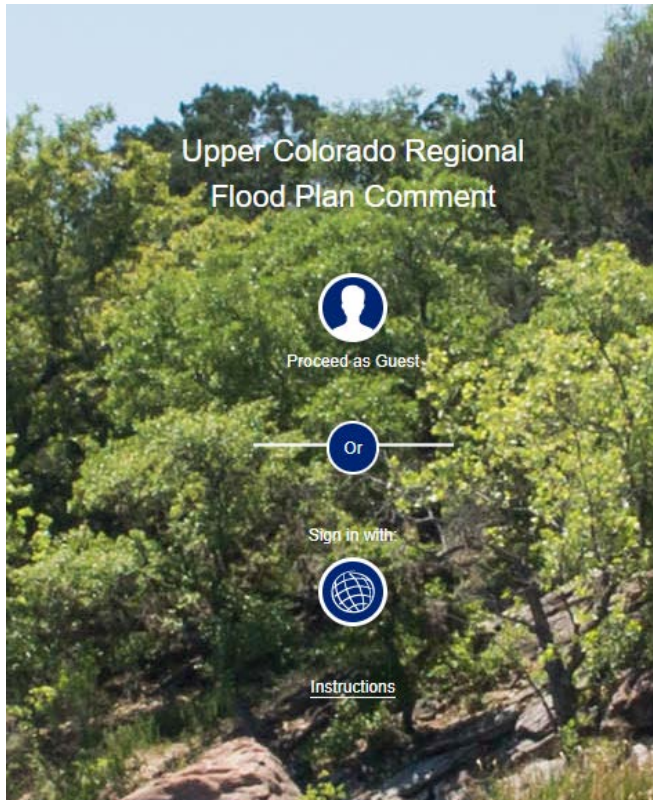
Interactive Map

Survey Forms

Contact

Region 9 Interactive Map

- Interactive Map
- Proceed as Guest



Region 9 Interactive Map

1. Navigate to location
2. Click "Submit a Report"
3. Drop a pin
4. Fill out fields
5. Attach photos
6. Click "Report It"

Upper Colorado Regional Flood Plan Comment Map

Sign In

GENERAL FLOODING COMMENTS

Details

Flood Concern
Select...

Flood Frequency
Select...

When did flooding occur?
08/30/2021 9:54 am

Description of flood concern or additional comments for the team, attach photos below if desired.

How long have you lived or worked in the area (in years)?

Can we contact you to obtain more information on the flooding? (required)
Select...

Name

Phone Number

Email

Attachments
Browse

Location
Click the map to draw the location.
Enter an address to search

Report It Cancel

Powered by esri

Maxar | FEMA Map Service Center <https://msc.fema.gov/portal/home> FEMA USGS/TWDB Estimated Base Flood

Contact Information

Anyone else that needs to be a part of this conversation?

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