### **Public Meeting Notice**

Region 9 – Upper Colorado Regional Flood Planning Group March 4, 2022 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 March 4, 2022 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: 211 546 675#

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

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 <a href="mailto:allison.strube@cosatx.us">allison.strube@cosatx.us</a> or <a href="mailto:rfpg9.lance@gmail.com">rfpg9.lance@gmail.com</a> by noon March 3, 2022. The subject line must be in the following format: "Public Comment, [item number] – March 4, 2022." 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. Texas Water Development Board Update
- 6. Sponsoring Agency Update from City of San Angelo
- 7. Consider nominating and electing RFPG Chair, Vice Chair, Secretary, two members-at-large to serve on the Executive Committee, as applicable, per group bylaws
- 8. Consultant Presentation by HDR Engineering, Inc. for discussion, recommendation, and/or approval on the following items:
  - a. Task 4C Prepare and Submit Technical Memorandum, March 7, 2022, Deliverable to TWDB
- 9. Consultant Presentation by HDR Engineering, Inc for discussion of Regional Flood Plan development updates, schedule, and next steps
- 10. Public comments limit 3 minutes per person
- 11. Consider date and agenda items for next meeting
- 12. Adjourn

Additional information may be obtained from: Allison Strube allison.strube@cosatx.us

301 W. Beauregard Ave., San Angelo, TX 76903

## **Public Meeting Notice**

Region 9 – Upper Colorado Regional Flood Planning Group December 16, 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:**

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

Non-voting Member	Agency	Present(x)/Absent()/
		Alternate Present (*)
John McEachern	Texas Parks and Wildlife Department	X-Virtual
Tim Frere	Texas Division of Emergency Management	
Larissa Place	TDA	
Ben Wilde	Texas State Soil and Water Conservation Board	X-Virtual
Jet Hays	General Land Office	
Tressa Olsen	Texas Water Development Board (TWDB)	X-Virtual
Winona Henry	Texas Commission on Environmental Quality	X-Virtual
Anna Yakimovicz	Region 10 Liaison	

#### **Others Present:**

Curtis Beitel – HDR (Consultant): In-Person Heather Keister – Freese & Nichols (Consultant) Scott Rushing – HALFF (Consultant) David Dunn – HDR (Consultant)

#### 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 10:05 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 Commissioner Kenneth Dierschke and seconded by David Lloyd. Motion passed unanimously.

### • AGENDA ITEM NO. 5: TWDB Update

Tressa Olsen with TWDB updated the group on the recent Chair's call that was conducted by all the regions. Chair Allison Strube was unable to attend that meeting.

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

Chair Strube discussed that there were no major updates.

 AGENDA ITEM NO. 7: Consultant Presentation by HDR Engineering, Inc. for update on 4A Flood Mitigation Needs Analysis

Curtis Beitel went through the presentations provided in the background material and discussed lack of overall response to outreach impacts, the flood risk list, and possible projects. Total scoring showing about 14 HUCs in the top end of the list.

 AGENDA ITEM NO. 8: Consultant Presentation by HDR Engineering, Inc. for discussion, recommendation, and/or approval on the following items: (a) Task 4B Identification and evaluation of Potential Flood Management Evaluations and Potentially Feasible Flood Management Strategies and Flood Mitigation Projects; (b) Task 4C Prepare and Submit Technical Memorandum Curtis Beitel went through the presentation provided in the background material.

Discussion was made by the group on minor updates and housekeeping on the format and minor details of the technical memo, but a motion was made by Scott McWilliams to submit the document with the edits as discussed and seconded by Chuck Brown. Motion passed unanimously.

- AGENDA ITEM NO. 9: Public Comments Limit 3 minutes per person
   No Public Comments were made during this item.
- AGENDA ITEM NO. 10: Consider Date and Agenda Items for Next Meeting
  It was discuss there would be no meeting in January and a tentative meeting for the 2<sup>nd</sup> or 3<sup>rd</sup> Thursday of February was discussed.
- AGENDA ITEM NO. 11: Adjourn
   Motion by Commissioner Rick Bacon and seconded by Shannon McMillan. Motion passed unanimously.
   Meeting was adjourned at 11:28 AM CST.

Approved by the Region 9 Upper Co	olorado KFPG at a meeting held on March 4, 2022.
Lance Overstreet, SECRETARY	
Allison Strube, CHAIR	_



# **Upper Colorado Regional Flood Plan**

**Technical Memorandum Supplement** GIS Deliverable, March 7, 2022







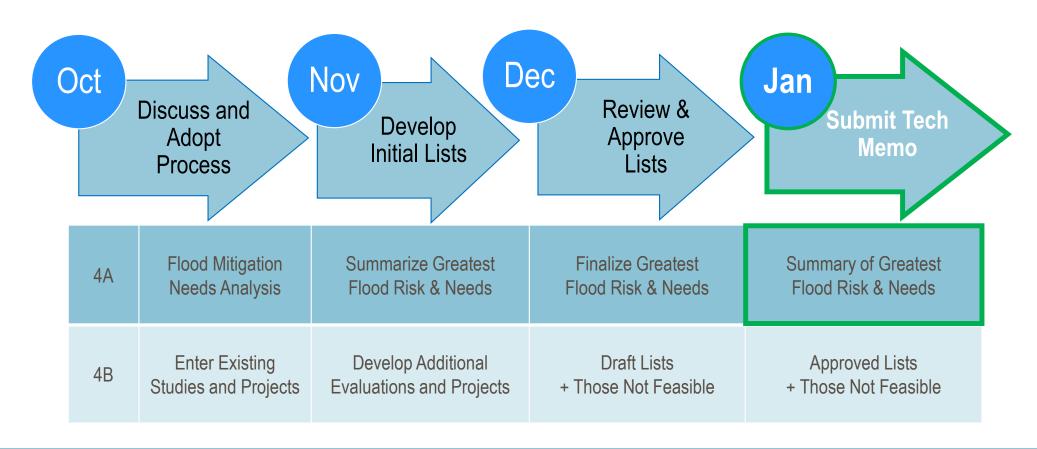
March 4, 2022



# Task 4 Background

- Task 4A Flood Mitigation Needs Analysis
- Task 4B Identification and Evaluation of Potential Flood Management Evaluations and Potentially Feasible Flood Management Strategies and Flood Mitigation Project
- Task 4C Prepare and Submit Technical Memorandum

# Task 4A/4B ✓



# **Technical Memorandum Submissions to TWDB**

- January 7, 2022
  - Included needs analysis, identification of FMSs, FMPs, FMEs
- March 7, 2022
  - TM Supplement GIS deliverable



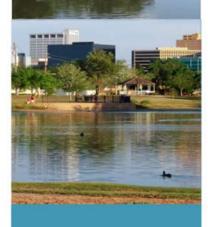




## Technical Memorandum

2023 Regional Flood Plan – Flood Planning Region 9 – Upper Colorado

Texas Water Development Board January 7, 2022



Prepared under the supervision of: Curtis Beitel, P.E., CFM

Texas P.E. No. 83213

Texas PE Firm Registration
Number: F-754

HDR Engineering, Inc.

DRAFT - NOT FOR CONSTRUCTION

HDR Engineering, Inc. Texas PE Firm Registration No. F-754

## GIS Deliverable - Geodatabase

 Geodatabase Deliverable follows TWDB's Exhibit D: Data Submittal Guidelines for Regional Flood Planning Example required fields, feature class

## 3.6 Future Condition Flood Risk Analysis

## 3.6.1 Future Condition Flood Hazard [FutFldHazard]

**Description:** Perform future condition flood hazard analyses to determine the location and magnitude of both 1.0% annual chance and 0.2% annual chance floods. This task also includes identification of flood prone areas. These areas can be identified in the 'Annual Probability' field with a value of 'Unknown'.

Table 15: List of Fields for 'FutFldHazard'

Item	Required ?	Field Name	Data Type	Guidance	Valid Entries
Future Hazard	Υ	FUTHAZ_ID	Text	Must be unique for each feature	
RFPG	Y	RFPG_NUM	Short (2)	RFPG number	
	Υ	RFPG_NAME	Text		
County	Υ	COUNTY	Text	County name, without "County" (e.g. "Harris", not "Harris County"). For hazard and exposure feature classes, COUNTY must be singular.	
HUC8s	Y	HUC8	Text	NHD HUC8 numbers, comma-separated	
HUC10s	N	HUC10	Text	NHD HUC10 numbers, comma-separated	
HUC12s	N	HUC12	Text	NHD HUC12 numbers, comma-separated. May be left blank if too many for field length.	
Watersheds	N	WS_ID	Text	WS_IDs from Watershed feature, comma-separated. May be left blank if too many for field length.	

# **GIS Deliverable - Maps**

## Maps as numbered in TWDB Exhibit C – Technical Guidelines

- Map 4: Existing Condition Flood Hazard
- Map 5: Existing Condition Flood Hazard Gaps in Inundation Boundary Mapping and Identify known Flood Prone Areas
- Map 6: Existing Condition Flood Exposure
- Map 7: Existing Condition Vulnerability and Critical Infrastructure
- Map 8: Future Condition Flood Hazard
- Map 9: Future Condition Flood Hazard Gaps in Inundation Boundary Mapping and Identify known Flood Prone Areas
- Map 10: Extent of Increase of Flood Hazard Compared to Existing Condition
- Map 11: Future Condition Flood Exposure
- Map 12: Future Condition Vulnerability and Critical Infrastructure

# **Map 4. Existing Condition Flood Hazard**

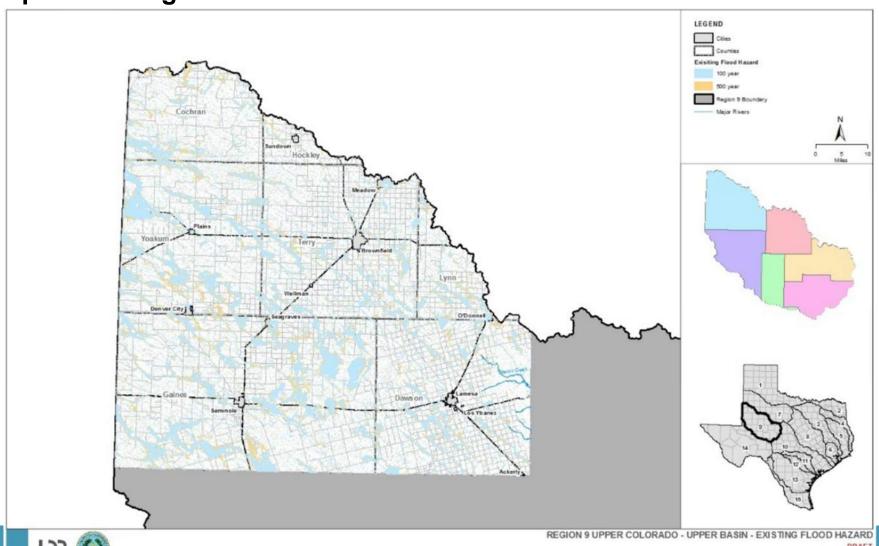
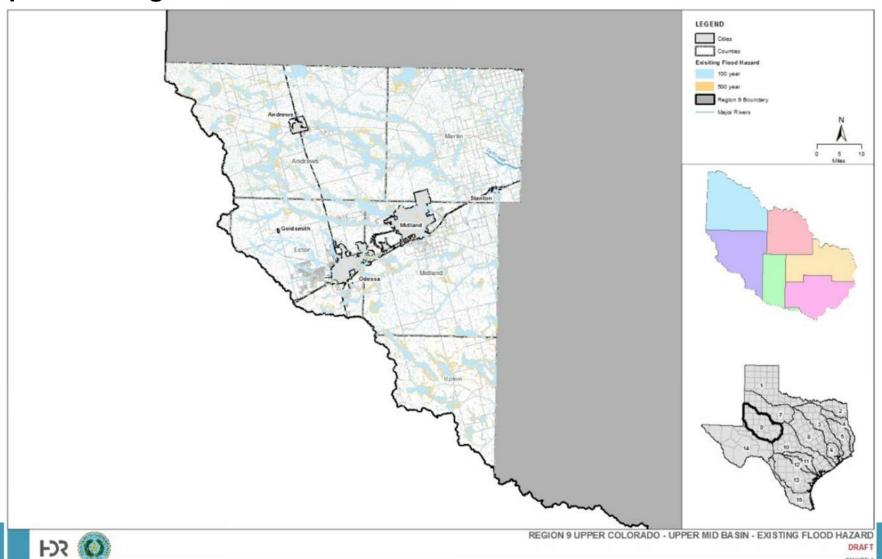
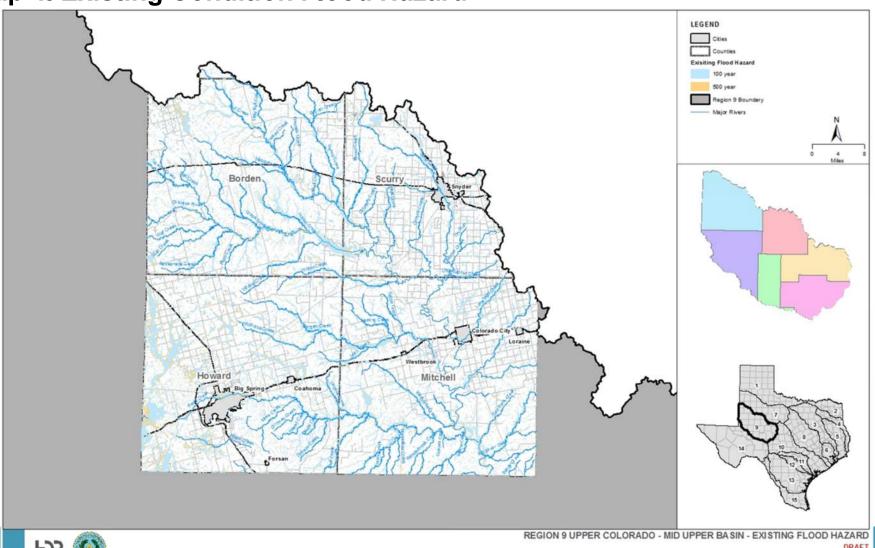


FIGURE 1

**Map 4. Existing Condition Flood Hazard** 



**Map 4. Existing Condition Flood Hazard** 



**Map 4. Existing Condition Flood Hazard** 

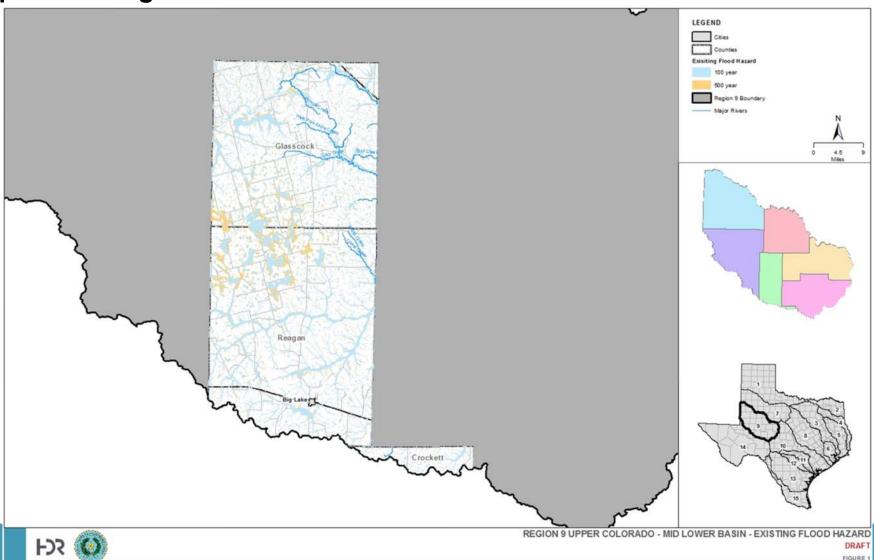
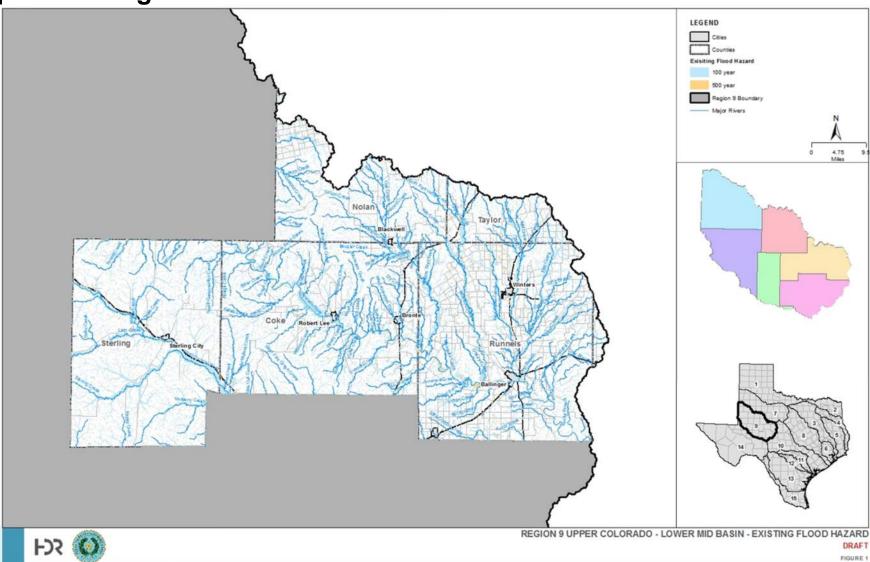
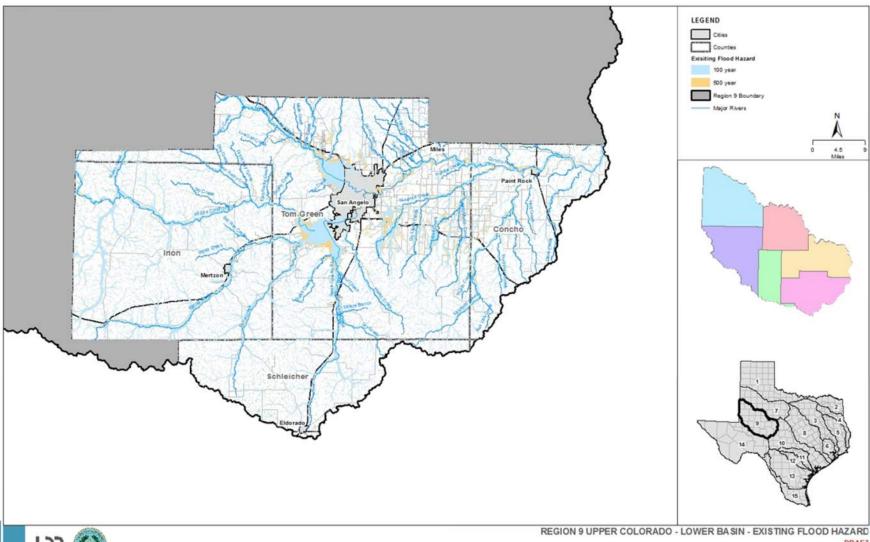


FIGURE 1

**Map 4. Existing Condition Flood Hazard** 

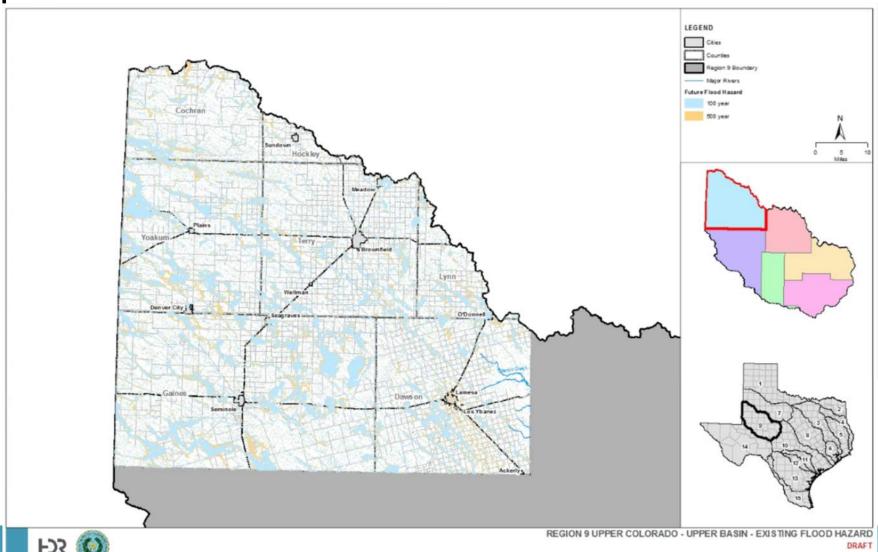


**Map 4. Existing Condition Flood Hazard** 

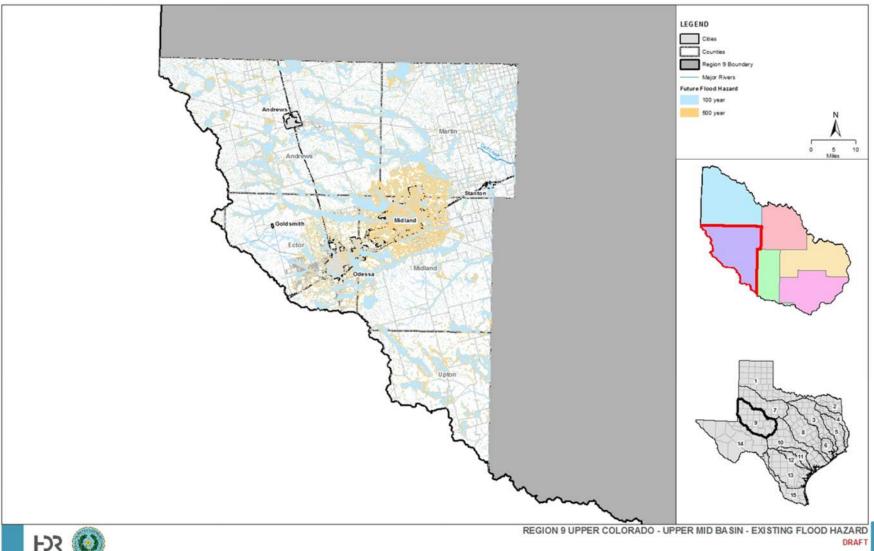


12

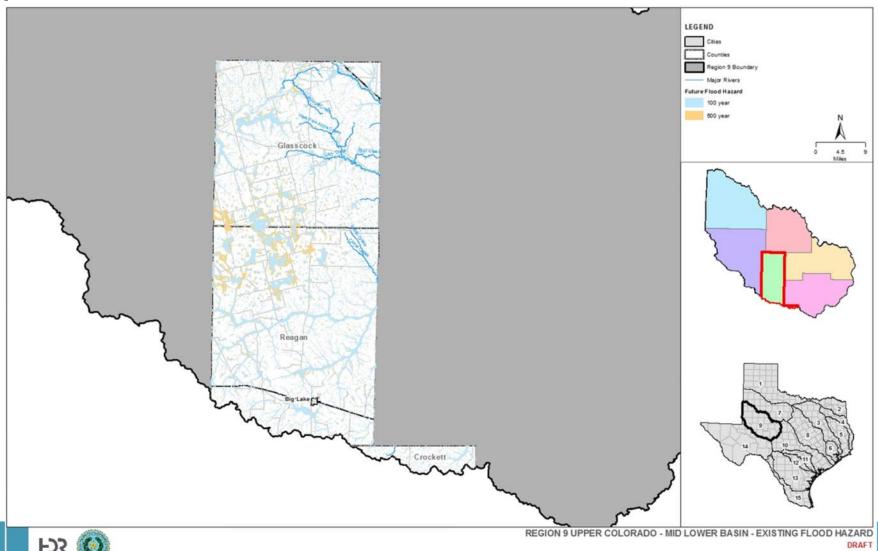
**Map 8. Future Condition Flood Hazard** 



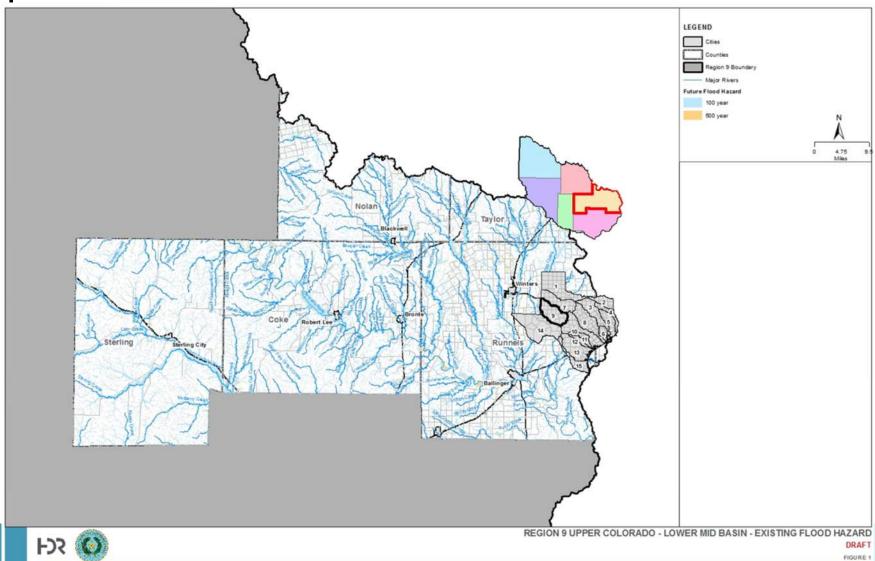
**Map 8. Future Condition Flood Hazard** 



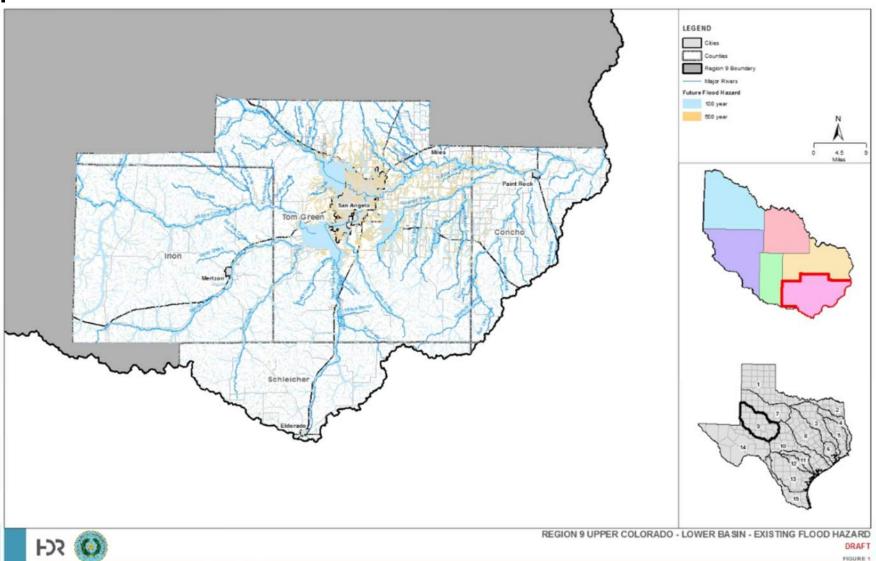
**Map 8. Future Condition Flood Hazard** 



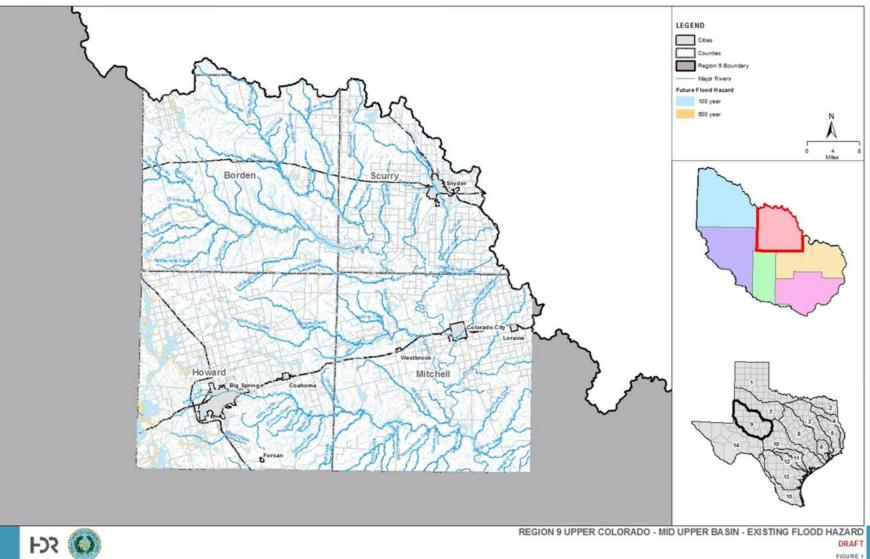
**Map 8. Future Condition Flood Hazard** 



**Map 8. Future Condition Flood Hazard** 



## **Map 8. Future Condition Flood Hazard**



18

# **Suggested Planning Group Action**

- Consider approval of Interim Technical Memorandum Supplement Deliverable.
- "Direct consultant team to submit Interim Technical Memorandum Supplement Deliverable to TWDB staff by deadline of March 7, 2022."



# **Upper Colorado Regional Flood Plan**

Regional Flood Plan Development Schedule and Next Steps





March 4, 2022





First Planning Cycle Schedule

# **Planning Updates**

- January 7, 2022: Technical Memorandum submitted to TWDB
- January 26, 2022: Notice to Proceed -Regional Flood Planning Grant Contract with City of San Angelo



**F**)S



## Technical Memorandum 2023 Regional Flood Plan -Flood Planning Region 9 -

Texas Water Development Board January 7, 2022



Prepared under the supervision of: Curtis Beitel, P.E., CFM Texas P.E. No. 83213

Texas PE Firm Registration Number: F-754 HDR Engineering, Inc.

HDR Engineering, Inc. Texas PE Firm Registration No. F-754

# TWDB Working Schedule Working Conceptual Schedule\*\*

First Cycle of Regional Flood Planning

As of December 2020



			Planning		2020							21	021											20	22							- 2	2023		
Item	Entity	Activity	SOW Task #	bet	Nov	Dec	ue	- top	Mar	Apr	May	5	5	Snt	des	Det	Nov	Dec	an	ep	Mar	λor	May	un	5	gng	day	)ct	Nov	Dec	ue	Q.	Mar	You	May
1	TWDB	Designation of RFPG members		1000							_																			$\neg$		$\neg$	$\neg$		
2	RFPG	RFPG First Meetings							Г	Т	Т																					$\blacksquare$	$\neg$	$\neg$	
3	RFPG	Public participation, stakeholder input, post notices, hold meetings, maintain email lists and website.	10																																
4	TWDB	Publish Request for Regional Flood Planning Grant Applications																																	
5	RFPG/Sponsor	Submission of Applications for Regional Flood Planning Grants to TWDB						(DUE	JAN	21, 20	121)																						T	T	
6	TWDB/Sponsor	Review and Execution of Regional Flood Planning Grant Contracts									Г																								
7	RFPG/Sponsor	Solicitation for Technical Consultant by RFQ process																			- 10												$\neg$		
8	RFPG	Pre-Planning Meetings for Public Input on Development of RFP																																	
9	RFPG	Selection of Technical Consultant																												$\neg$		$\neg$	$\neg$	$\neg$	$\neg$
10	RFPG/Sponsor	Execution of Technical Consultant Subcontract																		2 3										$\neg$		$\neg$	$\neg$	$\neg$	$\neg$
11	RFPG	Planning Area Description	1																														$\neg$		
12	RFPG	Existing Condition Flood Risk Analyses	2A		П			П																						$\neg$		$\Box$	$\neg$	$\neg$	$\neg$
13	RFPG	Future Condition Flood Risk Analyses	28																		- 1))									$\neg$		$\Box$	$\neg$	$\neg$	$\neg$
14	RFPG	Evaluation and Recommendations on Floodplain Management Practices	3A				П		Г																							П	T	T	$\neg$
15	RFPG	Flood Mitigation and Floodplain Management Goals	38		$\neg$		$\overline{}$	$\overline{}$	_	т								$\neg$												$\neg$		$\neg$	$\neg$	$\neg$	$\neg$
16	RFPG	Flood Mitigation Need Analysis	4A				$\overline{}$	$\overline{}$	_	-	_																	$\boldsymbol{\vdash}$				$\neg$	$\neg$	$\neg$	$\neg$
17	RFPG	Identification and Evaluation of Potential FMEs and Potentially Feasible FMSs and FMPs	48						Г	Г	Г																	Г					$\exists$	T	$\Box$
18	RFPG	Preparation and Submission of Technical Memorandum to the TWOB	4C								Γ				П					(DUE	IAN 3	, 202	2)												
18	TWDB	Issue Notice-to-Proceed on Task 5									_																					$\blacksquare$	$\neg$	$\neg$	$\neg$
20	RFPG	Recommendation of FMEs, FMSs, and FMPs	5								т													ĺ		Ĭ				$\blacksquare$		$\neg$	$\neg$	$\neg$	$\neg$
21	RFPG	Impacts of Regional Flood Plan	6A						Г		Т																								$\neg$
22	RFPG	Contributions to and Impacts on Water Supply Development and the State Water Plan	6B						Г		Г																						T	T	
23	RFPG	Flood Response Information and Activities	7		П				т		_						$\overline{}$													$\neg$		$\neg$	$\neg$	$\neg$	$\neg$
24	RFPG	Administrative, Regulatory, and Legislative Recommendations	8																																
25	RFPG	Flood Infrastructure Financing Analysis	9							$\Box$											- U											$\neg$	$\neg$	$\dashv$	$\neg$
26	RFPG	Preparation and Submission of Draft RFP to the TWDB	10																								(DUE	AUG	1, 202	(2)		$\neg$	$\neg$	$\neg$	$\neg$
27	RFPG	Public Input on Draft RFP	10																								10						$\neg$		
28	TWDB	TWDB Review and Comment on the Draft RFP																			il.												$\Box$		$\neg$
29	RFPG	Incorporate TWDB & Public Input into Final RFP	10																		Ü												$\neg$		$\neg$
30	RFPG	Adopt and Submit the 2023 RFP to the TWDB	All																													(DUE	IAN 1	0, 203	3)

## TWDB Working Schedule Current UCRFPG Responsibilities

## Working Conceptual Schedule\*\*

First Cycle of Regional Flood Planning

As of December 2020



0.55	10010-2001	green de la companya	Planning		202	0						20	21											20	22							20	23	
Item	Entity	Activity	SOW Task #	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Int	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Int	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Anr	May
18	TWDB	Issue Notice-to-Proceed on Task 5																																
20	RFPG	Recommendation of FMEs, FMSs, and FMPs	5							,																								7
21	RFPG	Impacts of Regional Flood Plan	6A																				I	Į	I									
22		Contributions to and Impacts on Water Supply Development and the State Water Plan	6B																															
23	RFPG	Flood Response Information and Activities	7																$\neg$															
24	RFPG	Administrative, Regulatory, and Legislative Recommendations	8																										П					
25	RFPG	Flood Infrastructure Financing Analysis	9																				Ш	II	I									
26	RFPG	Preparation and Submission of Draft RFP to the TWDB	10																								(DUE	AUG :	, 202	2)				
27	RFPG	Public Input on Draft RFP	10																															
28	TWDB	TWDB Review and Comment on the Draft RFP																									Ī	I						
29	RFPG	Incorporate TWDB & Public Input into Final RFP	10																П															
30	RFPG	Adopt and Submit the 2023 RFP to the TWDB	All																												(1	DUE JAI	N 10, 7	2023)

# Flood Plan Development Schedule

Timeframe	TWDB Flood Plan Scope of Work Tasks/Actions
January 26, 2022	Task 5 Notice to Proceed
March 7, 2022	Technical Memo GIS Submitted to TWDB
March	Task 10 Public Participation and Plan Adoption - Will be ongoing throughout RFP development Task 4 Needs Analysis and Refined FME, FMP, FMS List Task 5 Recommendations
April	Task 5 Recommendations Task 7 Flood Response
May	Task 5 Recommendations Task 8 Administrative, Regulatory, and Legislative Recommendations Task 9 Flood Infrastructure Financing Analysis
June	Tasks 6a, 6b Impacts of the Regional Flood Plan & Impacts to Water Plan Task 12 Identify FMEs to complete
July	Discuss Draft Flood Plan Refinements
August 1, 2022	August 1, 2022, Draft Flood Plan Submitted to TWDB

# **Next Steps**

- Begin Task 5. Recommendation of Flood Management Evaluations and Flood Management Strategies and Associated Flood Mitigation Projects
- Stakeholder Outreach
- Continue Regional Flood Plan development
  - Draft Chapters to be provided to Planning Group
  - Planning group
    - Provide comments via email
    - Discussion items to planning group meeting
- Chapter 1 Planning Area Description

March 4, 2022



Stakeholder Outreach

# **Stakeholder Meetings**

- Developing Draft Agenda
- Comments?

- 1) Introductions
- 2) Overview of State Flood Plan
  - a) Region 9 Goals
- 3) Benefits of Participation in Regional Flood Plan
  - a) Financing through the TWDB's Flood Infrastructure Fund
- 4) Existing Floodplain Management Practices

FEMA CID	481192
Floodplain Management Regulations (Yes/ No/ Unknown)	No
Adopted Minimum Regulations pursuant to TWC Section 16.3145? (Yes/ No)	No
NFIP Participant (Yes/ No)	No
Higher Standards Adopted (Yes/ No)	No
Floodplain Management Practices (Strong/Moderate/Low/None)	None
Level of enforcement of practices (High/ Moderate/ Low/ None)	None
Existing Stormwater or Drainage Fee (Yes/No)	No

- 5) Summary of Flood Risk
  - a) Current Effective FEMA Flood Insurance Rate Map
  - b) Additional Floodplain Sources (Fathom)
  - c) Summary of Structures At Risk
  - d) Historic flooding experiences

March 4, 2022

# Stakeholder Meetings (continued)

## Excerpt of municipality stakeholder information

able 6 - Ex	isting Floodplain Man	agement Practices							
FEMA CID <sup>1</sup>	Entity <sup>1</sup>		Floodplain management regulations (Yes/ No/ Unknown) <sup>1</sup>	Adopted minimum regulations pursuant to Texas Water Code Section 16.3145? (Yes/ No) <sup>1</sup>	NFIP Participant (Yes/No) <sup>1</sup>	Higher Standards Adopted (Yes/ No)2	Floodplain Management Practices (Strong/Moderate /Low/None) <sup>2</sup>	Level of enforcement of practices (High/ Moderate/ Low/ None) <sup>2</sup>	Existing Stormwater or Drainage Fee (Yes/No)2
480477	City of Midland	Midland	Unknown	Yes	Yes	No	Moderate	Moderate	Yes
480992	City of Miles	Miles	Unknown	Yes	Yes	No	Low	Low	No
480206	City of Odessa	Odessa	Yes	Yes	Yes	No	Moderate	Moderate	Yes
480921	City of O'Donnell	O'Donnell	No	No	No	No	None	None	No
480683	City of Plains	Plains	Yes	Yes	Yes	No	Low	Low	No
480749	City of Robert Lee	Robert Lee	Yes	Yes	Yes	No	Low	Low	No
480623	City of San Angelo	San Angelo	Yes	Yes	Yes	No	Moderate	Moderate	Yes
480239	City of Seagraves	Seagraves	Unknown	Yes	Yes	No	Low	Low	No
480240	City of Seminole	Seminole	Unknown	Yes	Yes	No	Low	Low	No
481001	City of Snyder	Snyder	Yes	Yes	Yes	No	Low	Low	No

- Planning Group members will be invited to join meetings virtually
- Comments / Questions?

March 4, 2022

# Questions

