Public Meeting Notice

Region 9 – Upper Colorado Regional Flood Planning Group
December 10, 2025
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 December 10, 2025, at 10:00 AM at the City Hall Annex– Board Room – 1st Floor, 301 W. Beauregard Ave., San Angelo, Texas, for the purpose of considering the following agenda items.

Phone participation is available for public and non-voting representatives by the conference call information:
Call In: (325) 326-0870 Passcode / ID: 470 574 988#

The Meeting Agenda and the Agenda Packet are posted online at: https://www.uppercoloradoflood.org

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 astrube@crmwd.org or scottm@ucratx.org by noon December 9, 2025. The subject line must be in the following format: "Public Comment, [item number] – December 10, 2025." 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 (TWDB) Update
6. Sponsoring agency update from City of San Angelo
7. Discussion and update on Task 2- Flood Hazard Mapping and Receive Public Input
8. Discussion and action on confirming the list of potential FMXs for the Tech Memo
9. Discussion and action on considering the adoption of the Technical Memorandum with authorization of HDR/ City of San Angelo to make non-substantial edits for submittal to the TWDB by January 7, 2026
10. Technical consultant update for Second Cycle
11. Discussion and action on definition of "Rural Applicant"
12. Public comments – limit 3 minutes per person
13. Consider date and agenda items for next meeting
14. Adjourn

Additional information may be obtained from:
Allison Strube
astrube@crmwd.org
400 E. 24th Street
Big Spring, Texas 79721

Public Meeting Notice

Region 9 – Upper Colorado Regional Flood Planning Group
October 22, 2025
10:00 AM CST

Meeting held in person at the City Hall Annex – Board Room – 1st Floor, 301 W. Beauregard Ave., San Angelo, Texas. Additionally, participation was available via conference call at (424) 672-7540.

Roll Call:

Voting Member	Interest Category	Present (x) /Absent ( ) / Alternate Present (*)
Kenneth Dierschke	*Agricultural interests*	X
Rick Bacon	*Counties*	X
Vacant	*Electric generating utilities*	
Shannon McMillan	*Environmental interests*	X
Vacant	*Flood districts*	
Morse Haynes	*Industries*	X
Russell Pehl	*Municipalities*	X
Vacant	*Public*	
Scott McWilliams	*River authorities*	X
Vacant	*Small business*	
Allison Strube	*Water districts*	X
Shane Kelton	*Water utilities*	X

Non-voting Member	Agency	Present(x)/Absent( )/ Alternate Present (*)
John McEachern	Texas Parks and Wildlife Department	X
Carlos Pena	Texas Division of Emergency Management	
Lauren Mayse	Texas Department of Agriculture	
Ben Wilde	Texas State Soil and Water Conservation Board	X - Virtually
Jet Hays	General Land Office	
Sarah Magana	Texas Water Development Board (TWDB)	X
Winona Henry	Texas Commission on Environmental Quality	
Anna Yakimovicz	Region 10 Liaison	

Others Present:

Paula Jo Lemonds – HDR (Consultant): Virtual
Mio Matsumara – HDR (Consultant)

Ollie Trager – FNI (Consultant)
Diane Howe – HDR (Consultant): Virtual
Susan Roth – (Consultant): Virtual
Heather Keister – FNI (Consultant): Virtual
Andrew Howe – Halff (Consultant)
Samuel Amoako-Atta – Halff (Consultant): Virtual

Quorum:
Quorum: **Yes**
Number of voting members or alternates representing voting members present: 8
Number required for quorum per current voting positions of 9: 5

Meeting agendas, packets, information and recordings are available at the link
https://www.sanangelo.gov/496/Region-9-Upper-Colorado-Flood-Planning-R

- **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.

- **AGENDA ITEM NO. 2: Welcome**

- **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 Rick Bacon and seconded by Shane Kelton to approve the minutes as presented. Motion passed unanimously.

- **AGENDA ITEM NO. 5: Texas Water Development Board (TWDB) Update**
  Sarah Magana gave an update from TWDB including items on when the technical memo is due in January 2026, notice requirements, and materials for small communities that are now available from TWDB.

- **AGENDA ITEM NO. 6: Sponsor agency update from the City of San Angelo**
  Chair Strube called on Shane Kelton, and he stated there were no updates on behalf of the City of San Angelo. The only item San Angelo is currently working on reimbursement requests with TWDB.

- **AGENDA ITEM NO. 7: Technical consultant update on Region 9 website**
  This item was discussed following Item 8. Susan Roth gave a presentation on website updates. The goal is to have the website functional before Thanksgiving. It was directed that public comments should go to Chair Strube's, Shane Kelton's, and HDR's emails. ADA requirements were discussed and Sarah Magna stated she would get the Region 9 more information.

- **AGENDA ITEM NO. 8: Consider nominating and electing RFPG Chair, Vice Chair, Secretary, two members-at-large to serve on the Executive Committee, as applicable, per group bylaws**

This item was discussed following Item 6. Chair Strube opened the floor to discussions on nominations. Chair Strube made a motion to nominate Shane Kelton as Vice Chair as replacement to Chuck Brown and keeping all other positions with current representation. Rick Bacon seconded the motion. Motion passed unanimously.

- **AGENDA ITEM NO. 9: Technical consultant update for Second Cycle**
  Susan Roth started the presentation with an update on outreach. She highlighted the Midland Open House Region 9 hosted for stakeholder and public input. Diane Howe the gave an update on Participating, Non-Participating, and Sanctioned Communities in the NFIP. Andrew Howe gave an update on Flood Hazard Mapping. Mio Matsumara gave an update on Floodplain Management Goals and Flood Prone Areas. It was the direction of Region 9 to include the additional flood prone areas brought by the Midland Open House attendees and other stakeholder input. It was discussed that Flood Early Warning System are recommended to be FMSs. Finally, it was discussed on how Region 9 would like to define "Rural Applicant". It was discussed at the next meeting a vote would be considered for proposing an alternative definition of "Rural Applicant".

- **AGENDA ITEM NO. 10: Technical consultant presentation on TWDB Flood Analytics User Survey**
  Ollie Trager gave a quick update on the TWDB Flood Analytics User Survey. She encouraged the group to submit the survey and please share the QR code to others to also submit survey data.

- **AGENDA ITEM NO. 11: Public Comments**
  Kennth Dierschke asked the group if they were aware how Representative Darby will interact with our plan. Heather Kiester gave an update on information FNI has provided to the legislature.

- **AGENDA ITEM NO. 12: Consider Date and Agenda Items for Next Meeting**
  It was discussed to have the meeting to be held between the Thanksgiving and Christmas holidays. December 10th was proposed to be the next regularly scheduled meeting.

- **AGENDA ITEM NO. 13: Adjourn**
  Motion by Rick Bacon and seconded by Kenneth Dierschke. Motion passed unanimously. The meeting was adjourned at 11:22 AM CST.

Approved by the Region 9 Upper Colorado RFPG at a meeting held on December 10, 2025.

_____
SECRETARY

_____
CHAIR

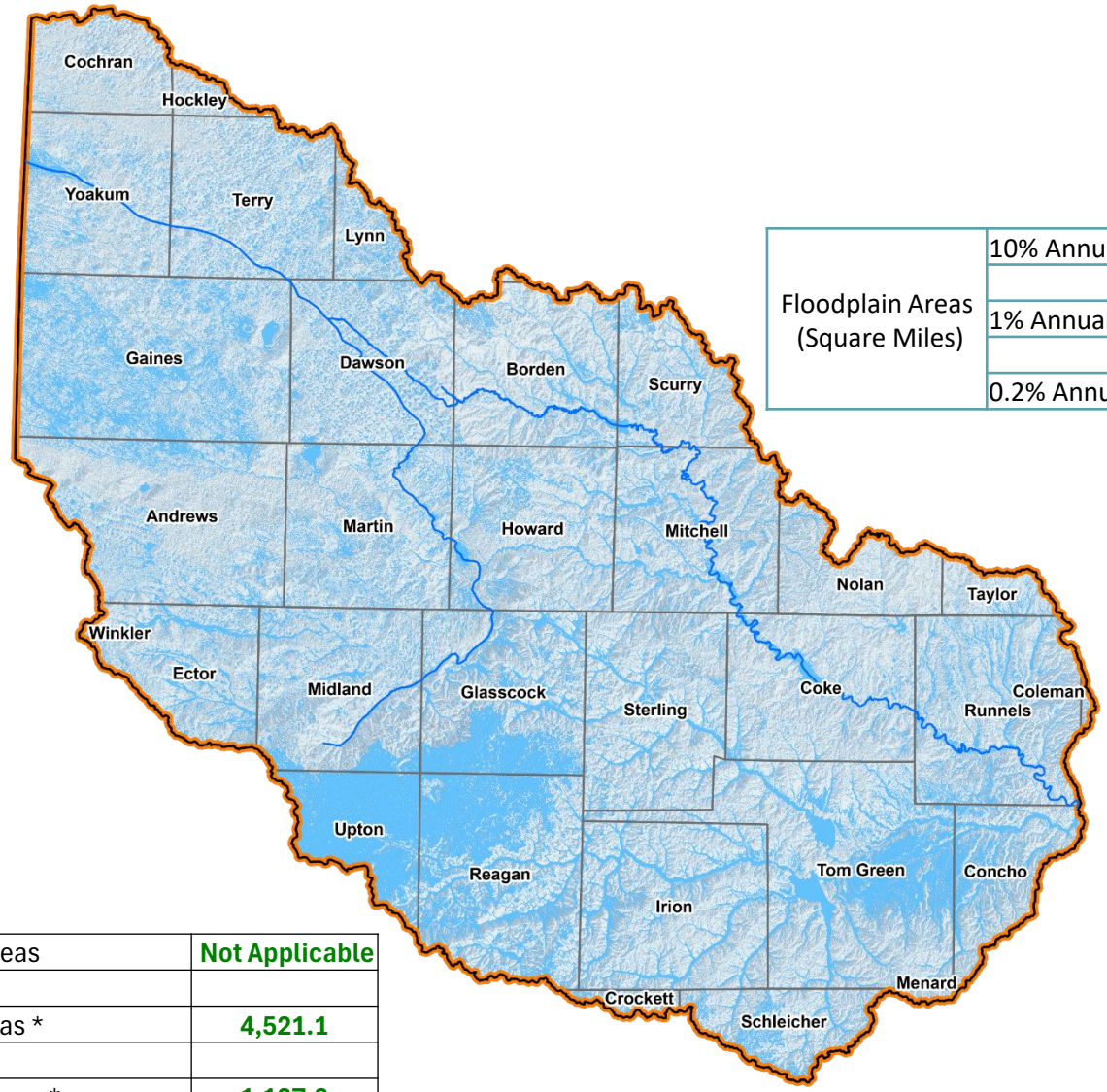
Upper Colorado Regional Flood Plan

Discussion and update on Task 2 – Flood Hazard Mapping

Agenda Item No. 7

December 10, 2025

Task 2A – Existing Conditions Flood Risk Mapping



Cycle 2

Floodplain Areas (Square Miles)	10% Annual Chance Flood Hazard Areas	1,070.0
	1% Annual Chance Flood Hazard Areas*	1,473.1
	0.2% Annual Chance Flood Hazard Areas*	1,452.8

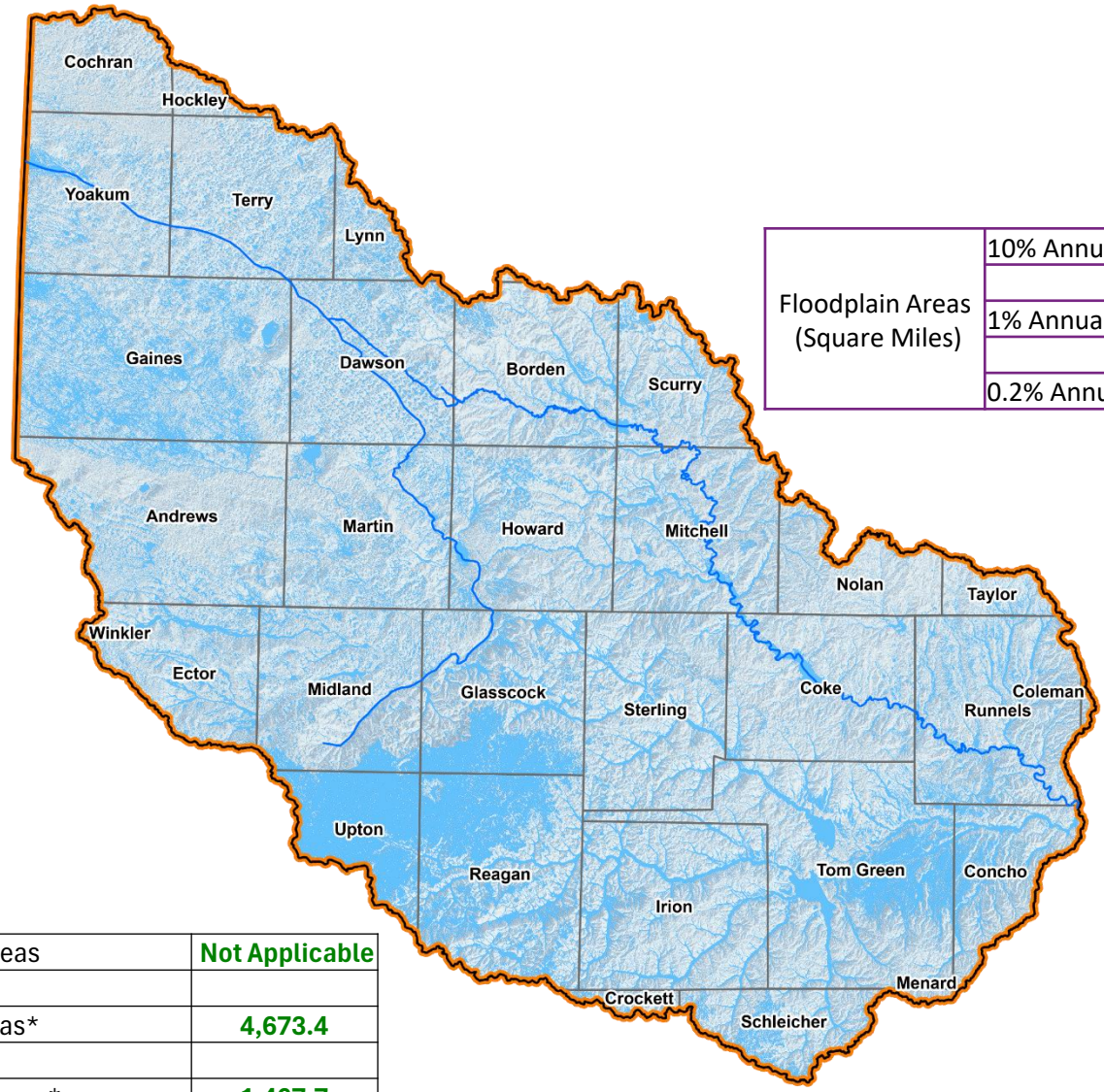
*The 1% does not incorporate the 10% and the 0.2% does not incorporate the 1%

Cycle 1

Floodplain Areas (Square Miles)	10% Annual Chance Flood Hazard Areas	Not Applicable
	1% Annual Chance Flood Hazard Areas *	4,521.1
	0.2% Annual Chance Flood Hazard Areas*	1,127.2

Percent Land in Floodplain (Upper Colorado Region)	Cycle 1	26.7%
	Cycle 2	18.9%

Task 2B – Future Conditions Flood Risk Mapping



Cycle 2

Floodplain Areas (Square Miles)	10% Annual Chance Flood Hazard Areas	3,078.9
	1% Annual Chance Flood Hazard Areas*	2,320.3
	0.2% Annual Chance Flood Hazard Areas*	1,656.9

*The 1% does not incorporate the 10% and the 0.2% does not incorporate the 1%

Cycle 1

Floodplain Areas (Square Miles)	10% Annual Chance Flood Hazard Areas	Not Applicable
	1% Annual Chance Flood Hazard Areas*	4,673.4
	0.2% Annual Chance Flood Hazard Areas*	1,467.7

Percent Land in Floodplain (Upper Colorado Region)	Cycle 1	29.0%
	Cycle 2	33.3%

Upper Colorado Regional Flood Plan

Discussion and action on confirming the list of potential FMXs for the Tech Memo

Agenda Item No. 8

December 10, 2025

Table 12. Identified Flood Management Evaluations*

FME ID	FME Name	Description	County	Watersheds[A]	FME Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources	Potential Funding Amount	Estimated number of structures at 1% annual flood risk[B]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Number of low water crossings in project area at annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road segment closures (#)	Estimated farm & ranch land at 1% annual flood risk (acres)
091000001	Andrews County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Andrews		Watershed Planning	1495.20	Riverine, Local	Andrews County	000151,00000152,00000154,09000174,00000272,09001828,09002972	No	$500,000			959	763	1455	0	3	173.2	0	8416.517
091000002	Andrews County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Andrews		Watershed Planning	1495.20	Riverine, Local	Andrews County	000151,00000152,00000154,09000174,00000272,09001828,09002972	No	$1,288,000			959	763	1455	0	3	173.2	0	8416.517
091000003	Andrews County GIS Development	Develop GIS an inventory of stormwater infrastructure	Andrews		Other	1495.20	Riverine, Local	Andrews County	000151,00000152,00000154,09000174,00000272,09001828,09002972	No	$100,000			959	763	1455	0	3	173.2	0	8416.517
091000004	Borden FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Borden		Watershed Planning	902.98	Riverine, Local, Playa	Borden County	000117,00000172,09000173,09000174,00000183,00000184,00000272,00000275,00000278,00	No	$887,000			69	9	20	0	2	26.1	0	10740.18
091000005	City of Big Lake FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Reagan		Watershed Planning	2.38	Riverine, Local	Big Lake	09003500	No	$31,000			75	53	110	0	2	2.4	0	5.194128
091000006	City of Blackwell Storm Drain and Culvert Improvements Stud	Proposed project planning for upgrading undersized stormwater drains and culverts.	Nolan		Project Planning	0.59	Riverine, Local	Blackwell	000261,00000278,00000284,09000499,09000852,09002581	No	$300,000			9	3	14	0	0	0.5	0	0.07071
091000007	City of Brownfield DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Terry		Watershed Planning	6.54	Riverine, Local	Brownfield	00000205,00000275,00000308,09003111	No	$250,000			245	125	537	0	1	17.8	0	416.09
091000008	City of Colorado City DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Mitchell		Watershed Planning	5.31	Riverine, Local, Playa	Colorado City	00000172,00000278,09003443	No	$250,000			143	93	252	2	1	10.1	0	55.57276
091000009	City of Lamesa DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Dawson		Watershed Planning	4.72	Riverine, Local	Dawson County	000118,09000173,09000174,00000184,00000205,00000272,00000275,00000295,00000308,09001828,09002888,09000	No	$250,000			185	0	551	0	6	11.9	0	82.95412
091000010	City of Loraine Kindred St Detention Project	Identify scope of detention project on Kindred Street. Offsite detention and property buyout required in order to handle runoff from culvert project identification on Kinder Street. Implement the most cost-effective solution to reduce or eliminate floodin	Mitchell		Other	0.01		Loraine	00000172,00000278,09003448	Yes	$25,000			0	0	0	0	0	0.0	0	0
091000011	City of Odessa Buyout Program Study	In Muskingum Draw floodplain between 8th Street and University Boulevard, numerous homes and small businesses (approximately 400) are subject to damage from flooding. Proposed evaluation of potential buyout project.	Midland,Ector		Project Planning	44.26	Riverine, Local	Odessa	00000151,00000152,00000272,09000288,09002836	Yes	$411,700			6574	5476	24528	10	26	154.6	0	26.06533
091000012	City of Odessa DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Ector		Project Planning	44.26	Riverine, Local	Odessa	000272,09000288,09002836	No	$750,000			6574	5476	24528	10	26	154.6	0	26.06533
091000013	City of Odessa FEMA Mapping	Prepare Comprehensive Floodplain and Drainage Study for the City of Odessa. Determine BFE in currently identified A zones on FEMA maps.	Ector,Midland		Watershed Planning	51.15	Riverine, Local	Odessa	000272,09000288,09001698,09002836,09002838	No	$192,000			6774	5481	25522	10	26	167.1	0	46.26301
091000014	City of O'Donnell DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Lynn,Dawson		Watershed Planning	0.86	Riverine, Local	O'Donnell	000272,00000275,00000295,00000308,09003482	No	$250,000			284	184	246	1	0	9.7	0	394.4998
091000015	City of Snyder DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Scurry		Watershed Planning	8.32	Riverine, Local, Playa	Snyder	000170,00000172,00000183,00000272,00000275,00000278,09000288,00000295,00000445,09	No	$250,000			445	266	1365	1	3	20.6	0	70.46579
091000016	City of Sterling City DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Sterling		Watershed Planning	0.99	Riverine, Local	Sterling City	09000149,00000261,00000284,09002715	No	$250,000			132	90	148	0	7	5.0	0	20.74763
091000017	Cochran County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Cochran		Watershed Planning	773.56	Riverine, Local	Cochran County	000205,09000206,00000275,00000295	No	$671,000			23	12	51	0	0	144.0	0	15910.84
091000018	Cochran County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Cochran		Watershed Planning	773.56	Riverine, Local	Cochran County	00000187	No	$500,000			23	12	51	0	0	144.0	0	15910.84
091000019	Coke County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Coke		Watershed Planning	924.57	Riverine, Local, Playa	Coke County	09000147	No	$500,000			245	104	123	0	14	55.4	0	5509.607
091000020	Coke County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Coke		Watershed Planning	924.57	Riverine, Local, Playa	Coke County	000147,09000149,00000170,00000172,00000261,00000278,00000284,09000539,09002162,09002581,09002685,09000	No	$920,000			245	104	123	0	14	55.4	0	5509.607
091000021	Coke County GIS Development	Develop a GIS inventory of stormwater infrastructure	Coke		Other	924.57	Riverine, Local, Playa	Coke County	09000147	No	$100,000			245	104	123	0	14	55.4	0	5509.607
091000022	Concho County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Concho		Watershed Planning	988.88	Riverine, Local	Concho County	00000124	No	$500,000			103	52	77	0	4	23.6	0	13016.57
091000023	Concho County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Concho		Watershed Planning	988.88	Riverine, Local	Concho County	000124,09000131,00000144,00000145,00000261,00000278,00000284,00000301,00000307,09	No	$962,000			103	52	77	0	4	23.6	0	13016.57
091000024	Concho County GIS Development	Develop a GIS inventory of stormwater infrastructure	Concho		Other	988.88	Riverine, Local	Concho County	00000124	No	$100,000			103	52	77	0	4	23.6	0	13016.57
091000025	Crockett County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Crockett		Watershed Planning	2797.09	Riverine, Local	Crockett County	00000052	No	$500,000			0	0	0	0	0	0.7	0	5.348514
091000026	Crockett County FEMA Mapping	Update existing FEMA Mapping	Crockett		Watershed Planning	2797.09	Riverine, Local	Crockett County	000068,00000126,00000127,00000261,00000272,00000284,00000684	No	$985,000			0	0	0	0	0	0.7	0	5.348514
091000027	Crockett County GIS Development	Develop a GIS inventory of stormwater infrastructure	Crockett		Other	2797.09	Riverine, Local	Crockett County	00000052	No	$100,000			0	0	0	0	0	0.7	0	5.348514
091000028	Dawson County GIS Development	Develop a GIS inventory of stormwater infrastructure	Dawson		Other	898.81	Riverine, Local	Dawson County	000118,09000173,09000174,00000184,00000205,00000272,00000275,00000295,00000308,09001828,09002888,09000	No	$100,000			474	9	763	0	9	537.9	0	81984.1
091000029	Dawson County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Dawson		Watershed Planning	898.81	Riverine, Local	Dawson County	000118,09000173,09000174,00000184,00000205,00000272,00000275,00000295,00000308,09001828,09002888,09000	No	$500,000			474	9	763	0	9	537.9	0	81984.1
091000030	Dawson County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Dawson		Watershed Planning	898.81	Riverine, Local	Dawson County	000118,09000173,09000174,00000184,00000205,00000272,00000275,00000295,00000308,09001828,09002888,09000	No	$812,000			474	9	763	0	9	537.9	0	81984.1
091000031	Ector County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Ector		Watershed Planning	899.61	Riverine, Local	Ector County	000151,00000152,00000154,00000272,09000288,00000684,09001698,09002836,09003576	No	$500,000			13045	10079	31733	13	34	306.5	0	168.5142
091000032	Ector County GIS Development	Develop a GIS inventory of stormwater infrastructure	Ector		Other	899.61	Riverine, Local	Ector County	000151,00000152,00000154,00000272,09000288,00000684,09001698,09002836,09003576	No	$100,000			13045	10079	31733	13	34	306.5	0	168.5142
091000033	Ector County Buyout Program Study	In the area of 61st Street and Benefield, Florida in north western area of county, structures have experienced repetitive losses from flooding. Proposed evaluation of potential mitigation project.	Ector		Project Planning	899.61	Riverine, Local	Ector County	00000102,00000152,00000154,00000272,09000288,09001698,09002836,09003576	Yes	$100,000			13045	10079	31733	13	34	306.5	0	168.3893

Table 12. Identified Flood Management Evaluations*

FME ID	FME Name	Description	County	Watersheds[A]	FME Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources	Potential Funding Amount	Estimated number of structures at 1% annual flood risk[B]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Number of low water crossings in project area at annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road segment closures (#)	Estimated farm & ranch land at 1% annual flood risk (acres)
091000034	Ector County FEMA Mapping	Update existing FEMA Mapping.	Ector		Watershed Planning	899.61	Riverine, Local	Ector County	000151,00000152,00000154,00000272,09000288,00000684,09001698,09002836,09003576	No	$857,000			13045	10079	31733	13	34	306.5	0	168.5142
091000035	Ector County Stormwater Contaminant Study	Conduct a study to determine pollutant levels in County areas nearby sewer system for level of contaminants before and after a flood event.	Ector		Preparedness	899.61	Riverine, Local	Ector County	000151,00000152,00000154,00000272,09000288,00000684,09001698,09002836,09003576	No	$100,000			13045	10079	31733	13	34	306.5	0	168.5142
091000036	Gaines County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Gaines		Watershed Planning	1497.58	Riverine, Local	Gaines County	000118,09000174,00000205,09000206,00000272,00000275,09001828,09002681,09002684,09	No	$500,000			1890	814	2654	1	5	434.3	0	147852.4
091000037	Gaines County GIS Development	Develop a GIS inventory of stormwater infrastructure	Gaines		Other	1497.58	Riverine, Local	Gaines County	000118,09000174,00000205,09000206,00000272,00000275,09001828,09002681,09002684,09	No	$100,000			1890	814	2654	1	5	434.3	0	147852.4
091000038	Gaines County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Gaines		Watershed Planning	1497.58	Riverine, Local	Gaines County	000118,09000174,00000205,09000206,00000272,00000275,09001828,09002681,09002684,09	No	$1,272,000			1890	814	2654	1	5	434.3	0	147852.4
091000039	Glasscock County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Glasscock		Watershed Planning	897.15	Riverine, Local, Playa	Glasscock County	09000150	No	$500,000			141	3	74	0	0	33.8	0	26320.96
091000040	Glasscock County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Glasscock		Watershed Planning	897.15	Riverine, Local, Playa	Glasscock County	000149,09000150,00000151,09000173,09000174,00000261,00000272,00000684,00001240	No	$845,000			141	3	74	0	0	33.8	0	26320.96
091000041	Glasscock County GIS Development	Develop a GIS inventory of stormwater infrastructure	Glasscock		Other	897.15	Riverine, Local, Playa	Glasscock County	09000150	No	$100,000			141	3	74	0	0	33.8	0	26320.96
091000042	Hockley County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Hockley		Watershed Planning	906.67	Riverine, Local	Hockley County	00000186	No	$500,000			44	18	1553	3	2	42.3	0	1395.676
091000043	Hockley County FEMA Mapping	Update existing FEMA Mapping	Hockley		Watershed Planning	906.67	Riverine, Local	Hockley County	000187,00000205,00900206,00000275,00000295,00000308,09003169	No	$987,000			44	18	1553	3	2	42.3	0	1395.676
091000044	Hockley County GIS Development	Develop a GIS inventory of stormwater infrastructure	Hockley		Other	906.67	Riverine, Local	Hockley County	000187,00000205,00900206,00000275,00000295,00000308,09003169	No	$100,000			44	18	1553	3	2	42.3	0	1395.676
091000045	Howard County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Howard		Watershed Planning	900.69	Riverine, Local, Playa	Howard County	000149,09000150,00000172,09000173,09000174,00000261,00000272,00000278,00000284,09000288,09001680,0900	No	$500,000			1372	662	4038	2	20	196.1	0	37027.93
091000046	Howard County GIS Development	Develop a GIS inventory of stormwater infrastructure	Howard		Other	900.69	Riverine, Local, Playa	Howard County	000149,09000150,00000172,09000173,09000174,00000261,00000272,00000278,00000284,09000288,09001680,0900	No	$100,000			1372	662	4038	2	20	196.1	0	37027.93
091000047	Howard County FEMA Mapping	Update existing FEMA Mapping	Howard		Watershed Planning	900.69	Riverine, Local, Playa	Howard County	000149,09000150,00000172,09000173,09000174,00000261,00000272,00000278,00000284,09000288,09001680,0900	No	$896,000			1372	662	4038	2	20	196.1	0	37027.93
091000048	Irion County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Irion		Watershed Planning	1047.45	Riverine, Local	Irion County	09000068	No	$500,000			354	104	181	0	8	47.8	0	2460.404
091000049	Irion County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Irion		Watershed Planning	1047.45	Riverine, Local	Irion County	000068,00000126,00900131,00000261,00000284,00001240,09002400	No	$962,000			354	104	181	0	8	47.8	0	2460.404
091000050	Irion County GIS Development	Develop a GIS inventory of stormwater infrastructure	Irion		Other	1047.45	Riverine, Local	Irion County	09000068	No	$100,000			354	104	181	0	8	47.8	0	2460.404
091000051	Lynn County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Lynn		Watershed Planning	890.17	Riverine, Local	Lynn County	000183,00000184,00000186,00000205,00000272,00000275,00000295,00000308,00000445,09	No	$500,000			340	204	347	1	0	152.0	0	25468.81
091000052	Lynn County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Lynn		Watershed Planning	890.17	Riverine, Local	Lynn County	000183,00000184,00000186,00000205,00000272,00000275,00000295,00000308,00000445,09	No	$780,000			340	204	347	1	0	152.0	0	25468.81
091000053	Martin County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Martin		Watershed Planning	912.08	Riverine, Local	Martin County	000117,09000118,09000150,00000151,09000173,09000174,00000272,09000405,09002738,09	No	$500,000			902	451	1987	3	5	229.1	0	60436.15
091000054	Martin County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Martin		Watershed Planning	912.08	Riverine, Local	Martin County	000117,09000118,09000150,00000151,09000173,09000174,00000272,09000405,09002738,09	No	$788,000			902	451	1987	3	5	229.1	0	60436.15
091000055	Martin County GIS Development	Develop a GIS inventory of stormwater infrastructure	Martin		Other	912.08	Riverine, Local	Martin County	000117,09000118,09000150,00000151,09000173,09000174,00000272,09000405,09002738,09	No	$100,000			902	451	1987	3	5	229.1	0	60436.15
091000056	Midland County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Midland		Watershed Planning	898.32	Riverine, Local	Midland County	000127,09000150,00000151,00000152,09000174,00000272,09000288,00000684,09000692,09001049,09002050,0900	No	$500,000			8432	5663	23148	22	28	289.5	0	8596.422
091000057	Midland County FEMA Mapping	Update existing FEMA Mapping	Midland		Watershed Planning	898.32	Riverine, Local	Midland County	000127,09000150,00000151,00000152,09000174,00000272,09000288,00000684,09000692,09001049,09002050,0900	No	$926,000			8432	5663	23148	22	28	289.5	0	8596.422
091000058	Midland County GIS Development	Develop a GIS inventory of stormwater infrastructure	Midland		Other	898.32	Riverine, Local	Midland County	000127,09000150,00000151,00000152,09000174,00000272,09000288,00000684,09000692,09001049,09002050,0900	No	$100,000			8432	5663	23148	22	28	289.5	0	8596.422
091000059	Mitchell County FEMA Mapping	Update Existing FEMA Mapping	Mitchell		Watershed Planning	913.24	Riverine, Local, Playa	Mitchell County	000147,09000149,00000170,00000172,09000173,00000261,00000272,00000278,00000284,00000295,00000445,0900	No	$929,000			344	206	628	2	11	107.6	0	16809.28
091000060	Mitchell County GIS Development	Develop a GIS inventory of stormwater infrastructure	Mitchell		Other	913.24	Riverine, Local, Playa	Mitchell County	000147,09000149,00000170,00000172,09000173,00000261,00000272,00000278,00000284,00000295,00000445,0900	No	$100,000			344	206	628	2	11	107.6	0	16809.28

Table 12. Identified Flood Management Evaluations*

FME ID	FME Name	Description	County	Watersheds[A]	FME Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources	Potential Funding Amount	Estimated number of structures at 1% annual flood risk[B]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Number of low water crossings in project area at annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road segment closures (#)	Estimated farm & ranch land at 1% annual flood risk (acres)
091000061	Mitchell County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Mitchell		Watershed Planning	913.24	Riverine, Local, Playa	Mitchell County	000147,09000149,00000170,00000172,09000173,00000261,00000272,00000278,00000284,00000295,00000445,09000	No	$500,000			344	206	628	2	11	107.6	0	16809.28
091000062	Nolan County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Nolan		Watershed Planning	910.70	Riverine, Local, Playa	Nolan County	000147,00000168,00000170,00000172,00000261,00000278,00000284,00000295,09000499,09	No	$500,000			90	16	22	0	5	21.0	0	4147.819
091000063	Nolan County FEMA Mapping	Update existing FEMA Mapping	Nolan		Watershed Planning	910.70	Riverine, Local, Playa	Nolan County	000147,00000168,00000170,00000172,00000261,00000278,00000284,00000295,09000499,09	No	$924,000			90	16	22	0	5	21.0	0	4147.819
091000064	Nolan County GIS Development	Develop a GIS inventory of stormwater infrastructure	Nolan		Other	910.70	Riverine, Local, Playa	Nolan County	000147,00000168,00000170,00000172,00000261,00000278,00000284,00000295,09000499,09	No	$100,000			90	16	22	0	5	21.0	0	4147.819
091000065	Nolan County Buyout Program Study	Proposed evaluation of potential buyout project for repetitive loss properties in Nolan County.	Nolan		Project Planning	910.70	Riverine, Local, Playa	Nolan County	000147,00000168,00000170,00000172,00000261,00000278,00000284,00000295,09000499,09	No	$100,000			90	16	22	0	5	21.0	0	4147.819
091000066	Reagan County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Reagan		Watershed Planning	1170.90	Riverine, Local	Reagan County	00000126	No	$500,000			161	79	167	0	2	38.9	0	15439.37
091000067	Reagan County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Reagan		Watershed Planning	1170.90	Riverine, Local	Reagan County	00000126	No	$998,000			161	79	167	0	2	38.9	0	15439.37
091000068	Reagan County GIS Development	Develop a GIS inventory of stormwater infrastructure	Reagan		Other	1170.90	Riverine, Local	Reagan County	00000126	No	$100,000			161	79	167	0	2	38.9	0	15439.37
091000069	Runnels County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Runnels		Watershed Planning	1051.79	Riverine, Local	Runnels County	00000145	No	$500,000			164	41	179	1	18	124.7	0	39553.13
091000070	Runnels County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Runnels		Watershed Planning	1051.79	Riverine, Local	Runnels County	00000145	No	$1,047,000			164	41	179	1	18	124.7	0	39553.13
091000071	Runnels County GIS Development	Develop a GIS inventory of stormwater infrastructure	Runnels		Other	1051.79	Riverine, Local	Runnels County	00000145	No	$100,000			164	41	179	1	18	124.7	0	39553.13
091000072	San Angelo Goodfellow Draw Low Water Crossing Improveme	Proposed 10'x5' Box culverts beneath Era Street and Evelyn avenue and channel improvements in Goodfellow Draw to allow passage of the 25-year storm. In existing conditions, there are no culverts present (2 LWCs).	Tom Green		Project Planning	0.01	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$1,813,953			16	16	53	0	1	0.2	0	0
091000073	San Angelo Lester Lane Culvert Improvement Project	Replace existing 24"x36" CMP arch pipe under Tres Rios Drive with 5'x3' concrete box culvert.	Tom Green		Project Planning	0.01	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$195,277			0	0	0	0	0	0.0	0	0
091000074	San Angelo LWC 3	Low water crossing, street flooding. College Hills Blvd and Sunset Dr	Tom Green		Project Planning	0.02		San Angelo	09000131,00000261,00000284,09003257	Yes	$6,541,000			0	0	0	0	0	0.0	0	0
091000075	San Angelo Street Flooding 11	Upgrade, improve, and expand drainage systems throughout the city. Implementation of sediment and scour control measures.	Tom Green		Project Planning	61.91	Riverine, Local	San Angelo	000068,00000124,09000131,00000145,00000261,00000278,00000284,09000496,09000497,09000539,09000775,0900	Yes	$25,000			2587	1821	8034	6	27	93.6	0	558.4952
091000076	San Angelo Street Flooding 12	Excessive street flow, street flooding Amarillo St at 39th, Goliad	Tom Green		Project Planning	0.02	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$25,000			4	4	11	0	0	0.1	0	0
091000077	San Angelo Street Flooding 13	Heavy street flow. 23rd at Armstrong	Tom Green		Project Planning	61.91	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$25,000			2587	1821	8034	6	27	93.6	0	558.4952
091000078	San Angelo Street Flooding 14	Heavy street flow, street flooding. Robin Hood at Amistad	Tom Green		Project Planning	0.01	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$25,000			0	0	0	0	0	0.2	0	0.061551
091000079	San Angelo Street Flooding 15	Low water crossing, street flooding. Foster St. South of loop 306	Tom Green		Project Planning	0.01		San Angelo	09000131,00000261,00000284,09003257	Yes	$3,500,000			0	0	0	0	0	0.0	0	0
091000080	San Angelo Street Flooding 16	Low water crossing, street flooding. Red Bluff Rd. at Lincoln Park Rd	Tom Green		Project Planning	0.00	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$25,000			1	1	0	0	0	0.0	0	0
091000081	San Angelo Street Flooding 17	Unclear on issue. Christoval at Chadburne	Tom Green		Project Planning	0.01		San Angelo	09000131,00000261,00000284,09003257	Yes	$25,000			0	0	0	0	0	0.0	0	0
091000082	San Angelo Street Flooding 3	Street flow south of Oxford enters Red Arroyo, 3-4' deep in street	Tom Green		Project Planning	0.12	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$6,645,000			12	1	81	0	2	1.8	0	0.664265
091000083	San Angelo Sul Ross Avenue and Lindenwood Drive Culvert In	Proposed 9'x8' box culvert running underground along Sul Ross Avenue from Loop 306 to Lindenwood Drive, then along Lindenwood Drive to downstream storage. Excessive street flow, street flooding Sul Ross St. at Sunset Dr.	Tom Green		Project Planning	0.07	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$1,037,911			4	4	52	0	1	0.6	0	0
091000084	San Angelo Sulper Draw Park Drainage Improvements	Low water crossing, street flooding. Monroe at Sulfur Draw Park. Excessive street flow, street flooding. Taylor St at Conchita St. Heavy street flow. Madison St. between Ave J to Algerita. Heavy street flow. Beauregard Ave (Campus to N Concho River)	Tom Green		Project Planning	0.46		San Angelo	09000131,00000261,00000284,09003257	No	$532,640			96	94	0	0	0	0.0	0	0
091000085	San Angelo Sunset Lake Flooding Improvement	Evaluate the increase in flood water surface. Analyize the flood pool level for Sunset Lake. Review the outlet structures, over flow points, and the excessive 70,000 cu yds of requireded dredging. Restore or improve lake levels to FEMA FIS studies.	Tom Green		Project Planning	0.29		San Angelo	09000131,00000261,00000284,09003257	Yes	$100,000			7	0	0	0	1	0.0	0	0
091000086	Schleicher County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Schleicher		Watershed Planning	1308.80	Riverine, Local	Schleicher County	00000051	No	$500,000			99	40	186	0	2	16.6	0	1263.946
091000087	Schleicher County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Schleicher		Watershed Planning	1308.80	Riverine, Local	Schleicher County	00000051	No	$1,207,000			99	40	186	0	2	16.6	0	1263.946
091000088	Schleicher County GIS Development	Develop a GIS inventory of stormwater infrastructure	Schleicher		Other	1308.80	Riverine, Local	Schleicher County	00000051	No	$100,000			99	40	186	0	2	16.6	0	1263.946
091000089	Scurry County FEMA Mapping	Update existing FEMA Mapping	Scurry		Watershed Planning	906.45	Riverine, Local, Playa	Scurry County	000170,00000172,00000183,00000272,00000275,00000278,09000288,00000295,00000445,09	No	$903,000			606	324	1486	1	10	75.9	0	11744.7
091000090	Scurry County GIS Development	Develop a GIS inventory of stormwater infrastructure	Scurry		Other	906.45	Riverine, Local, Playa	Scurry County	000170,00000172,00000183,00000272,00000275,00000278,09000288,00000295,00000445,09	No	$100,000			606	324	1486	1	10	75.9	0	11744.7
091000091	Scurry County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Scurry		Watershed Planning	906.45	Riverine, Local, Playa	Scurry County	000170,00000172,00000183,00000272,00000275,00000278,09000288,00000295,00000445,09	No	$25,000			606	324	1486	1	10	75.9	0	11744.7
091000092	Scurry County USACE Flood Study	Comprehensive study of flood risk and reduction alternatives, with the assistance of the USACE.	Scurry		Watershed Planning	8.32	Riverine, Local, Playa	Scurry County	00000116,00000278,09000288,09003309	No	$2,000,000			445	266	1365	1	3	20.6	0	70.46579
091000093	Sterling County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Sterling		Watershed Planning	919.22	Riverine, Local, Playa	Sterling County	09000149	No	$500,000			179	97	172	0	7	29.7	0	2289.666
091000094	Sterling County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Sterling		Watershed Planning	919.22	Riverine, Local, Playa	Sterling County	09000149	No	$897,000			179	97	172	0	7	29.7	0	2289.666
091000095	Sterling County GIS Development	Develop a GIS inventory of stormwater infrastructure	Sterling		Other	919.22	Riverine, Local, Playa	Sterling County	09000149	No	$100,000			179	97	172	0	7	29.7	0	2289.666
091000096	Taylor County GIS Development	Develop a GIS inventory of stormwater infrastructure	Taylor		Other	915.61	Riverine, Local	Taylor County	000168,00000170,00000278,00000284,00000295,00000307	No	$100,000			70	51	46	0	10	17.8	0	3752.044

Table 12. Identified Flood Management Evaluations*

FME ID	FME Name	Description	County	Watersheds[A]	FME Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources	Potential Funding Amount	Estimated number of structures at 1% annual flood risk[B]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Number of low water crossings in project area at annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road segment closures (#)	Estimated farm & ranch land at 1% annual flood risk (acres)
091000097	Taylor County Dam Inspection Program	Annual dam inspection, partner with SWCD to help fund repairs and maintenance, partner with property owners to report new damage or erosion, and patrol for illegal dumping at dams.	Taylor		Other	915.61	Riverine, Local	Taylor County	00000144,00000145,00000168,00000170,00000278,00000284,00000295,00000307	No	$100,000			70	51	46	0	10	17.8	0	3752.044
091000098	Taylor County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Taylor		Watershed Planning	915.62	Riverine, Local	Taylor County	000170,00000278,00000284,00000295,00000307	No	$500,000			70	51	46	0	10	17.8	0	3752.044
091000099	Taylor County FEMA Mapping	Update Existing FEMA Mapping	Taylor		Watershed Planning	915.61	Riverine, Local	Taylor County	00000168	No	$955,000			70	51	46	0	10	17.8	0	3752.044
091000100	Taylor County Repetitive Loss Properties Study	Proposed evaluation of potential mitigation project for repetitive loss properties in Taylor County.	Taylor		Project Planning	915.62	Riverine, Local	Taylor County	000170,00000278,00000284,00000295,00000307	No	$100,000			70	51	46	0	10	17.8	0	3752.044
091000101	Taylor County USACE Comprehensive Flood Risk Study	Undertake a comprehensive study of flood risk and reduction alternatives, with the assistance of the US Army Corps of Engineering. Implement feasible alternative for flood reduction. Revise flood damage prevention ordinance to include flood risk areas ide	Taylor		Watershed Planning	915.62	Riverine, Local	Taylor County	00000145,00000168,00000170,00000278,00000284,00000295,00000307	No	$2,000,000			70	51	46	0	10	17.8	0	3752.044
091000102	Terry County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Terry		Watershed Planning	887.75	Riverine, Local	Terry County	000184,00000186,00000187,00000205,09000206,00000272,00000275,00000295,00000308,09001828,09003111,09000	No	$500,000			499	183	1118	0	6	633.7	0	89576.49
091000103	Terry County FEMA Mapping	Update existing FEMA Mapping & create FEMA mapping in previously unmapped areas	Terry		Watershed Planning	887.75	Riverine, Local	Terry County	000184,00000186,00000187,00000205,09000206,00000272,00000275,00000295,00000308,09001828,09003111,09000	No	$1,011,000			499	183	1118	0	6	633.7	0	89576.49
091000104	Terry County GIS Development	Develop a GIS inventory of stormwater infrastructure	Terry		Other	887.75	Riverine, Local	Terry County	000184,00000186,00000187,00000205,09000206,00000272,00000275,00000295,00000308,09001828,09003111,09000	No	$100,000			499	183	1118	0	6	633.7	0	89576.49
091000105	Tom Green County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Tom Green		Watershed Planning	1533.92	Riverine, Local	Tom Green County	09000131	No	$500,000			5166	3373	9987	7	47	253.5	0	48794.72
091000106	Tom Green County FEMA Mapping	Update Existing FEMA Mapping	Tom Green		Watershed Planning	1533.92	Riverine, Local	Tom Green County	000068,00000124,09000131,00000145,00000261,00000278,00000284,09000496,09000497,09000539,09000775,09000	No	$1,457,000			5164	3371	9987	7	46	252.8	0	48639.63
091000107	Tom Green County GIS Development	Develop a GIS inventory of stormwater infrastructure	Tom Green		Other	1533.92	Riverine, Local	Tom Green County	09000131	No	$100,000			5166	3373	9987	7	47	253.5	0	48794.72
091000108	Town of Ballinger DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Runnels		Watershed Planning	3.40	Riverine, Local	Ballinger	00000145,00000278,00000284,09002451	No	$250,000			13	7	127	1	0	14.9	0	122.5136
091000109	Town of Loraine Drainway Project Planning	Identify scope of drainways project to remove soil caused by runoff in roadside ditches. Evaluate and study size and number of culverts to minimize drainage projects.	Mitchell		Watershed Planning	1.04	Riverine, Local, Playa	Loraine	00000172,00000278,09003448	No	$25,000			9	7	6	0	0	5.4	0	1.730034
091000110	Upper Colorado Warning System Outreach and Study	Basin-wide Study Program: Improve on Warning signs, lights, or systems.	Taylor,Nolan,Mitchell,Howard,Martin,A		Other	21171.46	Riverine, Local, Playa	Upper Colorado River Authority	000052,09000068,00000102,00000115,00000116,00000117,09000118,00000124,00000126,00000127,09000131,00000144,00000145,09000147,09000149,09000150,00000151,00000152,00000154,00000168,0000	No	$100,000			36361	23637	81195	56	255	4338.4	0	719343.1
091000111	Upton County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Upton		Watershed Planning	1235.94	Riverine, Local	Upton County	00000127	No	$500,000			41	16	23	0	1	34.1	0	6457.232
091000112	Upton County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Upton		Watershed Planning	1235.94	Riverine, Local	Upton County	00000127	No	$1,080,000			41	16	23	0	1	34.1	0	6457.232
091000113	Upton County GIS Development	Develop a GIS inventory of stormwater infrastructure	Upton		Other	1235.94	Riverine, Local	Upton County	00000127	No	$100,000			41	16	23	0	1	34.1	0	6457.232
091000114	Yoakum County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Yoakum		Watershed Planning	797.70	Riverine, Local	Yoakum County	000187,00000205,00900206,00000272,00000275,09001828,09002479,	No	$500,000			543	263	776	0	2	292.3	0	65855.14
091000115	Yoakum County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Yoakum		Watershed Planning	797.70	Riverine, Local	Yoakum County	09000206	No	$717,000			543	263	776	0	2	292.3	0	65855.14
091000116	Butler Farms Bridge	Provide access to Butler Farms subdivision through construction of a bridge structure on Foster Road as well as construction of a secondary access to the subdivision	Tom Green		Other	1.93	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	No	$25,000			24	8	0	0	0	0.0	0	4.655433
091000117	Southwest Blvd Channel Widening	Widen channel from just upstream of Loop 306 to just downstream of Southwest Blvd. Install a 300 flood bridge with high chord of 1888msl. Install storm drain line in Southwest Blvd.	Tom Green		Other	0.03	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	No	$25,000			7	0	0	0	1	0.0	0	0
091000124	MI4F Playa Detention	The project consists of elevating the outlet elevation from approximately 2843 to 2847 by constructing a berm embankment approximately 600 feet in length. The project also includes one (1) 6' x 4' RCBC outlet pipe. The outlet will extend approximately 2,*	Midland		Project Planning	75.31	Riverine	Midland	09002838	No	$25,000			0	0	0	0	0	0.0	0	0
091000125	North Fork Red Arroyo Detention	8 ac and 12 ac regional detention basins	Tom Green		Other	0.03	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	No	$25,000			0	0	0	0	0	0.0	0	1.086192
091000126	Pecan and 3rd Sreet	2.1 ac regional detention. intersection and downstream channel improvements	Tom Green		Other	0.00	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	No	$25,000			0	0	0	0	0	0.0	0	0
091000127	Spaulding St Storm Drain	Raise Spaulding St. at East Angelo Draw by 5.4 feet and install (4) 9 x 8' box culverts under Spaulding; raise Bell St. at East Angelo Draw by 2.4 feet and install (4) 9 x8' culverts.	Tom Green		Other	61.91	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	No	$25,000			2587	1821	0	6	27	0.0	0	558.4952
091000128	City of San Angelo 400 Block of E. 14th St. Buyout	This area floods homes during heavy rainfall. Demo existing building and convert to park area.	Tom Green		Other	0.00	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	No	$150,000			0	0	0	0	0	0.0	0	0
091000129	Midland Draw Channel Improvements	The proposed channel has a 250-foot top width for the entire length of the reach. There are three existing crossings, two to remain, one to be expanded, and one new crossing. The first crossing, at Loop 349, is to remain. The second crossing, at the futu*	Midland		Project Planning	0.76	Riverine, Local	Midland County	00000151,00000272	No	$845,000			37	36	138	0	1	1.9	0	4.6
091000130	City of Odessa Flood Early Warning System	Install a flood early warning system along flood prone waterways for the City of Odessa.	Midland, Ector		Preparedness	255.90	Riverine	Odessa	09002836	No	$100,000			18125	14107	42321	21	49	104.0	49	0
091000131	Mitchell County Flood Early Warning System	Install a flood early warning system along flood-prone waterways in unincorporated areas of the county.	Mitchell		Preparedness	913.24	Riverine, Other	Mitchell County	00000172	No	$100,000			1497	1047	3141	2	26	48.0	26	0
091000132	Irion County Flood Early Warning System	Install a flood early warning system along flood-prone waterways in unincorporated areas of the county.	Irion		Preparedness	1047.46	Riverine	Irion County	09000068	No	$100,000			359	104	312	0	23	50.0	23	0
091000133	City of Snyder Flood Early Warning System	Install a flood early warning system along flood prone waterways for the City of Snyder.	Scurry		Preparedness	81.44	Riverine	Snyder	09003309	No	$100,000			518	301	903	1	2	13.0	2	0

Table 12. Identified Flood Management Evaluations*

FME ID	FME Name	Description	County	Watersheds[A]	FME Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources	Potential Funding Amount	Estimated number of structures at 1% annual flood risk[B]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Number of low water crossings in project area at annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road segment closures (#)	Estimated farm & ranch land at 1% annual flood risk (acres)
091000134	City of Big Spring Flood Early Warning System	Install a flood early warning system along flood prone waterways for the City of Big Spring.	Howard		Preparedness	92.07	Riverine	Howard County	09003421	No	$100,000			1121	636	1908	6	22	26.0	22	0
091000135	City of San Angelo Flood Early Warning System	Install a flood early warning system along flood prone waterways for the City of San Angelo.	Tom Green		Preparedness	178.93	Riverine	San Angelo	09003257	No	$100,000			5863	368	1104	7	45	46.0	45	0
091000136	City of Midland Flood Early Warning System	Install a flood early warning system along flood prone waterways for the City of Midland.	Midland		Preparedness	291.13	Riverine	Midland	09002838	No	$100,000			12071	8944	26832	23	43	97.0	43	0
091000137	Midland Industrial Channel	Channel improvements are planned for the Industrial Channel beginning at the channel's confluence with Midland Draw just south of U.S. Highway 80 (Business 20) at Station 0+00 and ending at a point just downstream of Lamesa Road at Station 87+56. Maintena	Midland		Project Planning	9.78	Riverine, Local	Midland	00000151,00000272	No	$122,000	Midland Storr	122000	5984	4126	8713	9	0	37.8	0	99.8
091000138	Southwest_Andrews_Playa	Proposed excavation in playa located South of FM 1910 and East of new SW Mustang Dr. Approximate 183,000 cu-yd. of removed earth material. Project aims to maintain existing floodplain to account for anticipated development.	Andrews		Project Planning	0.78	Riverine, Local	Andrews	9000102	No	$84,000	Stormwater Fe	84000	14	0	26	0	0	0.4	0	3.045436
091000139	Northwest_Andrews_Playa	Proposed excavation in playa located South of Taylor and West of new 5th Street (FM301). Approximate 53,000 cu.yd. of removed earth material. Project aims to maintain existing floodplain to account for anticipated development.	Andrews		Project Planning	2.35	Riverine, Local	Andrews	09000102	No	$84,000	Stormwater Fe	84000	15	13	7	0	0	1.5	0	3.189626
091000140	Sulphur_Springs_Draw_Dam	Perform a watershed-wide evaluation of the dams to assess flood protection performance for the 100-year and 500-year events, develop breach analyses mapping and assess hazard classification, develop risk indices, and evaluate dam safety performance.	Yoakum,Terry,Gaines,Dawson,Borden,I		Watershed Planning	1877.35	Riverine, Local	Colorado River MWD	09000288	No	$14,500			603	80	383	0	0	925.4	0	138578.3
091000141	Milldde Colorado Elm Dams	Perform a watershed-wide evaluation of the dams to assess flood protection performance for the 100-year and 500-year events, develop breach analyses mapping and assess hazard classification, develop risk indices, and evaluate dam safety performance.	Nolan,Taylor,Runnels,Coke,Tom Green,		Watershed Planning	1152.66	Riverine, Local	Valley Creek Water Control District	09000852	No	$193,700			253	100	117	1	3	128.0	3	33103.29
091000142	I20_Playa_to_Pit	Ridgewood Outfall: Outfall Pipe from Retention basin to playa south of Business 20; OIME Outfall: Pipe to connect playa, caliche pit to I-20; Faudree South Outfall: Need to acquire caliche pit in the center	Ector,Midland		Project Planning	47.39	Riverine, Local	Midland County	09000151	No	$25,000	Midland Coun	50000	1782	1229	2550	3	0	75.9	0	22.5163
091000143	Colorado_Headwaters_Dams	Perform a watershed-wide evaluation of the dams to assess flood protection performance for the 100-year and 500-year events, develop breach analyses mapping and assess hazard classification, develop risk indices, and evaluate dam safety performance.	Terry,Lynn,Garza,Borden,Scurry,Nolan,I		Watershed Planning	2912.38	Riverine, Local, Playa	Colorado River MWD	09000288	No	$110,600			1587	770	1567	2	5	880.1	5	109763.1
091000144	South Concho Dam	Perform a watershed-wide evaluation of the dams to assess flood protection performance for the 100-year and 500-year events, develop breach analyses mapping and assess hazard classification, develop risk indices, and evaluate dam safety performance.	Irion,Tom Green,Crockett,Schleicher		Watershed Planning	1330.86	Riverine, Local	San Angelo	09003257	No	$49,500			2071	1048	1872	0	2	121.6	2	7608.985
091000145	Upper Colorado Dams	Perform a watershed-wide evaluation of the dams to assess flood protection performance for the 100-year and 500-year events, develop breach analyses mapping and assess hazard classification, develop risk indices, and evaluate dam safety performance.	Mitchell,Nolan,Sterling,Coke,Runnels		Watershed Planning	1373.41	Riverine, Local, Playa	Colorado River MWD	09000288	No	$88,800			311	108	139	0	1	64.2	1	12129.95
091000146	I20_Drainage_System	G: Some excavation/ fill reshaping completed. County needs to acquire a downstream easement; H: Acquire easement from cotton field to an existing caliche pit, Cotton field, and easement and construct minor channel; I: enlarge or deepen Lower South Draw	Midland		Project Planning	32.54	Riverine, Local	Midland County	09000151	No	$25,000	Midland Coun	50000	1273	589	2556	3	0	60.0	0	241.733
091000147	Midland County Panel A Project	Proposed channel improvements, retention basins near Avalon Drive.	Midland		Project Planning	9.03	Riverine, Local	Midland County	09000151	No	$25,000	Midland Coun	50000	90	13	35	0	0	4.4	0	1.80685
091000148	Mineral Wells Road - South Concho River Crossing	New bridge crossing South Concho River	Tom Green		Project Planning	0.01	Riverine	Tom Green County	09000131	No	$250,000			0	0	0	0	1	0.1	0	0
091000149	North Concho River - Post Oak Crossing	Raise road level and install 4 culvert pipes	Tom Green		Project Planning	0.00	Riverine	Tom Green County	09000131	No	$250,000			0	0	0	0	1	0.2	0	0
091000150	City of Lamesa GIS Development	Develop a GIS inventory of stormwater infrastructure	Dawson		Other	4.72	Riverine	Lamesa	09003125	No	$100,000			185	0	551	0	6	11.9	0	82.95412
091000151	Ector County Monahan's Draw Study	Perform a flood study for Monahan's Draw to develop potential flood mitigation solutions	Ector		Project Planning	4.47	Riverine	Ector County	00000152	No	$250,000										
091000152	City of Mertzon FEMA Mapping	Update existing FEMA Mapping	Irion		Watershed Planning	1.57	Riverine	Mertzon	09002400	No	$150,000										

** This summary table is only applicable for the Technical Memorandum midpoint deliverable and shall include all identified potential flood management evaluations.*

[A] Leave blank if too many for text field length (254 characters)

[B] Should not include power generating structures

Table 13. Identified Potentially Feasible Flood Mitigation Projects*

FMP ID	FMP Name	Description	Associated Goals (ID)	County	Watersheds*	FMP Type	FMP Area (sqmi)	Flood Risk Type (Riverine, Coastal, Urban, Playa, Other)	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Project Cost ($)	Area in 1% annual chance Floodplain	Area in 0.2% annual chance Floodplain	Estimated number of structures at 100yr flood risk*	Residential structures at 1% annual flood risk*	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Emergency Facilities in 1% annual flood risk (#)*	Number of low water crossing in project areas at 1% annual flood risk (#)	Estimated length of roads at 1% annual flood risk (Miles)	Estimated number of road closures (#)	Estimated farm & ranch land at 1% annual flood risk (acres)*	Number of structures removed from 1% annual flood risk*	Number of structures removed from 0.2% annual flood risk*	Residential structures removed from 1% annual flood risk	Estimated Population removed from 1% annual flood risk	Critical facilities removed from 1% annual flood risk (#)	Emergency Facilities Removed in 1% annual flood risk (#)*	Number of low water crossings removed in project area from 1% annual flood risk (#)	Estimated length of roads removed from 1% annual flood risk (Miles)	Estimated reduction in road closure occurrences	Estimated farm & ranch land removed from 1% annual flood risk (acres)*	Estimated reduction in fatalities (if available)	Estimated reduction in injuries (if available)	Pre-Project Level-of-Service	Post-Project level-of-Service	Percent Nature-based Solution (by cost)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Texas Flood SVI	Water Supply Benefit (Y/N)	Benefit-Cost Ratio
093000005	Avenue P Detention	Construct additional 8 x 8 box culverts downstream of Bryant Blvd continuing along Avenue P downstream to Chadbourne St	09000004	Tom Green		Other	0.100746		Tom Green County	09000131,00000261,00000284,09003257	No	2388000	0.007421	0.007052	29	1	61	0	0	0	1.539792	0	64.47514	1	1	2	1	16	0	0	0	0	16.11878			Unknown	Unknown	25	No		0.6	No	0.1
093000007	Playa M4F	The project consists of elevating the outlet elevation from approximately 2843 to 2847 by constructing a berm embankment, approximately 600 feet in length. The project also includes one (1) 6' x 4' RCBC outlet pipe. The outlet will extend approximately 2,	09000004	Midland		Detention Po	2.67537	Riverine, Local	Midland	00000151,00000272	No	1540000	1.13	<Null>	0	0	0	0	0	0	0	0	0.988971	0	0	0	0	0	0	0	0	0	0			50-year LOS	100-year LOS	8	No		0.2623	No	4.8
093000008	Jal Draw, Proj. A	The proposed channel has a 250-foot top width for the entire length of the reach. The existing upstream crossings at Loop 349 and County Road 60 are to remain. There are two proposed crossings. The Loop 349 Backage Road crossing is proposed to be sixteen*	09000004	Midland		Channel	0.152009	Riverine	Midland	00000151,00000272	No	11481000	0.2856	0.5401	1	1	2	0	0	1	0.071	1	0	1	1	1	1	2	0	1	6	1	0			50-year LOS	100-year LOS	10	No		0.3662	No	0.1
093000009	Jal Draw, Proj. B	The proposed channel has a 250-foot top width for the entire length of the reach. There is one proposed crossing at the future extension of Mockingbird Lane. This crossing is proposed to be fourteen 10' x 6' RCB.	09000004	Midland		Channel	0.202295	Riverine	Midland	00000151,00000272	No	11047000	0.3694	0.5346	54	24	40	0	0	0	4.75	0	0	54	54	33	34	40	0	0	4	0	0			5-year LOS	100-year LOS	10	No		0.3662	No	0.3
093000010	Jal Draw, Proj. C	The proposed channel has a 250-foot top width for the entire length of the reach. There are two proposed crossings. The pipeline bank crossing is proposed to be fourteen (14) 10' x 6' RCBC's. The CR 1250 crossing is proposed to be fourteen (14) 30" x 6 *	09000004	Midland		Channel	0.267023	Riverine	Midland	00000151,00000272	No	10365000	0.4229	0.5254	0	0	0	0	0	0	3.598	0	0	0	0	0	0	0	0	0	0	0	0			5-year LOS	100-year LOS	10	No		0.3662	No	0
093000011	Jal Draw, Proj. E	The proposed channel has a top width of 500-feet for much of the reach to match the existing top width. There are two existing crossings, one at Crowley Road and the other at Holiday Hill Road. FNI recommends that both crossings remain.	09000004	Midland		Channel	0.129892	Riverine	Midland	00000151,00000272,09002838	No	3779000	0.2321	0.1207	0	0	0	0	0	2	1.91	2	31.59	0	0	0	0	0	0	0	1	0	12.64			5-year LOS	100-year LOS	10	No		0.2623	No	0
093000013	Northwest Andrews Playa Lake Excavation	Proposed Excavation in playa located south of Taylor and west of new 5th Street (FM301). Approximate 53,000 cu.-yd. of removed earth material.	09000003, 09000004	Andrews		Other	1.865861	Riverine, Local	Andrews	00000102,00000272, 00000272, 09000302,	No	840000	0.232436	0.075634	2	13	24	0	0	0	1.08	0	1.2	0	0	0	0	0	0	0	0	0	0			Unknown	Unknown	0	No		0.25	No	3.9
093000015	Midland Draw, Project A	The proposed channel has a 250-foot top width for the entire length of the reach. There are three existing crossings, two to remain, one to be expanded, and one new crossing. The first crossing, at Loop 349, is to remain. The second crossing, at the fute*	09000004	Midland		Channel	0.1882253	Riverine	Midland	00000151,00000272	No	11592000	0.356	0.5288	0	0	0	0	0	2	14.473	2	0	0	0	0	0	0	0	1	14	2	0			25-year LOS	100-year LOS	10	No		0.2623	No	0.3
093000016	Midland Draw, Project B	The proposed channel has a 250-foot top width for the entire length of the reach. There is one proposed crossing. The Midland Drive crossing is proposed to be twelve (12) 10' x 4' RCBC's.	09000004	Midland		Channel	0.120445	Riverine	Midland	00000151,00000272,09002838	No	9045000	0.3479	0.5046	12	12	36	0	0	0	5.463	0	0.98	12	12	85	12	36	0	0	5	0	0			5-year LOS	100-year LOS	10	No		0.2623	No	0.1
093000017	Midland Draw, Project C	The proposed channel has a 250-foot top width for the entire length of the reach. There are two proposed crossings within the reach. The first is at a City of Midland 30" raw water line crossing, which is proposed to be twelve (12) 10' x 5' RCBC's. The s*	09000004	Midland		Channel	0.132727	Riverine	Midland	00000151,00000272,09002838	No	13676000	0.1956	0.2689	0	0	0	0	0	0	5.128	0	37	0	0	0	0	0	0	0	5	0	25.13			100-year LOS	100-year LOS	10	No		0.2623	No	0
093000018	Midland Draw, Project D	The proposed channel has a 300-foot top width. There are three proposed crossings. The first crossing, at Midkiff Road, is proposed to be twelve (12) 10' x 6' RCBC's. The second crossing, at Mayfield Plaze, is proposed to be twelve (12) 10' x 6' RCBC's. *	09000004	Midland		Channel	0.080171	Riverine	Midland	00000151,00000272,09002838	No	28762000	0.1444	0.3841	0	0	0	0	0	0	3.323	0	0	0	0	0	0	0	0	0	3	0	0			100-year LOS	100-year LOS	10	No		0.2623	No	0
093000019	Midland Draw, Project E	The proposed channel has a 300-foot top width for the entire reach. There are three proposed crossings, one is an existing crossing to be expanded. The first crossing, at a pipeline bank west of Garfield Street, is currently one (1) 10' x 5' RCBC and is*	09000004	Midland		Channel	0.113635	Riverine	Midland	00000151,00000272,09002838	No	13600000	0.1549	0.3608	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0			5-year LOS	100-year LOS	10	No		0.2623	No	0
093000020	Midland Draw, Project F	This reach is the downstream terminus of the proposed channel, with a top width of 400ft. The improved channel alignment is shown as a potential drainage buffer area between the polo ground and existing and proposed developments.	09000004	Midland		Channel	0.137114	Riverine	Midland	00000151,00000272,09002838	No	5883000	0.1933	0.3628	0	0	0	0	0	0	6.071	0	0	8	8	0	0	0	0	0	5	0	0			50-year LOS	100-year LOS	10	No		0.3071	No	0
093000022	Industrial Channel Project A	Channel improvements are planned for the Industrial Channel beginning at the channel's confluence with Midland Draw just south of U.S. Highway 80 (Business 20) at Station 0+00. The first reach of improvements extend upstream to the eastern edge of an ex*	09000004	Midland		Other	0.068805		Midland County	00000151,00000272	No	1120000	0.052106	0.007901	242	0	27	0	0	0	4.093221	0	45.08571	1	1	1	1	7	0	0	1	0	11.27143			Unknown	Unknown	25	No		1.8	No	1.1
093000031	Cauley Lane Regional Detention	The proposed project includes a 2,350 ft drainage channel with berms that diverts flow to a 34-ac regional detention pond that acts as a playa.	09000004	Tom Green		Other	0.041264	Riverine, Playa	Tom Green County	09000131,00000261,00000284,09003257	No	9851000	0.009764	0	143	2	234	0	0	0	0.881946	0	25.75146	143	143	143	143	234	1	2	3	0	0			Unknown	1% Annual Chance	0	No		0.25	No	0.9
093000035	Bradford Datention	The proposed project includes a 500-ft long drainage channel and culvert crossing that diverts runoff into a 7-ac regional detention pond that will be pumped to send flow to the East Angelo Draw.	09000004	Tom Green		Channel	0.017944	Local	Tom Green County	09000131,00000261,00000284,09003257	No	5528000	0.001144	0	760	0	1378	0	0	0	0.256554	0	1.868175	26	26	26	26	1	0	0	0	0	0			Unknown	1% Annual Chance	0	No		0.25	No	0.6
093000038	24th and Poe	The proposed project includes roadway widening improvements graded divert runoff into an existing drainage channel that will also be widened.	09000006	Tom Green		Other	0.012168	Local	Tom Green County	09000131,00000261,00000284,09003257	No	3075000	0.005585	0.000135	163	0	400	0	0	0	0.659281	0	4.846851	8	8	8	8	10	0	0	0	0	0			Unknown	1% Annual Chance	0	No		0.25	No	0.2
093000104	City of Andrews Southwest Andrews Playa Excavation	Proposed excavation in playa located South of FM 1930 and East of new SW Mustang Dr. Approximate 183,000 cu-yd. of removed earth material.	09000003, 09000004	Andrews		Channel	0.030186	Riverine, Local, Playa	Andrews	09000102	No	2914000	0.01489	0.008865	2	0	6	0	0	0	0.713858	0	19.44662	1	1	1	1	2	0	0	0	0	0	4.861654			Unknown	Unknown	25	No		0.25	No	0.6
093000105	Blackshear Drainage Improvements	The proposed project includes roadway widening improvements with taller curbs and valley gutters to divert flow into a proposed drainage channel.	09000006	Tom Green		Channel	0.073818	Local	San Angelo	09000131,00000261,00000284,09003257	No	6336216	0.038682	0.005318	163	19	1466	0	0	0	0.750741	0	0	26	26	26	26	69	0	0	0	0	0			Unknown	1% Annual Chance	0	No		0.9443	No	0.6
093000106	East Angelo Draw Drainage Improvements	The proposed project includes channel improvements spanning 0.6 miles and culvert capacity increase along two major channel crossings.	09000004	Tom Green		Channel	0.125676	Riverine	San Angelo	09000131,00000261,00000284,09003257	No	6926000	0.28	0.088947	118	23	123	0	0	4	2.979723	4	0	25	25	25	25	94	0	0	0	0	0			Unknown	1% Annual Chance	0	No		0.889	No	0.7

** This summary table is only applicable for the Technical Memorandum midpoint deliverable and shall include all identified potential flood mitigation projects.*

** Leave blank if too many for text field length (254 characters)*

** Should not include power-generating structures*

** For planning purposes, residential structures at flood risk will include residential buildings at flood risk that are greater than 500 square-feet unless the RFPGs have more specific information*

** Subset of critical facilities; provide the total number of EMS, Fire, Police, Medical and School structures*

** Estimated farm & ranch land at 100-year flood risk (acres) should only include farm and ranch land that are negatively impacted by flooding events and should not include land that benefits from floodplains for exemple rice fields.*

Table 14. Identified Potentially Feasible Flood Management Strategies

																Flood Risk								Reduction in Flood Risk														
FMS ID	FMS Name	Description	Associated Goals (ID)	County	Watershed Name	FMS Type	FMS Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Strategy Cost ($)	Non-recurring, Non-capital Cost ($)	Area in 1% annual Flood risk	Area in 0.2% annual Flood Risk	Estimated number of structures at 1% annual flood risk[3]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Emergency facilities at 1% annual flood risk (#)	Number of low water crossings in project area at 1% annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road closures (#)	Estimated active farm & ranch land at 1% annual flood risk (acres)[3]	Number of structures with reduced 1% annual Flood risk[4]	Number of structures removed from 1% annual Flood risk[4]	Number of structures removed from 0.2% annual Flood risk[4]	Residential structures removed from 1% annual Flood risk	Estimated Population removed from 1% annual Flood risk	Critical facilities removed from 1% annual Flood risk (#)	Number of low water crossings removed from 1% annual Flood risk (#)	Estimated length of roads removed from 1% annual flood risk (miles)	Estimated reduction in road closure occurrences	Estimated active farm & ranch land removed from 1% annual flood risk (acres)[3]	Estimated reduction in fatalities (if available)	Estimated reduction in injuries (if available)	Cost/ Structure removed	Percent Nature-based Solution (Y/N)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Water Supply Benefit (Y/N)
092000001	Andrews County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Andrews		Other	1495.2	Riverine, Local	Andrews County	00000102,09000118,00000151,00000152,00001154,09000174,00002772,09001828,09002972	No	$100,000	$75,000	210177.9	110.0	959	763	1463	0		3	173	0	7785.768	240	240	176	190	558	0	0	43	0	1946.4								No
092000002	Midland County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Midland		Other	898.3	Riverine, Local	Midland County	00000102,00000126,00000127,09000150,00000151,00000152,09000174,00002772,09000288,00000684,09000692,09001049,09002050,09002836,09002838	No	$100,000	$75,000	117458.3	59.3	8432	5663	23038	22		28	290	0	8189.256	2108	2108	1094	1415	9394	5	7	72	0	2047.3								No
092000003	Runnels County NFIP Application and compliance	Join the NFIP. Examine local flood ordinance to ensure minimum NFIP standards are included for program compliance and to consider possible higher regulatory standards.	09000011,09000017	Runnels		Other	1051.8	Riverine, Local	Runnels County	00000124,09000131,00000144,00000145,09000147,00000168,00000170,00002611,00002778,00002784,00003007,09000539,09002451,09003374,09003442	No	$30,000	$5,000	128515.8	35.3	164	41	178	0		18	125	0	39196.92	41	41	17	10	62	0	4	31	0	9799.2								No
092000004	Colorado City Ordinance Update SFHA regulation	permitting structures in the SFHA; Adopt no-rise in BFE	09000011	Mitchell		Other	5.3		Colorado City	00000172,00002778,09003443	No	$30,000	$5,000	500.9	0.2	143	93	353	2		1	10	0	37.86482	36	36	25	23	109	0	0	2	0	9.5								No
092000005	Colorado City Sediment Cleanout Program	cleaning debris from bridges, drains, and culverts.	09000004	Mitchell		Other	5.3		Colorado City	00000172,00002778,09003443	No	$25,000	$0	500.9	0.2	143	93	353	2		1	10	0	37.86482	36	36	25	23	109	0	0	2	0	9.5								No
092000006	Mitchell County DCM	Incorporate higher standards for hazard resistance in local application of the building code.	09000011	Mitchell		Other	913.2		Mitchell County	00000115,00000116,09000147,09000149,00000170,00000172,09001773,00002611,00002778,00002784,00003084,00000295,00000445,09003443,09003448,09003449	No	$100,000	$75,000	110277.9	29.2	344	206	737	2		11	108	0	16713.84	86	86	85	51	237	0	2	27	0	4178.5								No
092000007	Scurry County Ordinance Update SFHA	Increase freeboard requirements for structures in the SFHA; adopt a ""no-rise"" in BFE in the 100-year floodplain.	09000015	Scurry		Other	906.5		Scurry County	00000115,00000116,00000170,00000172,00001181,00002772,00002771,00002778,09000288,00000295,00003045,09003309	No	$100,000	$75,000	54305.2	14.1	606	324	1754	1		10	76	0	11692.57	152	152	30	81	537	0	2	19	0	2923.1								No
092000008	Mitchell County Flood Insurance Policy Program	Undertake an initiative to increase the number of flood insurance policies.	09000004	Mitchell		Other	913.2		Mitchell County	00000115,00000116,09000147,09000149,00000170,00000172,09001773,00002611,00002772,00002778,00002784,00003084,00000295,00000445,09003443,09003448,09003449	No	$30,000	$5,000	110277.9	29.2	344	206	737	2		11	108	0	16713.84	86	86	85	51	237	0	2	27	0	4178.5								No
092000009	Mitchell County Early Warning System	Purchase and install a flood early warning system along flood-prone waterways in unincorporated areas of the county.	09000006	Mitchell		Other	913.2		Borden County	00000115,00000116,09000147,09000149,00000170,00000172,09001773,00002611,00002772,00002778,00002784,00003084,00000295,00000445,09003443,09003448,09003449	No	$30,000	$5,000	110277.9	29.2	344	206	737	2		11	108	0	16713.84	86	86	85	51	237	0	2	27	0	4178.5								No
092000010	Scurry County Stormwater Channel Maintenance Program	Retain and maintain natural vegetation in stormwater channels	09000015	Scurry		Other	906.5		Scurry County	00000115,00000116,00000170,00000172,00001181,00002772,00002771,00002778,09000288,00000295,00003045,09003309	No	$30,000	$5,000	54305.2	14.1	606	324	1754	1		10	76	0	11692.57	152	152	30	81	537	0	2	19	0	2923.1								No
092000011	Town of Loraine NFIP Application	Join the NFIP.	09000011,09000017	Mitchell		Other	1.0		Mitchell County	00000172,00002778,09003448	No	$30,000	$5,000	105.9	0.1	9	7	6	0		0	5	0	1.215016	3	3	3	1	1	0	0	1	0	0.3								No
092000012	City of Blackwell NFIP Application	Join the NFIP.	09000011,09000017	Nolan,Coke		Other	0.6		Blackwell	09000147,09000170,09000261,09000278,09000499,09000852,09002581	No	$30,000	$5,000	23.0	0.0	2	3	14	0		0	0	0	0.000597	1	1	0	0	3	0	0	0	0	0.0								No
092000013	City of Westbrook NFIP Application	Join the NFIP	09000011,09000017	Mitchell		Other	0.4		Mitchell County	00000172,00002778,09003449	No	$30,000	$5,000	8.0	0.0	2	2	5	0		0	1	0	0.504985	1	1	0	0	1	0	0	0	0	0.1								No
092000014	Borden County NFIP Application	Application to join NFIP.	09000011,09000017	Borden		Other	903.0		Borden County	00000115,00000116,00000117,00000172,09001773,09001774,00001818,00001840,00002772,00002775,00002778,00000295,00000445	No	$30,000	$5,000	107897.0	29.4	69	9	20	0		2	26	0	10470.01	17	17	11	2	5	0	0	6	0	2617.5								No
092000015	Dawson County NFIP Application	Application to join NFIP	09000011,09000017	Dawson		Other	898.8		Dawson County	00000115,00000117,09000118,09000171,09001774,00000184,00000205,00002772,00002775,00000295,00003008,09002828,09002888,09003125,09003482,09003575	No	$30,000	$5,000	119189.1	57.1	474	9	710	0		9	538	0	76212.73	119	119	84	2	205	0	2	134	0	19053.2								No
092000016	Scurry County NFIP Application	Application to join NFIP	09000011,09000017	Scurry		Other	906.5		Scurry County	00000115,00000116,00000170,00000172,00001831,00002772,00002775,00002778,09000288,00000295,00003045,09003309	No	$30,000	$5,000	54305.2	14.1	606	324	1754	1		10	76	0	11692.57	152	152	30	81	537	0	2	19	0	2923.1								No
092000017	Borden County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Borden		Other	903.0		Borden County	00000115,00000116,00000117,00000172,09001773,09001774,00001818,00001840,00002772,00002775,00002778,00000295,00000445	No	$100,000	$75,000	107897.0	29.4	69	9	20	0		2	26	0	10470.01	18	18	11	2	5	0	0	6	0	2617.5								No
092000018	Andrews County NFIP Application	Application to join the NFIP.	09000011,09000017	Andrews		Other	1495.2		Andrews County	00000102,09000118,00000151,00000152,00001154,09000174,00002772,09001828,09002972	No	$30,000	$5,000	210177.9	110.0	959	763	1463	0		3	173	0	7785.768	240	240	176	190	558	0	0	43	0	1946.4								No
092000019	City of Ackerly NFIP Application	Application to join the NFIP.	09000011,09000017	Martin,Dawson		Other	0.3		Ackerly	00000117,09000174,00002772,09003575	No	$30,000	$5,000	12.7	0.0	2	2	2	0		0	2	0	0.291416	1	1	1	0	0	0	0	0	0	0.1								No
092000020	City of Andrews DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Andrews		Other	6.9		Andrews County	00000102,00002772,09002972	No	$100,000	$75,000	544.1	0.4	286	209	833	0		0	18	0	3.603397	72	72	105	52	312	0	0	4	0	0.9								No
092000021	City of Brownfield DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Terry		Other	6.5		Terry County	00000205,00000275,00000308,09003111	No	$100,000	$75,000	756.7	0.4	243	125	535	0		1	17	0	348.6923	61	61	51	31	212	0	0	4	0	87.2								No
092000022	City of Lamesa DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Dawson		Other	5.1		Lamesa	00000117,00002772,00003308,09003125	No	$100,000	$75,000	326.2	0.2	184	184	495	0		6	12	0	51.15264	46	46	45	46	132	0	1	3	0	12.8								No
092000023	City of Colorado City DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Mitchell		Other	5.3		Mitchell County	00000172,00002778,09003443	No	$100,000	$75,000	500.9	0.2	143	93	353	2		1	10	0	37.86482	36	36	25	23	109	0	0	2	0	9.5								No
092000024	City of Seminole DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Gaines		Other	3.8		Seminole	09000118,00002772,09001828,09003231	No	$100,000	$75,000	287.8	0.2	108	75	332	0		1	12	0	13.80502	27	27	36	18	118	0	0	3	0	3.5								No
092000025	City of Snyder DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Scurry		Other	8.9		Snyder	00000116,00000278,09002888,09003309	No	$100,000	$75,000	988.5	0.2	447	266	1634	1		3	21	0	60.07658	112	112	18	66	486	0	0	5	0	15.0								No
092000026	City of O'Donnell NFIP Application	Application to join the NFIP.	09000011,09000017	Lynn,Dawson		Other	0.9		O'Donnell	00000117,00000184,00000272,00000275,00000295,00003038,09003482	No	$30,000	$5,000	345.2	0.1	284	184	250	1		0	10	0	97.29911	71	71	17	46	97	0	0	2	0	24.3								No
092000027	City of Wellman NFIP Application	Application to join the NFIP.	09000011,09000017	Terry		Other	0.3		Wellman	00000205,00000275,09003112	No	$30,000	$5,000	3.8	0.0	9	9	99	0		0	0	0	0	3	3	0	2	24	0	0	0	0	0.0								No
092000028	Dawson County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Dawson		Other	898.8		Dawson County	00000115,00000117,09000118,09000171,09001774,00000184,00000205,00002772,00002775,00000295,00003008,09002828,09002888,09003125,09003482,09003575	No	$100,000	$75,000	119189.1	57.1	474	9	710	0		9	538	0	76212.73	119	119	84	2	205	0	2	134	0	19053.2								No
092000029	Gaines County NFIP Application	Application to join the NFIP.	09000011,09000017	Gaines		Other	1497.6		Gaines County	00000102,00000117,09000118,09000174,00000205,09000206,00002772,00002775,09002828,09002681,09003231	No	$30,000	$5,000	276508.7	132.6	1890	814	2679	1		5	434	0	145295.5	473	473	236	203	996	0	1	108	0	36323.9								No
092000030	Hockley County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Hockley		Other	906.7		Hockley County	00000184,00000186,00000187,00000205,09000206,00002775,00002951,00003038,09003169	No	$100,000	$75,000	9816.3	7.0	44	18	851	3		2	42	0	1350.755	11	11	11	4	216	0	0	10	0	337.7								No
092000031	Lynn County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Lynn		Other	890.2		Lynn County	00000115,00000117,00000183,00000184,00000186,00000205,00002772,00002775,00000295,00003038,00004045,09003482	No	$100,000	$75,000	32600.4	17.5	340	204	352	1		0	152	0	23560.42	85	85	16	51	123	0	0	38	0	5890.1								No
092000032	Martin County NFIP Application	Application to join the NFIP.	09000011,09000017	Martin		Other	912.1		Martin County	00000102,00000115,00000117,09000118,09000150,00000151,09001773,09001774,00002772,09000405,09002738,09002838,09003575	No	$30,000	$5,000	146375.3	66.8	902	451	2015	3		5	229	0	55702.27	226	226	64	112	728	0	1	57	0	13925.6								No
092000033	Nolan County Ordinance Update SFHA	construction, increase freeboard requirements for structures in the SFHA; adopt a "no-rise" in BFE in the 100-year floodplain. Update local flood ordinance to prohibit granting of variance in SFHA; Include "cumulative	09000011	Nolan		Other	910.7		Nolan County	00000116,00000145,09000147,00000168,00000170,00000172,00002611,00002778,00000284,00000295,09000499,09000852,09002581	No	$100,000	$75,000	44376.2	7.8	90	16	23	0		5	21	0	3888.377	23	23	2	4	7	0	1	5	0	972.1								No
092000034	Terry County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Terry		Other	887.8		Terry County	00000117,09000118,00000184,00000186,00000187,00000205,09000206,00000272,00000275,00000295,00003008,09002828,09003111,09003112,09003317	No	$100,000	$75,000	130088.3	59.2	499	183	1052	0		6	634	0	84143.86	125	125	80	45	398	0	1	158	0	21036.0								No
092000035	Yoakum County NFIP Application	Application to join NFIP.	09000011,09000017	Yoakum		Other	797.7		Yoakum County	00000118,00000186,00000187,00000205,09000206,00002772,00002775,09001828,09002479,09002681	No	$30,000	$5,000	150121.5	68.1	543	263	799	0		2	292	0	63670.6	136	136	42	65	328	0	0	73	0	15917.7								No
092000036	Taylor County Detention Program	conjunction with development to address excessive stormwater / firefighting water source.	09000004	Taylor		Other	915.6		Taylor County	00000144,00000145,00000168,00000170,00000278,00000284,00000295,00003007	No	$100,000	$75,000	21048.6	4.3	70	51	46	0		10	18	0	3492.508	18	18	5	12	11	0	2	4	0	873.1								No
092000037	Taylor County New Ordinance - Wetlands and Watershed Ordinance	Adopt wetlands development regulations; Implement a Comprehensive Watershed Ordinance for new development.	09000006	Taylor		Other	915.6		Taylor County	00000144,00000145,00000168,00000170,00000278,00000284,00000295,00003007	No	$30,000	$5,000	21048.6	4.3	70	51	46	0		10	18	0	3492.508	18	18	5	12	11	0	2	4	0	873.1								No
092000038	Upper Colorado Building Codes Outreach Program	Outreach Program: Encourage communities to adopt current building codes, adopt new construction codes for setting the minimum floor elevation	09000011	Taylor,Nolan,Mitchell,Howard,Martin,Andrews,Borden,Scurry,Menard,Schleicher,Crockett,Irion,Concho,Reagan,Upton,Tom Green,Coleman,Runnels,Coke,Sterling,Glasscock,Midland,Ector,Winkler,Hockley,Cochran,Garza,Lynn,Terry,Yoakum,Dawson,Gaines		Other	21171.6		Upper Colorado River Authority	00000050,00000051,00000052,00000068,00000102,00000115,00000116,00000117,09000118,00000124,00000126,00000127,09000131,00000144,00000145,09000147,09000149,09000150,00000151,00000152,00000154,00000168,00000170,00002772,09000173,09000174,00000183,00000184	No	$25,000	$0	2893508.0	1127.2	36361	23637	81457	54		255	4338	0	719367.3	9090	9090	4318	5909	32721	13	63	1084	0	179841.8								No

Table 14. Identified Potentially Feasible Flood Management Strategies

														Flood Risk									Reduction in Flood Risk														
FMS ID	FMS Name	Description	Associated Goals (ID)	County	Watershed Name	FMS Type	FMS Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Strategy Cost ($)	Non-recurring, Non-capital Cost ($)	Area in 1% annual Flood risk	Area in 0.2% annual Flood Risk	Estimated number of structures at 1% annual flood risk[3]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Emergency facilities at 1% annual flood risk (#)	Number of low water crossings in project area at 1% annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road closures (#)	Estimated active farm & ranch land at 1% annual flood risk (acres)[3]	Number of structures with reduced 1% annual Flood risk[4]	Number of structures removed from 1% annual Flood risk[4]	Number of structures removed from 0.2% annual Flood risk[4]	Residential structures removed from 1% annual Flood risk	Estimated Population removed from 1% annual Flood risk	Critical facilities removed from 1% annual Flood risk (#)	Number of low water crossings removed from 1% annual Flood risk (#)	Estimated length of roads removed from 1% annual flood risk (miles)	Estimated reduction in road closure occurrences	Estimated active farm & ranch land removed from 1% annual flood risk (acres)[3]	Estimated reduction in fatalities (if available)	Estimated reduction in injuries (if available)	Cost/ Structure removed	Percent Nature-based Solution (Y/N)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Water Supply Benefit (Y/N)
092000039	Stormwater Maintenance	Outreach Program: Encourage maintenance programs on storm water infrastructure, Dams, ditches, and channels.	09000011	Taylor,Nolan,Mitchell,Howard,Martin,Andrews,Borden,Scurry,Menard,Schleicher,Crockett,Irion,Concho,Reagan,Upton,Tom Green,Coleman,Runnels,Coke,Sterling,Glasscock,Midland,Ector,Winkler,Hockley,Cochran,Garza,Lynn,Terry,Yoakum,Dawson,Gaines		Other	21171.6		Upper Colorado River Authority	00000050,00000051,00000052,09000068,00000102,00000115,00000116,00000117,09000138,00000124,00000126,00000127,09000131,00000144,00000145,09000147,09000149,09000150000001551,00000152,00000154,00000168,00000170,00000172,09000173,09000174,00000181,00000184	No	$25,000	$0	2893508.0	1127.2	36361	23637	81457	54		255	4338	0	719367.3	9090	9090	4318	5909	32721	13	63	1084	0	179841.8							No
092000040	Tom Green County Flood Insurance Awareness	Develop flood insurance and awareness program; disseminate materials with new permits and place in the library at City Hall	09000011	Tom Green		Other	1533.9		Tom Green County	00000150,00000051,09000068,00000124,09000131,00000145,00000261,00000278,00000284,09000496,09000497,09000539,09000775,09000969,09002069,09003257	No	$30,000	$5,000	211659.1	67.0	5164	3371	9948	7		46	253	0	48446.88	1291	1291	652	842	4008	1	11	63	0	12111.7							No
092000041	Cochran County Drainage Mainace	Create a maintenance program for the ditches and culverts throughout Cochran	09000002	Cochran		Other	773.6		Cochran County	00000186,00000187,00000205,09000206,00000295	No	$48,000	$23,000	64306.3	37.3	23	12	53	0		0	144	0	15614.36	6	6	1	3	13	0	0	36	0	3903.6							No
092000042	Cochran County Inundation Awareness	civic groups, and the general public about the dangers of flash flooding in the county; to include printed materials placed throughout the county	09000002	Cochran		Other	773.6		Cochran County	00000186,00000187,00000205,09000206,00000295	No	$30,000	$5,000	64306.3	37.3	23	12	53	0		0	144	0	15614.36	6	6	1	3	13	0	0	36	0	3903.6							No
092000043	Cochran County DCM	Commissioners Court Order prohibiting any dumping in ditches and culverts throughout Cochran County to ensure that flood waters don't accumulate and flood roadways or buildings.	09000004	Cochran		Other	773.6		Cochran County	00000186,00000187,00000205,09000206,00000295	No	$100,000	$75,000	64306.3	37.3	23	12	53	0		0	144	0	15614.36	6	6	1	3	13	0	0	36	0	3903.6							No
092000044	Concho County CTP Program	The CTP Program is an innovative approach to creating partnerships between FEMA and participating NFIP communities	09000002	Concho		Other	988.9		Concho County	00000150,00000051,00000124,09000131,00000144,00000145,00000261,00000278,00000284,00000301,00000307,09002653	No	$30,000	$5,000	57587.3	14.8	103	52	77	0		4	24	0	12259.07	26	26	15	13	19	0	1	6	0	3064.8							No
092000045	City of Goldsmith Mainace Program	Clear debris and street clean up streets in town after severe flood	09000002	Ector		Other	0.3		Goldsmith	00000152,00000272,09003576	No	$25,000	$0	99.0	1.0	9	9	99	0		0	0	0	0	3	3	0	2	24	0	0	0	0	0.0							No
092000046	City of Colorado City	Establish, adopt, and implement a "green infrastructure" program for parks, nature preserves, greenbelts, etc.	09000011	Mitchell		Other	5.4		Mitchell County	00000172,00000278,09003443	No	$30,000	$5,000	518.2	0.2	143	93	353	2		1	10	0	41.68165	36	36	26	23	109	0	0	2	0	10.4							No
092000047	City of Colorado City	for install backflow valves to prevent reverse flow floods.	09000011	Mitchell		Other	5.4		Mitchell County	00000172,00000278,09003443	No	$30,000	$5,000	518.2	0.2	143	93	353	2		1	10	0	41.68165	36	36	26	23	109	0	0	2	0	10.4							No
092000048	City of Westbrook	clearing debris from bridges, drains and culverts.	09000015	Mitchell		Other	0.4		Mitchell County	00000172,00000278,09003449	No	$25,000	$0	2.5	0.0	9	9	99	0		0	0	0	0	3	3	0	2	24	0	0	0	0	0.0							No
092000049	Nolan County	from drains, culverts and watershed streams for the purposes of flood reduction and to enhance water run-off throughout the County.	09000004	Nolan		Other	910.6		Nolan County	00000156,09000147,09000170,00000172,00000261,00000278,00000284,00000295,00000445,09000499,09000852,09002581	No	$30,000	$5,000	44368.9	7.8	90	16	23	0		5	21	0	3888.307	23	23	2	4	7	0	1	5	0	972.1							No
092000050	City of Blackwell	Establish, adopt and implement a "green infrastructure" program for parks, nature preserves, greenbelts, etc.	09000002	Nolan,Coke		Other	0.6		Blackwell	09000147,00000170,00000261,00000278,00000284,09000499,09000852,09002581	No	$30,000	$5,000	23.8	0.0	2	3	14	0		0	0	0	0	1	1	0	0	3	0	0	0	0	0.0							No
092000051	City of Blackwell Debris Program	Implement maintenance program for clearing debris from drains/culverts.	09000011	Nolan,Coke		Other	0.6		Blackwell	09000147,00000170,00000261,00000278,00000284,09000499,09000852,09002581	No	$60,000	$35,000	23.0	0.0	9	3	14	0		0	0	0	0.000597	3	3	0	0	3	0	0	0	0	0.0							No
092000052	City of Big Lake Debris Cleaning Program	clearing debris from bridges, drains and culverts.	09000999	Reagan		Other	2.4		Big Lake	09003500	No	$25,000	$0	95.0	0.1	75	53	142	0		2	2	0	3.935484	19	19	20	13	42	0	0	0	0	1.0							No
092000053	Reagan County Sediment Cleanout Program	Adopt and implement a program for clearing debris from bridges, drains and culverts.	09000004	Reagan		Other	1170.9		Reagan County	00000126,00000127,09000150,00000151,00000261,00000272,00000684,00002402,09003500	No	$30,000	$5,000	122272.6	59.8	161	79	200	0		2	39	0	13306.96	41	41	34	19	64	0	0	10	0	3326.7							No
092000054	Runnels County	Adopt and implement a program for clearing debris from bridges, drains and culverts.	09000002	Runnels		Other	1052.5		Runnels County	00000124,09000131,00000145,09000147,00000168,00000170,00000261,00000278,00000284,00000307,09000539,09002162,09002451,09003374,09003442	No	$25,000	$0	128592.5	35.4	164	41	178	0		18	125	0	39209.77	41	41	17	10	62	0	4	31	0	9802.4							No
092000055	Taylor County	Establish, adopt, and implement a "green infrastructure" program for parks, nature preserve, greenbelts, etc.	09000004	Taylor		Other	915.6		Taylor County	00000145,00000168,00000170,00000278,00000284,00000295,00000307	No	$30,000	$5,000	21048.0	4.3	70	51	46	0		10	18	0	3492.162	18	18	5	12	11	0	2	4	0	873.0							No
092000056	Taylor County	program by providing FEMA/NFIP materials to mortgage lenders, real agents and insurance agents and place in local libraries.	09000015	Taylor		Other	915.6		Taylor County	00000145,00000168,00000170,00000278,00000284,00000295,00000307	No	$30,000	$5,000	21048.0	4.3	70	51	46	0		10	18	0	3492.162	18	18	5	12	11	0	2	4	0	873.0							No
092000057	Taylor County	Update FIS and FIRM maps once BLE is available	09000004	Taylor		Other	915.6		Taylor County	00000145,00000168,00000170,00000278,00000284,00000295,00000307	No	$30,000	$5,000	21048.0	4.3	70	51	46	0		10	18	0	3492.162	18	18	5	12	11	0	2	4	0	873.0							No
092000058	Taylor County Debris Clearing Program	clearing debris from bridges, drains and culverts.	09000999	Taylor		Other	915.6		Taylor County	00000168	No	$151,200	$126,200	21048.6	4.3	70	51	46	0		10	18	0	3492.508	18	18	5	12	11	0	2	4	0	873.1							No
092000059	Taylor County Gauge/Flood Barrier Program	Install automated creek rain gauges and automated barriers for flooded roadways.	09000002	Taylor		Other	915.6		Taylor County	00000168	No	$151,200	$126,200	21048.6	4.3	70	51	46	0		10	18	0	3492.508	18	18	5	12	11	0	2	4	0	873.1							No
092000060	Nolan County Warning Siren Program	sirens for any emergency of natural and/or man-made hazardous events. The warning sirens would be strategically placed in the following locations within the County: Cities of Sweetwater, Roscoe, Blackwell, Nolan, Maryn	09000999	Nolan		Other	910.7		Nolan County	00000170	No	$367,972	$342,972	44376.2	7.8	90	16	23	0		5	21	0	3888.377	23	23	2	4	7	0	1	5	0	972.1							No
092000061	City of Odessa Rain Guage Program	Install Rain gauges at eight (8) locations around city to collect data and improve warning system.	09000006	Midland,Ector		Other	51.1		Odessa	00000151,00000152,00000272,09000288,09001698,09002836,09002838	No	$30,000	$5,000	6956.9	4.2	6774	5481	25984	10		26	167	0	45.75022	1694	1694	854	1370	10384	2	6	42	0	11.4							No
092000062	Cochran County Road Signs Program	signs to warn motorists of a potential hazard or dangers on or near the roadway, which could be rapidly positioned by County personnel	09000006	Cochran		Other	773.6		Cochran County	00000187,09000206,00000275,00000295	No	$48,000	$23,000	64303.4	37.3	23	12	53	0		0	144	0	15614.11	6	6	1	3	13	0	0	36	0	3903.5							No
092000063	Coke County NFIP Application	Application to join the NFIP	09000011,09000017	Coke		Other	924.6		Coke County	09000147	No	$100,000	$75,000	110299.9	22.9	245	104	124	0		14	55	0	5435.483	62	62	50	26	43	0	3	14	0	1358.9							No
092000064	Reagan County NFIP Application	Join the National Flood Insurance Program (NFIP).	09000011,09000017	Reagan		Other	1170.9		Reagan County	00000126	No	$30,000	$5,000	122272.1	59.8	161	79	200	0		2	39	0	13305.97	40	40	34	19	64	0	0	10	0	3326.5							No
092000065	City of Robert Lee Flood Insurance Awareness Program	regarding availability of flood insurance by disseminating brochures in public places, such as City Hall.	09000004	Coke		Other	1.2		Robert Lee	09000147,00000261,00000284,09002685	No	$30,000	$5,000	103.3	0.0	42	33	37	0		0	2	0	1.121107	11	11	2	8	9	0	0	0	0	0.3							No
092000066	Concho County Flood Awareness Program	benefits of flood insurance as it pertains to elevating structures in the SFHA and in accordance with the local Floodplain Ordinance	09000011	Concho		Other	989.0		Concho County	00000124,09000131,00000144,00000145,00000261,00000278,00000284,00000301,00002653	No	$30,000	$5,000	57590.0	14.8	103	52	77	0		4	24	0	12260.43	26	26	15	13	19	0	1	6	0	3065.1							No
092000067	Crockett County Flood Warning System	water district with rainfall observer. Educate community on dangers of low water crossings.	09000006	Crockett		Other	2795.7		Crockett County	00000051,00000052,09000068,00000126,00000127,00000261,00000272,00000284,00000684	No	$30,000	$5,000	7257.3	1.5	9	9	99	0		0	1	0	5.348695	3	3	0	2	24	0	0	0	0	1.3							No
092000068	Crockett County Flood Insurance Awareness Program	regarding availability of flood insurance by disseminating brochures in public places, such as City Hall.	09000004	Crockett		Other	2795.7		Crockett County	00000051,00000052,09000068,00000126,00000127,00000261,00000272,00000284,00000684	No	$30,000	$5,000	7257.3	1.5	9	9	99	0		0	1	0	5.348695	3	3	0	2	24	0	0	0	0	1.3							No
092000069	City of Goldsmith TADD Program	(TADD)	09000006	Ector		Other	0.3		Goldsmith	00000152,00000272,09003576	No	$30,000	$5,000	99.0	1.0	9	9	99	0		0	0	0	0	3	3	0	2	24	0	0	0	0	0.0							No
092000070	City of Odessa NFIP Education Program	pamphlets to owners of flood-prone properties. Conduct workshops for local lending agencies, insurance agents, surveyors and title companies to promote availability of and understanding of flood insurance.	09000011,09000017	Midland,Ector		Other	44.3		Odessa	00000151,00000152,00000272,09002836	No	$25,000	$0	5885.9	3.7	6574	5476	24987	10		26	155	0	25.71767	1644	1644	745	1369	10133	2	6	39	0	6.4							No
092000071	City of Mertzon Local Ordinance Evaluation	Examine local flood ordinance to ensure minimum NFIP standards are included for program compliance and to consider possible higher regulatory standards.	09000999	Irion		Other	1.5		Mertzon	09002400	No	$30,000	$5,000	161.1	0.1	96	46	83	0		4	2	0	0.685018	24	24	10	11	25	0	1	0	0	0.2							No
092000072	Irion County Flood Warning System	Draft flood warning system	09000008,09000011	Irion		Other	1047.5		Irion County	09000068,00000126,09000131,00000261,00000284,00001240,09002400	No	$30,000	$5,000	133921.6	23.8	354	104	235	0		8	48	0	2458.436	89	89	32	26	72	0	2	12	0	614.6							No
092000073	Irion County Flood Insurance Education Program	benefits of flood insurance as it pertains to elevating structures in the SFHA and in accordance with the local Floodplain Ordinance	09000011	Irion		Other	1047.5		Irion County	09000068,00000126,09000131,00000261,00000284,00001240,09002400	No	$30,000	$5,000	133921.6	23.8	354	104	235	0		8	48	0	2458.436	89	89	32	26	72	0	2	12	0	614.6							No
092000074	Irion County NFIP Compliance Evaluation	language of flood ordinance to ensure minimum NFIP compliance standards and develop higher regulatory standards for permitting in flood prone areas of the County.	09000011,09000017	Irion		Other	1047.5		Irion County	09000068,00000126,09000131,00000261,00000284,00001240,09002400	No	$100,000	$75,000	133921.6	23.8	354	104	235	0		8	48	0	2458.436	89	89	32	26	72	0	2	12	0	614.6							No
092000075	Irion County CTP Program	Draft CTP program	09000002	Irion		Other	1047.5		Irion County	09000068,00000126,09000131,00000261,00000284,00001240,09002400	No	$30,000	$5,000	133921.6	23.8	354	104	235	0		8	48	0	2458.436	89	89	32	26	72	0	2	12	0	614.6							No
092000076	Lynn County Portable Pumps Program	pumps that can be deployed as needed to mitigate the potential impacts of future flood events.	09000004	Lynn		Other	890.2		Lynn County	00000184,00000186,00000205,00000272,00000275,00000295,00000308,00000441,09003482	No	$250,000	$225,000	32600.3	17.5	340	204	352	1		0	152	0	23560.16	85	85	16	51	123	0	0	38	0	5890.0							No
092000077	City of Westbrook TADD Program	low water crossings through the installation of warning signs and promotion of "Turn Around, Don't Drown" (TADD) Program.	09000006	Mitchell		Other	0.4		Mitchell County	00000172,00000278,09003449	No	$30,000	$5,000	2.5	0.0	9	9	99	0		0	0	0	0	3	3	0	2	24	0	0	0	0	0.0							No
092000078	Town of Loraine Flood Awareness Program	regarding availability of flood insurance by disseminating brochures in public places, such as City Hall.	09000004	Mitchell		Other	1.0		Mitchell County	00000172,00000278,09003448	No	$30,000	$5,000	102.3	0.0	8	6	5	0		0	5	0	1.255103	2	2	3	1	1	0	0	1	0	0.3							No
092000079	Nolan County Flood Awareness Program	program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation meaasures to reduce injuries, fatalities, and property damages.	09000006	Nolan		Other	910.6		Nolan County	00000156,09000147,00000170,00000172,00000261,00000278,00000284,00000295,00000445,09000499,09000852,09002581	No	$30,000	$5,000	44368.9	7.8	90	16	23	0		5	21	0	3888.307	23	23	2	4	7	0	1	5	0	972.1							No

Table 14. Identified Potentially Feasible Flood Management Strategies

														Flood Risk									Reduction in Flood Risk															
FMS ID	FMS Name	Description	Associated Goals (ID)	County	Watershed Name	FMS Type	FMS Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Strategy Cost ($)	Non-recurring, Non-capital Cost ($)	Area in 1% annual Flood risk	Area in 0.2% annual Flood Risk	Estimated number of structures at 1% annual flood risk[4]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Emergency facilities at 1% annual flood risk (#)	Number of low water crossings in project area at 1% annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road closures (#)	Estimated active farm & ranch land at 1% annual flood risk (acres)[5]	Number of structures with reduced 1% annual Flood risk[6]	Number of structures removed from 1% annual Flood risk[6]	Number of structures removed from 0.2% annual Flood risk[6]	Residential structures removed from 1% annual Flood risk	Estimated Population removed from 1% annual Flood risk	Critical facilities removed from 1% annual Flood risk (#)	Number of low water crossings removed from 1% annual Flood risk (#)	Estimated length of roads removed from 1% annual flood risk (miles)	Estimated reduction in road closure occurrences	Estimated active farm & ranch land removed from 1% annual flood risk (acres)[5]	Estimated reduction in fatalities (if available)	Estimated reduction in injuries (if available)	Cost/ Structure removed	Percent Nature-based Solution (Y/N)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Water Supply Benefit (Y/N)
092000080	City of Blackwell Flood Insurance Awareness Program	Implement a public awareness program regarding availability of flood insurance.	09000004	Nolan,Coke		Other	0.6		Blackwell	09000147,00000170,00000261,00000278,00000284,09000499,09000852,09002581	No	$30,000	$5,000	23.8	0.0	2	3	14	0		0	0	0	0	1	1	0	0	3	0	0	0	0	0.0							No
092000081	City of Big Lake Flood Warning System	Implement an education program to inform and notify residents of evacuation routes and dangers of driving into flooded roads and low-water crossings	09000006	Reagan		Other	1.3		Big Lake	00000126,00000261,00001240,09003500	No	$30,000	$5,000	44.9	0.1	68	49	138	0		2	2	0	0.09561	17	17	19	12	40	0	0	0	0	0.0							No
092000082	City of Big Lake CTP Program	Draft CTP program	09000002	Reagan		Other	1.3		Big Lake	00000126,00000261,00001240,09003500	No	$30,000	$5,000	44.9	0.1	68	49	138	0		2	2	0	0.09561	17	17	19	12	40	0	0	0	0	0.0							No
092000083	Reagan County Flood Awareness Program	Develop flood education and awareness program; disseminate materials with new permits and place in the library at City Hall	09000004	Reagan		Other	1170.9		Reagan County	00000126,00000127,09000150,00000151,00000261,00000272,00000684,00001240,09003500	No	$30,000	$5,000	122272.6	59.8	161	79	200	0		2	39	0	13306.96	41	41	34	19	64	0	0	10	0	3326.7							No
092000084	Reagan County CTP Program	Draft CTP program	09000002	Reagan		Other	1170.9		Reagan County	00000126,00000127,09000150,00000151,00000261,00000272,00000684,00001240,09003500	No	$30,000	$5,000	122272.6	59.8	161	79	200	0		2	39	0	13306.96	41	41	34	19	64	0	0	10	0	3326.7							No
092000085	City of Miles Flood Awareness Program	Draft flood awareness program	09000006	Runnels		Other	1.5		Miles	00000145,00000278,00000284,09000539,09003442	No	$30,000	$5,000	132.8	0.0	9	9	99	0		2	3	0	21.90781	3	3	0	2	24	0	0	1	0	5.5							No
092000086	City of Winters Flood Awareness Program	program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages.	09000006	Runnels		Other	2.2		Winters	00000145,00000278,00000284,09003374,09003442	No	$30,000	$5,000	212.4	0.1	1	1	14	0		0	2	0	33.34377	1	1	0	0	3	0	0	0	0	8.3							No
092000087	Runnels County Flood Awareness Program	program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages.	09000006	Runnels		Other	1052.5		Runnels County	00000124,09000131,00000145,09000147,00000168,00000170,00000261,00000278,00000284,00003072,09000539,09002162,09002451,09003374,09003442	No	$30,000	$5,000	128592.5	35.4	164	41	178	0		18	125	0	39209.77	41	41	17	10	62	0	4	31	0	9802.4							No
092000088	Runnels County Higher Standareds Program	Adopt higher floodplain standards. Restrict future development in high risk areas.	09000011	Runnels		Other	1052.5		Runnels County	00000124,09000131,00000145,09000147,00000168,00000170,00000261,00000278,00000284,00003072,09000539,09002162,09002451,09003374,09003442	No	$100,000	$75,000	128592.5	35.4	164	41	178	0		18	125	0	39209.77	41	41	17	10	62	0	4	31	0	9802.4							No
092000089	City of Ballinger Flood Awareness Program	Building Inspectors and Code Enforcement officer regarding NFIP Compliance regulations pertaining to permitting and inspections.	09000006	Runnels		Other	3.4		Ballinger	00000145,00000278,00000284,09002451	No	$30,000	$5,000	810.5	0.1	13	7	127	0		0	15	0	99.60306	4	4	0	1	32	0	0	4	0	24.9							No
092000090	City of Ballinger DCM	Consider stormwater criteria for infrastructure and floodplain ordinances to avoid new exposure to flood hazards.	09000999	Runnels		Other	3.4		Ballinger	00000145,00000278,00000284,09002451	No	$100,000	$75,000	810.5	0.1	13	7	127	0		0	15	0	99.60306	4	4	0	1	32	0	0	4	0	24.9							No
092000091	City of Ballinger NFIP Cross-Train Program	hazard information center for use by local residents and schools to educate the public about the top natural hazards affecting the CVCOG region.	09000011	Runnels		Other	3.4		Ballinger	00000145,00000278,00000284,09002451	No	$33,000	$8,000	810.5	0.1	13	7	127	0		0	15	0	99.60306	4	4	0	1	32	0	0	4	0	24.9							No
092000092	El Dorado Flood Awareness Program	Promote flood education and dangers of driving into flooded roadways through Turn Around Don't Drown program.	09000006	Schleicher		Other	1.4		Eldorado	00000051,00000261,00000284,09003113	No	$30,000	$5,000	78.6	0.0	20	10	173	0		0	3	0	1.419526	3	5	6	2	45	0	0	0	0	0.4							No
092000093	Schleicher County Flood Insurance Education Program	Draft flood insurance education program	09000002	Schleicher		Other	1310.0		Schleicher County	00000051,00000052,09000668,09000131,00000261,00000284,00003072,09003113	No	$30,000	$5,000	41425.6	7.5	99	40	191	0		2	17	0	1263.989	25	25	12	10	62	0	0	4	0	316.0							No
092000094	Schleicher County CTP Program	Mapping updates.	09000999	Schleicher		Other	1308.8		Schleicher County	00000051	No	$30,000	$5,000	41420.6	7.5	99	40	191	0		2	17	0	1263.989	25	25	12	10	62	0	0	4	0	316.0							No
092000095	Snyder Flood Insurance Awareness Program	Implement a public awareness program to inform the public about the availability of flood insurance.	09000004	Scurry		Other	8.3		Snyder	00000116,00000278,09000288,09003309	No	$30,000	$5,000	915.0	0.1	445	266	1633	1		3	21	0	41.68422	112	112	18	66	485	0	0	5	0	10.4							No
092000096	Scurry County New Development Criteria	Require new public buildings to be sited on low risk parcels.	09000011	Scurry		Other	906.5		Scurry County	00000115,00000116,00000183,00000272,00000275,00000278,00000288,00003295,00003445,09003309	No	$30,000	$5,000	54305.5	14.1	606	324	1754	1		10	76	0	11692.49	152	152	30	81	537	0	2	19	0	2923.1							No
092000097	Scurry County Flood Awareness Program	program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages	09000006	Scurry		Other	906.5		Scurry County	00000115,00000116,00000183,00000272,00000275,00000278,00000288,00003295,00003445,09003309	No	$30,000	$5,000	54305.5	14.1	606	324	1754	1		10	76	0	11692.49	152	152	30	81	537	0	2	19	0	2923.1							No
092000098	Sterling Flood Insurance Education Program	Draft flood insurance education program	09000011	Sterling		Other	1.0		Sterling City	00000149,00000261,00000284,09002715	No	$30,000	$5,000	140.4	0.1	132	90	156	0		7	5	0	1.592261	33	33	14	22	57	0	1	1	0	0.4							No
092000099	Sterling TADD Program	regarding dangers of driving across low water crossings through Turn Around Don't Drown.	09000006	Sterling		Other	1.0		Sterling City	00000149,00000261,00000284,09002715	No	$30,000	$5,000	140.4	0.1	132	90	156	0		7	5	0	1.592261	33	33	14	22	57	0	1	1	0	0.4							No
092000100	City of San Angelo LWC Awareness Program	Draft flood awareness program	09000006	Tom Green		Other	61.9		San Angelo	00000131,00000261,00000284,09003309	No	$110,000	$85,000	6785.9	3.8	2587	1821	7934	6		27	94	0	300.458	647	647	409	455	2928	1	6	24	0	75.1							No
092000101	Cochran County NFIP Application	Join the National Flood Insurance Program (NFIP).	09000011,09000017	Cochran		Other	773.6		Cochran County	00000187	No	$30,000	$5,000	64306.3	37.3	23	12	53	0		0	144	0	15614.36	6	6	1	3	13	0	0	36	0	3903.6							No
092000102	Coke County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Coke		Other	924.6		Coke County	09000147	No	$100,000	$75,000	110299.9	22.9	245	104	124	0		14	55	0	5435.483	62	62	50	26	43	0	3	14	0	1358.9							No
092000103	Town of Bronte Flood Insurance Awareness Program	program; disseminate materials with new permits and place in the library at City Hall.	09000999	Coke		Other	1.4		Bronte	09003477	No	$30,000	$5,000	193.5	0.1	38	17	20	0		2	2	0	6.052694	10	10	13	4	7	0	0	0	0	1.5							No
092000104	Concho County NFIP Application	Join the National Flood Insurance Program (NFIP).	09000999	Concho		Other	988.9		Concho County	00000124	No	$30,000	$5,000	57587.3	14.8	103	52	77	0		4	24	0	12259.07	26	26	15	13	19	0	1	6	0	3064.8							No
092000105	Concho County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Concho		Other	988.9		Concho County	00000124	No	$100,000	$75,000	57587.3	14.8	103	52	77	0		4	24	0	12259.07	26	26	15	13	19	0	1	6	0	3064.8							No
092000106	Town of Paint Rock NFIP Application	Join the National Flood Insurance Program (NFIP).	09000999	Concho		Other	1.6		Paint Rock	09002653	No	$30,000	$5,000	445.2	0.2	9	7	7	0		1	1	0	139.3244	3	3	3	4	1	1	0	0	0	34.8							No
092000107	Crockett County DCM	Outreach Program: Discuss Drainage Criteria Manual	09000999	Crockett		Other	2797.1		Crockett County	00000052	No	$100,000	$75,000	7259.2	1.5	9	9	99	0		0	1	0	5.348695	3	3	0	2	24	0	0	0	0	1.3							No
092000108	Ector County DCM	Outreach Program: Discuss Drainage Criteria Manual	09000999	Ector		Other	899.6		Ector County	00000152	No	$100,000	$75,000	91524.2	33.8	13045	10079	32288	13		14	306	0	150.4829	3261	3261	1296	2519	13281	3	8	76	0	37.6							No
092000109	Gaines County DCM	Outreach Program: Discuss Drainage Criteria Manual	09000999	Gaines		Other	1497.6		Gaines County	09000118	No	$100,000	$75,000	276508.7	132.6	1890	814	2679	1		5	434	0	145295.5	473	473	236	203	996	0	1	108	0	36323.9							No
092000110	Glasscock County NFIP Application	Join the National Flood Insurance Program (NFIP).	09000011,09000017	Glasscock		Other	897.2		Glasscock County	09000150	No	$30,000	$5,000	105929.6	47.4	141	3	74	0		0	34	0	25211.56	36	36	14	0	21	0	0	8	0	6302.9							No
092000111	Glasscock County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Glasscock		Other	897.2		Glasscock County	09000150	No	$100,000	$75,000	105929.6	47.4	141	3	74	0		0	34	0	25211.56	36	36	14	0	21	0	0	8	0	6302.9							No
092000112	Howard County NFIP Application	Application to join the NFIP.	09000011,09000017	Howard		Other	900.7		Howard County	09000173	No	$30,000	$5,000	117504.4	42.7	1372	662	3981	1		20	196	0	35444.84	343	343	224	165	1248	0	5	49	0	8861.2							No
092000113	Howard County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Howard		Other	900.7		Howard County	09000173	No	$100,000	$75,000	117504.4	42.7	1372	662	3981	1		20	196	0	35444.84	343	343	224	165	1248	0	5	49	0	8861.2							No
092000114	City of Mertzon NFIP Application	Join The NFIP.	09000011,09000017	Irion		Other	1.5		Mertzon	09002400	No	$30,000	$5,000	161.1	0.1	96	46	88	0		4	2	0	0.685018	24	24	24	10	11	25	0	1	0	0.2							No
092000115	Irion County NFIP Application	Join The NFIP.	09000011,09000017	Irion		Other	1047.5		Irion County	09000068	No	$30,000	$5,000	133920.5	23.8	354	104	235	0		8	48	0	2458.542	89	89	32	26	72	0	2	12	0	614.6							No
092000116	Martin County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Martin		Other	912.1		Martin County	09000174	No	$100,000	$75,000	146375.3	66.8	902	451	2015	3		5	229	0	55702.27	226	226	64	112	728	0	1	57	0	13925.6							No
092000117	City of Blackwell Warning System	siren to notify residents of severe weather events and implement area-wide telephone Emergency Notification System ("Reverse 911").	09000011	Nolan,Coke		Other	0.6		Blackwell	09000147,00000170,00000261,00000278,00000284,09000499,09000852,09002581	No	$60,000	$35,000	23.0	0.0	9	3	14	0		0	0	0	0.000597	3	3	0	0	3	0	0	0	0	0.0							No
092000118	Reagan County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Reagan		Other	1170.9		Reagan County	00000126	No	$100,000	$75,000	122272.1	59.8	161	79	200	0		2	39	0	13305.97	41	41	34	19	64	0	0	10	0	3326.5							No
092000119	Runnels County CRS Participation	Join the FEMA Community Rating System.	09000999	Runnels		Other	1051.8		Runnels County	00000145	No	$30,000	$5,000	128515.8	35.3	164	41	178	0		18	125	0	39196.92	41	41	17	10	62	0	4	31	0	9799.2							No
092000120	Schleicher County NFIP Application	Join the National Flood Insurance Program (NFIP).	09000011,09000017	Schleicher		Other	1308.8		Schleicher County	00000051	No	$30,000	$5,000	41420.6	7.5	99	40	191	0		2	17	0	1263.989	25	25	12	10	62	0	0	4	0	316.0							No
092000121	Schleicher County DCM	Consider stormwater criteria for infrastructure and floodplain ordinances to avoid new exposure to flood hazards.	09000999	Schleicher		Other	1308.8		Schleicher County	00000051	No	$100,000	$75,000	41420.6	7.5	99	40	191	0		2	17	0	1263.989	25	25	12	10	62	0	0	4	0	316.0							No
092000122	Sterling County NFIP Application	Join the National Flood Insurance Program (NFIP).	09000011,09000017	Sterling		Other	919.2		Sterling County	09000149	No	$30,000	$5,000	103861.9	18.6	179	97	180	0		7	30	0	2288.687	45	45	19	24	69	0	1	8	0	572.2							No
092000123	Sterling County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Sterling		Other	919.2		Sterling County	09000149	No	$100,000	$75,000	103861.9	18.6	179	97	180	0		7	30	0	2288.687	45	45	19	24	69	0	1	8	0	572.2							No
092000124	Sterling County CTP Program	Draft CTP program	09000999	Sterling		Other	919.2		Sterling County	09000149	No	$30,000	$5,000	103861.9	18.6	179	97	180	0		7	30	0	2288.687	45	45	19	24	69	0	1	8	0	572.2							No
092000125	Town of Meadow NFIP Application	Application to join NFIP. Encourage adopting minimum FEMA Standards	09000011,09000017	Terry		Other	1.6		Meadow	09003317	No	$30,000	$5,000	297.4	0.2	14	5	9	0		0	2	0	267.8905	4	4	3	1	3	0	0	0	0	67.0							No
092000126	Upton County NFIP Application	(NFIP).	09000011,09000017	Upton		Other	1235.9		Upton County	00000127	No	$30,000	$5,000	64197.4	51.2	41	16	23	0		1	34	0	6036.394	11	11	5	4	8	0	0	8	0	1509.1							No
092000127	Upton County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Upton		Other	1235.9		Upton County	00000127	No	$100,000	$75,000	64197.4	51.2	41	16	23	0		1	34	0	6036.394	11	11	5	4	8	0	0	8	0	1509.1							No
092000128	Yoakum County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Yoakum		Other	797.7		Yoakum County	09000206	No	$100,000	$75,000	150121.5	68.1	543	263	799	0		2	292	0	63670.6	136	136	42	65	328	0	0	73	0	15917.7							No
092000129	Upper Colorado Playa Lake Preservation Program	Improve the health of playa lakes via collaborative effort between communities in the region.	09000999	Andrews,Borden,Cochran,Coke,Coleman,Concho,Crockett,Dawson,Ector,Gaines,Garza,Glasscock,Hockley,Howard,Irion,Lynn,Martin,Menard,Midland,Mitchell,Nolan,Reagan,Runnels,Schleicher,Scurry,Sterling,Taylor Terry,Tom Green,Upton,Winkler,Yoakum		Other	21171.6		Upper Colorado River Authority	09000999	No	$25,000	$0	2893508.0	1127.2	36361	23637	81457	54		255	4338	0	719367.3	9090	9090	4318	5909	32721	13	63	1084	0	179841.8							No
092000130	Tom Green County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Tom Green		Other	1533.9		Tom Green County	09000131	No	$100,000	$75,000	211746.4	66.9	5166	3373	9948	7		47	253	0	48498.69	1292	1292	653	843	4008	1	11	63	0	12124.7							No
092000132	Midland County Panel B Projects	playas, drainage basins, and caliche pits, connecting to a culvert under I-20 through to a constructed ditch	09000999	Midland		Other	15.5		Midland County	00000151	No	$25,000	$0	2709.8	2.1	1109	720	2381	0		0	33	0	12.21667	278	278	117	180	1050	0	0	8	0	3.1							No
092000133	Midland County Panel C Projects	flow from I-20 to large playa south of Odessa	09000999	Midland		Other	13.8		Midland County	00000151	No	$25,000	$0	3065.0	1.4	138	22	490	0		0	12	0	17.91893	35	35	14	5	133	0	0	3	0	4.5							No
092000134	Midland County Panel D Projects	Floodway definition, easements, and a constructed channel	09000999	Midland		Other	85.4		Midland County	00000151	No	$25,000	$0	13260.3	8.3	352	114	246	0		1	12	0	136.1694	88	88	47	28	110	0	0	3	0	34.0							No
092000135	Midland County Panel E Projects	Proposed easements to protect playa to the west of South County Road 1232	09000999	Midland		Other	76.1		Midland County	00000151	No	$25,000	$0	10876.4	5.6	259	139	253	0		1	10	0	652.3766	65	65	32	34	84	0	0	2	0	163.1							No
092000136	Midland County Panel G Projects	North of I20 through caliche pit and second small playa, terminating in a large deep playa west of South County Road 1210 (Midkiff Road). System of ditches to connect three caliche pits to ease flooding on Midkiff Road	09000999	Midland		Other	12.6		Midland County	00000151	No	$25,000	$0	1398.3	0.8	525	258	960	0		0	16	0	19.15266	132	132	66	64	346	0	0	4	0	4.8							No

Table 14. Identified Potentially Feasible Flood Management Strategies

														Flood Risk										Reduction in Flood Risk																	
FMS ID	FMS Name	Description	Associated Goals (ID)	County	Watershed Name	FMS Type	FMS Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Strategy Cost ($)	Non-recurring, Non-capital Cost ($)	Area in 1% annual Flood risk	Area in 0.2% annual Flood Risk	Estimated number of structures at 1% annual flood risk[3]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Emergency facilities at 1% annual flood risk (#)	Number of low water crossings in project area at 1% annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road closures (#)	Estimated active farm & ranch land at 1% annual flood risk (acres)[4]	Number of structures with reduced 1% annual Flood risk[5]	Number of structures removed from 1% annual Flood risk[5]	Number of structures removed from 0.2% annual Flood risk[5]	Residential structures removed from 1% annual Flood risk	Estimated Population removed from 1% annual Flood risk	Critical facilities removed from 1% annual Flood risk (#)	Number of low water crossings removed from 1% annual Flood risk (#)	Estimated length of roads removed from 1% annual flood risk (miles)	Estimated reduction in road closure occurrences	Estimated active farm & ranch land removed from 1% annual flood risk (acres)[4]	Estimated reduction in fatalities (if available)	Estimated reduction in injuries (if available)	Cost/ Structure removed	Percent Nature-based Solution (Y/N)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Water Supply Benefit (Y/N)
092000137	Midland County Panel H Projects	Draw from Cotton Flad Road to FM 715. Proposed solutions to be further developed in Flood Planning Study.	09000999	Midland		Other	20.8		Midland County	00000151	No	$25,000	$0	1906.1	0.9	750	346	1904	0		2	13	0	209.7224	188	188	71	86	788	0	0	3	0	52.4							No
092000138	Midland County Panel I Projects	Potential projects identified on South Draw near its confluence with Midland Draw. Proposed solutions to be further developed in Flood Planning Study.	09000999	Midland		Other	20.0		Midland County	00000151	No	$25,000	$0	2506.5	1.7	463	182	2446	2		7	20	0	439.0398	116	116	66	45	736	0	1	5	0	109.8							No
092000139	Midland County Panel F Projects	Potential Projects identified in Monahans draw near confluence of Midland Draw. Proposed solutions to be further developed in Flood Planning Study.	09000999	Midland		Other	83.1		Midland County	00000151	No	$25,000	$0	12999.6	6.0	212	101	131	0		1	13	0	1193.407	53	53	23	25	54	0	0	3	0	298.4							No
092000144	Upper Colorado Stream Gauge Analysis	The placement of 10 additional stream gauges across the region in San Angelo, Big Spring, Snyder, and in Irion County to better monitor the flooding occuring.	09000002	Howard, Irion, Scurry, Tom Green		Flood Measurement and Warning	396.0	Riverine	RFPG Upper Colorado	09000068	No	$150,000	$0	0.0	0.0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0.0							No
092000145	Ector County Flood Early Warning System	Purchase and install a flood early warning system along flood-prone waterways in unincorporated areas of the county.	09000006	Ector		Other	906.4		Ector County	00000152	No	$30,000	$5,000	0.0	0.0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0.0							No

** This summary table is only applicable for the Technical Memorandum midpoint deliverable and shall include all identified potential flood mitigation projects.*

A. Estimated farm & ranch land at 100-year flood risk (acres) should only include farm and ranch land that are negatively impacted by flooding events and should not include land that benefits from floodplains for example rice fields.

** Should not include power generating structures*

Upper Colorado Regional Flood Plan

Discussion and action on considering the adoption of the Technical Memorandum

Agenda Item No. 9

December 10, 2025

Texas Water Development Board

Technical Memorandum

2028 Regional Flood Plan – Flood Planning Region 9 – Upper Colorado

Texas Water Development Board
January 7, 2026

DRAFT - NOT FOR CONSTRUCTION

Prepared under the supervision of:
Mio Matsumura, PE
Texas PE No. 123767

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

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

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List of Abbreviations

RFPG	Regional Flood Planning Group
HUC	Hydrologic Unit Code
LOS	Level-of-Service
FME	Flood Management Evaluations
FMS	Flood Management Strategies
FMP	Flood Mitigation Projects
TNRIS	Texas Natural Resources Information System
TWDB	Texas Water Development Board
FPR	Flood Planning Region
LWC	Low Water Crossing
GIS	Geographic Information Systems

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1 Introduction

The deliverable for the Regional Flood Plan (RFP), due to the TWDB on January 7, 2026, is an interim Technical Memorandum intended to demonstrate progress towards compiling the necessary technical information and analyses needed to develop the RFP and meet contract requirements. Changes to the data and information presented in this report are anticipated and will be incorporated into subsequent deliverables. The final RFP and State Flood Plan approved by the RFPG and the TWDB will supersede all previous deliverables.

This Technical Memorandum is organized as a series of attachments for each set of data required by the Scope of Work. The attachments to this report are organized according to Section 2.4.B of the Exhibit C Technical Guidance, which is summarized as follows:

a. A list of existing political subdivisions within the FPR that have flood-related authorities or responsibilities – provided in **Table 2-1**, **Table 2-2**, **Table 2-3** and **Appendix A-1**;

b. A list of previous flood studies considered by the RFPG to be relevant to development of the RFP – provided in **Table 3-1**;

c. A geodatabase and associated maps in accordance with TWDB Flood Planning guidance documents that the RFPG considers to be best representation of the region-wide 1% annual chance flood event, and 0.2% annual chance flood event inundation boundaries, and the source of flooding for each area, for use in its risk analysis, including indications of locations where such boundaries remain undefined (provided in the **'ExFldHazard'** feature class).

d. A geodatabase and associated maps in accordance with TWDB guidance that identifies additional flood-prone areas not described in (c) based on location of hydrologic features, historic flooding, and/or local knowledge– provided in **Table 5-1** and **Figure 5-1**;

e. A list of available flood-related models that the RFPG considers of most value in developing its plan – provided in **Table 7-1**;

f. A summary and associated maps of locations within the FPR that the RFPG considers having the greatest flood risk and flood risk reduction needs.

g. The flood mitigation and floodplain management goals adopted by the RFPG per §361.36– provided in **Table 8-1** and **Table 8.2**;

h. The documented process used by the RFPG to identify potentially feasible FMSs and FMPs; provided in **Figure 9-1.**

i. A list of potential FMEs and potentially feasible FMSs and FMPs identified by the RFPG, if any, provided in **Appendix A-2, A-3** and **A-4**; and

j. A list of FMSs and FMPs that were identified but determined by the RFPG to be infeasible, including the primary reason for it being infeasible.

This Technical Memorandum must be approved by the Upper Colorado Regional Flood Planning Group (RFPG) at a meeting subject to public notice requirements in accordance with 31 TAC §361.21(h) and submitted to the TWDB in accordance with Section I Article I of the project contract.

Several GIS feature classes are also included as deliverables that support the tabular data presented in this Technical Memorandum. **Table 1-1** below summarizes these required layers as well as their required submittal dates to TWDB.

Table 1-1. Geodatabase Feature Classes

Feature Class Name	Description	Deadline
Entities	Entities with flood-related authority	7-Jan
Watersheds	Watersheds	7-Jan
ExFldInfraPol ExFldInfraLn ExFldInfraPt	Existing natural flood mitigation features and constructed flood infrastructure	7-Jan
ExFldProjs	Proposed or ongoing flood mitigation projects	7-Jan
ExFldHazard	Existing conditions inundation boundary for the 10%, 1.0% and 0.2% events	7-Jan
Ex_Map_Gaps	Gaps in inundation boundary mapping	7-Jan
ExFldExpPol ExFldExpLn ExFldExpPt ExFldExpAll	Existing conditions flood exposure layer identifying people and places at risk for the 10%, 1.0% and 0.2% events	7-Jan
FutFldHazard	Future conditions inundation boundary for the 10%, 1.0% and 0.2% events	7-Jan
Fut_Map_Gaps	Future gaps in inundation boundary mapping	7-Jan
FutFldExpPol FutFldExpLn FutFldExpPt FutFldExpAll	Future conditions flood exposure layer identifying people and places at risk for the 10%, 1.0% and 0.2% events	7-Jan
ExFldMng	Areas with existing floodplain management practices	7-Jan
Goals	Adopted flood mitigation and floodplain management goals with associated areas	7-Jan
Streams	Streams relevant to proposed FMEs, FMPs, and FMSs	7-Jan
FME / FMP / FMS	Proposed FMEs, FMPs, and FMSs with associated areas	7-Jan
Model Coverage	Boundaries of available existing hydrologic and hydraulic models needed to evaluate FMSs and FMPs	7-Jan

2 Political Subdivisions with Flood-Related Authority

As requested in Section 2.4.B of the Exhibit C Technical Guidance, this section describes:

1.a - A list of existing political subdivisions within the FPR that have flood-related authorities or responsibilities.

A list of existing political subdivisions within the Upper Colorado Flood Planning Region (FPR) with known flood-related authorities or responsibilities is provided in **Appendix A-1 – Exhibit C, Table 6**.

Cities, counties, and various types of water control districts were identified for the Upper Colorado FPR. A point of contact was identified for each entity and an existing Floodplain Management Survey sent to the identified contact. Of the political subdivisions in the FPR, the majority are municipalities (**Table 2-1**) or county governments (**Table 2-2**), both of which enjoy broad authority to set policy to mitigate flood risk. The data collection effort for this plan identified 40 cities and 28 counties or portions of counties within the region. An additional 29 other entities (**Table 2-3**) with varying degrees of potential authority were also identified.

The municipalities considered in the development of the Regional Flood Plan are listed in **Table 2-1** below.

Table 2-1. Municipalities in Region 9

Entity	Entity	Entity	Entity
City of Ackerly	City of Denver City	City of Odessa	City of Sterling City
City of Andrews	City of El Dorado	City of O'Donnell	City of Sundown
City of Ballinger	City of Forsan	City of Plains	City of Westbrook
City of Big Lake	City of Goldsmith	City of Robert Lee	City of Winters
City of Big Spring	City of Lamesa	City of San Angelo	Town of Blackwell
City of Bronte	City of Los Ybanez	City of Seagraves	Town of Loraine
City of Brownfield	City of Mertzon	City of Seminole	Town of Meadow
City of Coahoma	City of Midland	City of Snyder	Town of Paint Rock
City of Colorado City	City of Miles	City of Stanton	Town of Wellman

The counties considered in the development of the Regional Flood Plan are listed in **Table 2-2** below. Small unincorporated portions of Coleman (10), Garza (7), Menard (10) and Winkler (14) Counties are also located in Region 9, but they were not considered during the development of the Region 9 Regional Flood Plan. Since the vast majority of each of these counties are in other regions, they are unlikely to enact county-wide actions specific to Region 9, and it is understood that their interests are included in the respective neighboring regions.

Table 2-2. Counties in Region 9

Entity	Entity	Entity	Entity
Andrews County	Ector County	Martin County	Scurry County
Borden County	Gaines County	Midland County	Taylor County
Cochran County	Glasscock County	Mitchell County	Tom Green County
Coke County	Hockley County	Nolan County	Upton County
Concho County	Howard County	Reagan County	Yoakum County
Crockett County	Irion County	Runnells County	
Dawson County	Lynn County	Schleicher County	

A total of 29 other entities considered in the development of the Regional Flood Plan are provided in **Table 2-3** below.

Table 2-3. Other Entities in Region 9

Entity	Type
Upper Colorado River Authority	River Authority
Colorado River MWD	River Authority
Brazos River Authority	River Authority
Central Colorado River Authority	River Authority
Lower Colorado River Authority	River Authority
Canadian River Municipal Water Authority	River Authority
Concho Valley Council of Governments	Other (COG)
Permian Basin Regional Planning Commission	Other (COG)
South Plains Association of Governments	Other (COG)
West Central Texas Council of Governments	Other (COG)
Coke County Kickapoo WCID 1	Other
Ector County Utility District	Other
Gaines County SWMD	Other
Howard County WCID 1	Other
Martin County FWSD 1	Other
Midland County FWSD 1	Other
Midland County Utility District	Other
Downtown Midland Management District	Other
Nolan County FWSD 1	Other
Reagan County WSD	Other
Red Creek MUD	Other
Salt Fork Water Quality District	Other
Tom Green County FWSD 1	Other
Tom Green County FWSD 2	Other
Tom Green County FWSD 3	Other
Tom Green County WCID 1	Other
Upton County Water District	Other
Valley Creek Water Control District	Other
Willow Creek Water Control District	Other

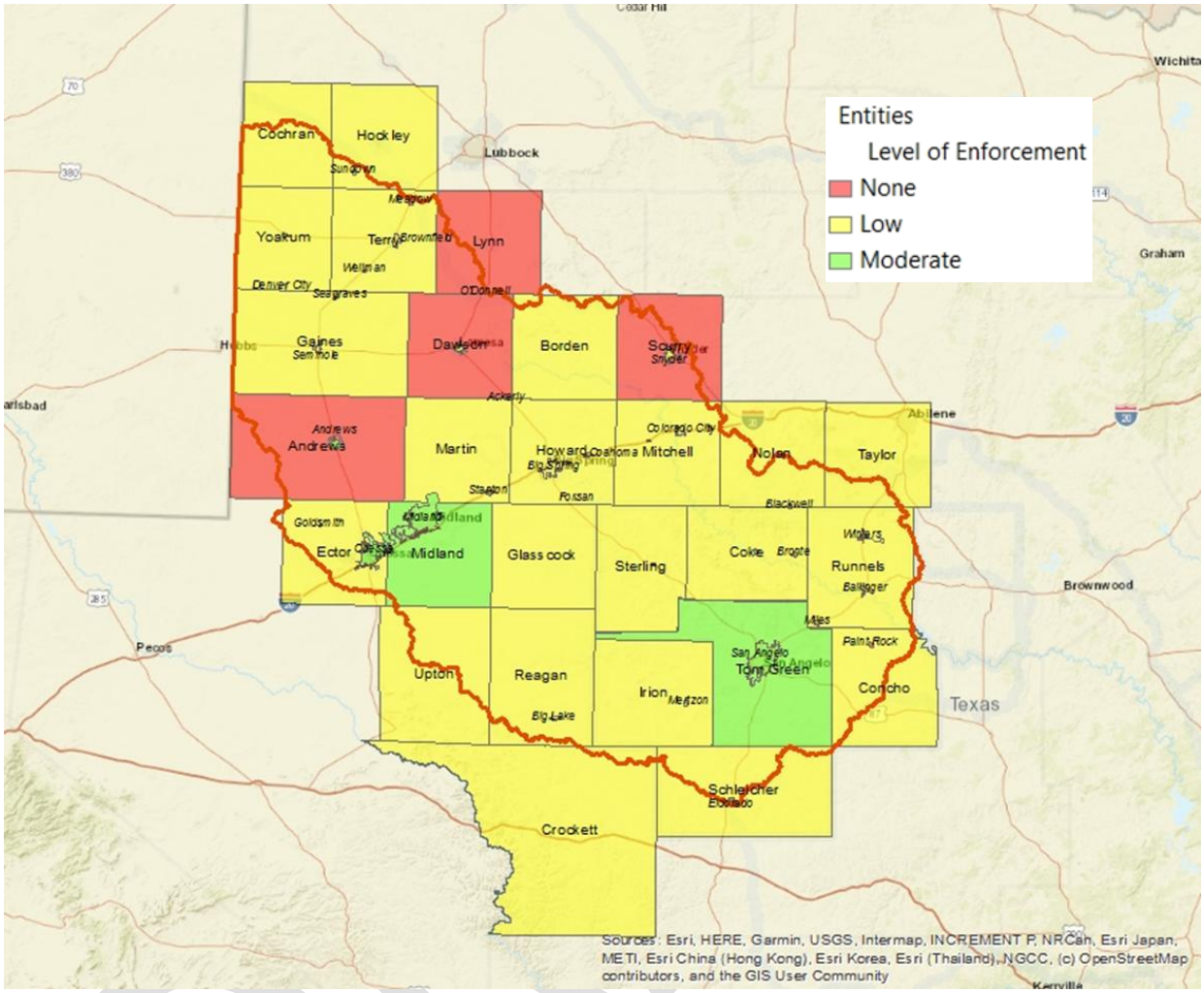
A total of 70 entities have authority to enact floodplain management regulations in Region 9. The extents of floodplain management regulations within the basin are shown below in **Figure 2-1.**

A total of 49 entities are participants of the National Flood Insurance Program (NFIP), consisting of 26 counties and 23 municipalities. Six entities in Region 9 (Ballinger, Lynn County, Midland, Odessa, San Angelo, Tom Green County and Taylor County) have adopted higher standards according to the TMFA 2024 higher standards survey. Two entities in Region 9 (San Angelo and Midland) have an existing stormwater or drainage fee.

The level of floodplain management practices and enforcement was identified as ‘high’, ‘moderate’, ‘low’, or ‘none’, as defined below, within Region 9.

- ‘High’ Level – Actively enforces the entire ordinance, performs many inspections throughout the construction process, issues fines, violations, and Section 1316s where appropriate, and enforces substantial damage and substantial improvement.
- ‘Moderate’ Level – Enforces much of the ordinance, performs limited inspections and is limited in issuance of fines and violations.
- ‘Low’ Level – Provides permitting of development in the floodplain, may not perform inspections, may not issue fines or violations.
- ‘None’ Level – Does not enforce floodplain management regulations.

Figure 2-1. Degree of Floodplain Management Practices



3 Previous and Ongoing Relevant Flood Studies

As requested in Section 2.4.B of the Exhibit C Technical Guidance, this section describes:

1.b - A list of previous flood studies considered by the RFPG to be relevant to development of the RFP.

A list of previous flood studies considered by the Regional Flood Planning Group to be relevant to the development of the Regional Flood Plan is provided in **Table 3-1** below.

Table 3-1. Previous Local and Regional Relevant Flood Plans

Flood Study	Description	Jurisdictions	Counties	Year
Midland Master Drainage Plan	This effort was initiated in 1991 to develop hydrologic and hydraulics models of the 6 major watersheds for Existing 1993, Future – No Action and Future – Playas conditions. The Playas model was refined to also include in-line channel detention and bridge/culvert improvements. The opinion of probable cost to fully realize the MDP was $62,889,750 in 1996 dollars.	Midland	Midland	1996
Odessa Master Drainage Plan	This effort was initiated in 2001 to develop hydrologic and hydraulics models of the watershed for Existing 1993, Future – No Action and Future – Playas conditions.	Odessa	Ector	2001
JAL and Midland Draw Watershed Study	This effort was initiated in 2015 to develop updated detailed hydrologic and hydraulic analyses of the Jal and Midland Draw watersheds for existing and fully developed conditions, along with a master plan and conceptual design of drainage improvements projects to help guide development adjacent to the draws.	Midland	Midland	2017
San Angelo Master Drainage Plan	This effort was initiated in 2019 to evaluate regional detention opportunities in the Red Arroyo watershed and update the Drainage CIP list. Six regional detention opportunities in the Red Arroyo were evaluated for potential benefits at College Hills Boulevard. A total of 38 problem areas were evaluated and prioritized, and Drainage CIP projects were developed to address the top 10 problem areas, including conceptual design and capital cost estimates. Potential funding alternatives were also identified and described.	San Angelo	Tom Green	2021
Deep Creek Section 205 Study	This effort was initiated in 2017 to evaluate flood risk management (FRM) actions aimed at providing the coastal communities of Texas with multiple lines of defense to reduce impacts from a wide array of coastal hazards. This study falls under the USACE's Civil Works Mission.	Snyder	Scurry	2021

Table 3-1. Previous Local and Regional Relevant Flood Plans

Flood Study	Description	Jurisdictions	Counties	Year
Concho Valley Hazard Mitigation Action Plan	The Concho Valley Council of Governments Hazard Mitigation Plan is a multi-jurisdictional plan covering 7 counties and 8 cities in Region 9. The purpose of the Plan is to minimize or eliminate long-term risks to human life and property from known hazards and to break the cycle of high-cost disaster response and recovery within the planning area.	Bronte, Mertzon, Robert Lee, Sterling City, Paint Rock, San Angelo, Eldorado, Big Lake	Coke, Concho, Sterling, Reagan, Irion, Tom Green, Schleicher	2013-2018
Tom Green County Hazard Mitigation Action Plan	The Plan was prepared by Tom Green County, participating jurisdictions, and H2O Partners, Inc. The purpose of the Plan is to protect people and structures and to minimize the costs of disaster response and recovery. The goal of the Plan is to minimize or eliminate long-term risks to human life and property from known hazards by identifying and implementing cost-effective hazard mitigation actions.	San Angelo	Tom Green	2020-2025
West Central Texas COG Regional Hazard Mitigation Action Plan Update	The West Central Texas Council of Governments Hazard Mitigation Plan is a multi-jurisdictional plan covering 5 counties and 8 cities in Region 9. The mitigation strategies seek to identify potential loss-reduction opportunities. The goal of this effort is to work towards more disaster-resistant and resilient communities.	Snyder, Colorado City, Loraine, Westbrook, Blackwell, Ballinger, Miles and Winters	Scurry, Mitchell, Nolan, Taylor and Runnells	2020-2025
Ector County Multi-Jurisdictional Hazard Mitigation Action Plan	The Plan was prepared by Ector County, participating jurisdictions, and H2O Partners, Inc. The purpose of the Plan is to minimize or eliminate long-term risks to human life and property from known hazards and to break the cycle of high-cost disaster response and recovery within the planning area."	Odessa and Goldsmith	Ector	2011-2016
Cochran County Multi-Jurisdictional Hazard Mitigation Action Plan	The Plan was prepared by Cochran County, participating jurisdictions, and H2O Partners, Inc. The purpose of the Plan is to minimize or eliminate long-term risks to human life and property from known hazards and to break the cycle of high-cost disaster response and recovery within the planning area."	None are in Region 9	Cochran	2014
Terry County Multi-Jurisdictional Hazard Mitigation Action Plan	The Plan was prepared by Terry County, participating jurisdictions, TDEM and LAN, Inc. The purpose of the Plan is to minimize or eliminate long-term risks to human life and property from known hazards and to break the cycle of high-cost disaster response and recovery within the planning area."		Terry	
Lynn County Multi-Jurisdictional Hazard Mitigation Action Plan	The Plan was prepared by Lamb and Lynn County, participating jurisdictions, and H2O Partners, Inc. The purpose of the Plan is to minimize or eliminate long-term risks to human life and property from known hazards and to break the cycle of high-cost disaster response and recovery within the planning area."	O'Donnell	Lynn	2020

4 Flood Risk Boundaries

As requested in Section 2.4.B of the Exhibit C Technical Guidance, this section describes:

> ***1.c - A geodatabase and associated maps in accordance with TWDB Flood Planning guidance documents that the RFPG considers to be best representation of the region-wide 10% annual chance event, 1% annual chance flood event, and 0.2% annual chance flood event inundation boundaries, and the source of flooding for each area, for use in its risk analysis, including indications of locations where such boundaries remain undefined.***

This section describes the comprehensive flood risk analysis conducted for the Upper Colorado Flood Planning Region (UCFPR). Flood risks were assessed for the 10 percent, 1 percent annual chance and 0.2 percent annual chance events for existing conditions of the basin and a future condition scenario that considers changes in flood hazards over the 30-year planning horizon. The overall flood risk analysis is comprised of three separate but related evaluations, including:

1. Flood Hazard Analyses –characterize location, magnitude, and frequency of flooding.
2. Flood Exposure Analyses – identify who and what might be harmed within the region.
3. Vulnerability Analyses – identify vulnerabilities of communities and critical facilities.

The following sections describe the process undertaken to determine and quantify flood hazards in the region and present the results of the evaluation, including a summary of the types and magnitude of flooding and the communities most susceptible to its harmful effects.

4.1 Existing Flood Hazard

The existing condition flood hazard analysis compiles a comprehensive outlook of existing flood hazards in the region. To date, no full-coverage evaluation of flood risk has ever taken place in the UCFPR or in the State of Texas. In addition, much of the flood risk in the Upper Colorado Region (Region 9) is unmapped or based on out-of-date maps. Therefore, most of the flood risk across the region is not well quantified, meaning that people and their property are unknowingly in harm's way.

The outcome of the flood hazard analysis is a map of flood hazard areas that are subject to flooding during the 10 percent, 1 percent, and 0.2 percent annual chance events. This effort is not regulatory in nature, and the results of this evaluation do not have an impact on National Flood Insurance Program (NFIP) insurance requirements or premiums. Rather, this exercise is intended to gather a single, comprehensive set of best available information on actual flood risk in the region to help communities understand their current risks and better prepare in the event of a flood.

To assist RFPGs with the flood hazard analysis, the TWDB prepared a statewide, Geographic Information System (GIS) dataset that is comprised of the most recent flood hazard data in Texas, referred to as the "flood risk quilt." The floodplain quilt is comprised of data from several sources, including First American Flood Data Services (FAFDS) flood zone determinations, the Federal Emergency Management Agency's (FEMA) National Flood Hazard Layer (NFHL) information developed from detailed and approximate flood studies, and FEMA Base Level Engineering (BLE) data.

Due in part to the availability of 2D BLE datasets for the entire basin, the 10 percent, 1 percent, and 0.2 percent annual chance flood risk boundaries were processed for all waterways with contributing drainage areas larger than 1 square mile for the entire basin. Where multiple data sets were available, the most accurate risk boundaries were applied.

The Fort Worth District of the U.S. Army Corps of Engineers (USACE) provided additional flood risk boundaries and some flood-prone areas were identified from public comments. The following is a list of the various flood risk data sets used in their order of accuracy from most accurate to least accurate, with the base flood elevation (BFE) data set and sets above it considered accurate.

1. National Flood Hazard Layer (NFHL) Pending Data
2. NFHL Preliminary Data
3. USACE Section 205 Study
4. NFHL Effective Data
5. FEMA Base Flood Elevations
6. Base Level Engineering (BLE) 1D and 2D Data
7. NFHL Approximate Study Areas
8. First American Flood Data Services (FAFDS)
9. Cursory Floodplain Data – April 21, 2025
10. Public Comments

The current existing condition 10%, 1% and 0.2% annual chance flood risk boundaries are provided in the geodatabase in the **'ExFldHazard'** feature class, and the final **'ExFldHazard'** feature class will be provided in the January 7 submittal to TWDB. **Figure 4-1** below provides a depiction and source of the 1% annual chance flood risk boundaries for the upper half of Region 9, for use in the risk analysis.

Figure 4-1. Flood Risk Boundary Sources – Upper Region 9

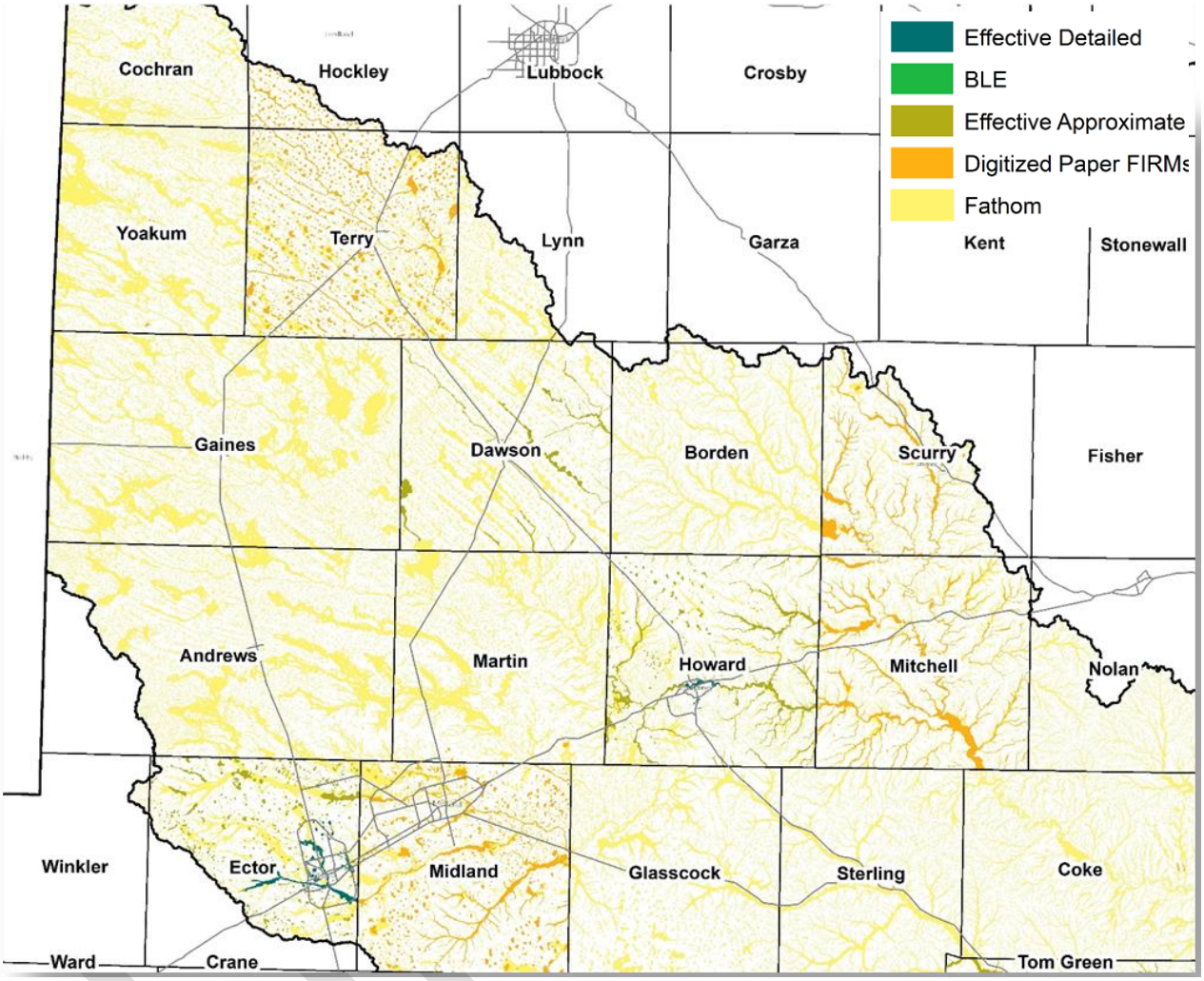
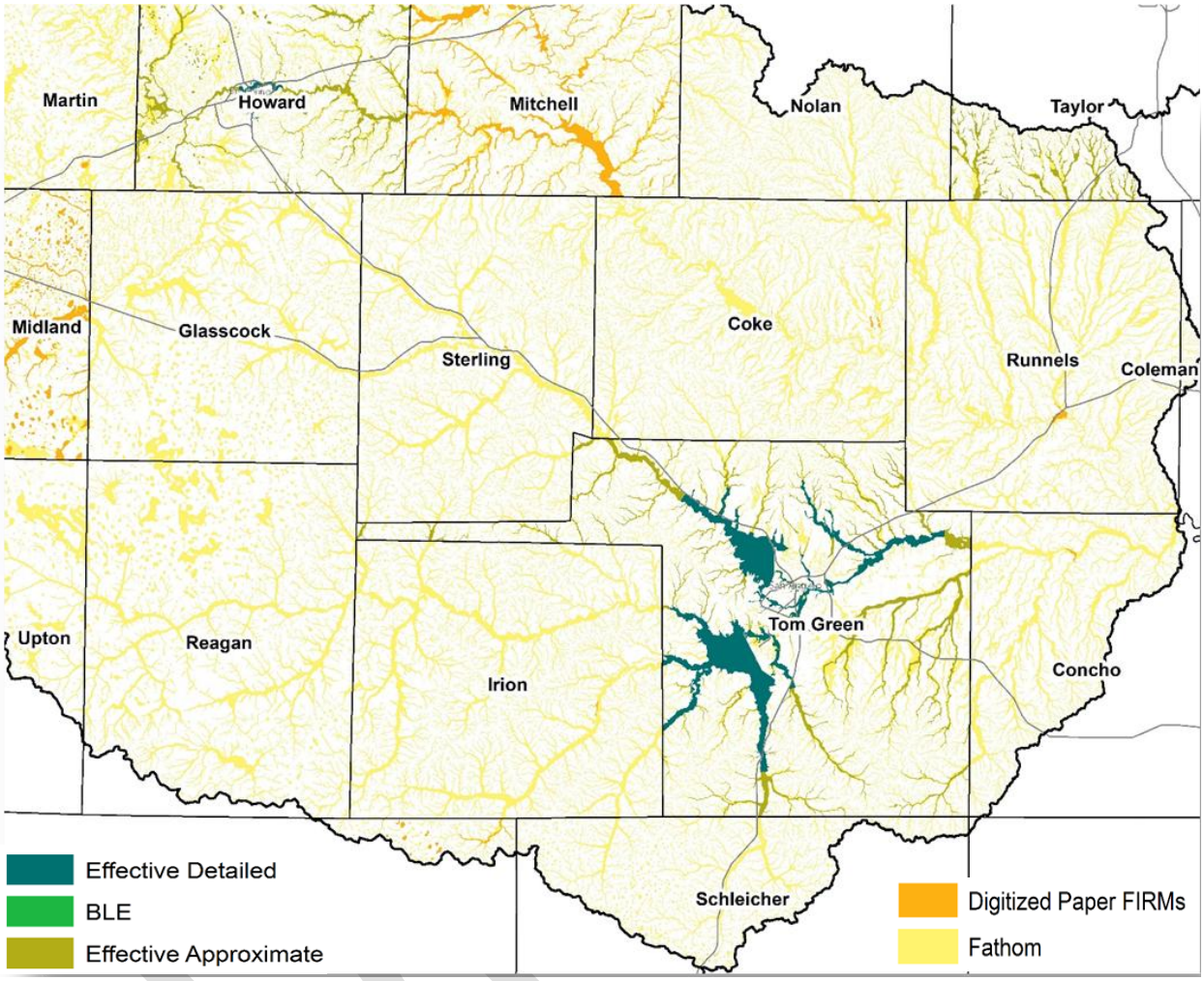


Figure 4-2 below provides a depiction and source of the 1% annual chance flood risk boundaries for the lower half of Region 9, for use in the risk analysis.

Figure 4-2. Flood Risk Boundary Sources – Lower Region 9



As part of their Deep Creek Section 205 Study, the Fort Worth District USACE developed updated risk boundaries through the City of Snyder. The updated 1% and 0.2% annual chance flood risk boundaries for existing conditions were obtained from the USACE in GIS shapefile format and were stitched into the flood inundation quilt of the surrounding area in Scurry County.

The existing condition 10%, 1% and 0.2% annual chance flood risk boundaries will be provided in the geodatabase in the 'ExFldHazard' feature class in the January 7 submittal to TWDB.

4.1.1 Existing Conditions Data Gaps

As previously described, most of the Upper Colorado Region is lacking extensive effective regulatory FEMA flood mapping information, and the areas that are mapped are generally decades old. For the gap analysis, the UCRFPG determined that anything other than detailed study information less than 10 years old is a data gap. This results in the entire region being listed as a gap; areas that have old

FEMA effective mapping information versus areas that have no mapping). Additionally, while the region is being completely mapped with 2D BLE datasets, these are approximate model-backed studies with very little to no hydraulic structures included in the modeling. Enhancements of these models are needed in at least the populated areas in the region.

4.2 Future Flood Hazard

In addition to quantifying the current flood risk, it is helpful to consider the change in flood risk over the course of the planning horizon to help communities plan for new or increased risks. With this concept in mind, a future condition flood risk analysis was performed for the UCFPR. Similar to the existing condition flood hazard analysis, the future condition flood risk hazard analysis compiles a comprehensive outlook of future flood hazards in the region.

The outcome of the future flood hazard analysis is a map of flood hazard areas that are subject to flooding during the 10 percent, 1 percent, and 0.2 percent annual chance events. This effort is not regulatory in nature, and the results of this evaluation do not have an impact on NFIP insurance requirements or premiums. Rather, this exercise is intended to gather a single, comprehensive set of best available information on actual future flood risk in the region to help communities understand their current risks and better prepare in the event of a flood.

History has demonstrated that flood hazards tend to increase over time in populated areas due to projected increases in impervious cover, anticipated sedimentation in flood control structures, as well as other factors that result in increased or altered flood hazards. As a result, the future conditions flood hazard area was defined based on an expected increase in flooding extents and magnitude across the region.

The future conditions mapping for Cycle 2 of the UCRFP utilizes the 2025 Future Condition Cursory Floodplain (Year 2060) study data developed by the Texas Water Development Board (TWDB). TWDB produced high-resolution, statewide future flood risk maps using the Fathom modeling framework. These maps incorporate minimal, moderate, and significant climate forcing scenarios, referred to as scenarios 1, 2, and 3 respectively. The data incorporates projected land use changes and land subsidence effects, providing a comprehensive representation of future flood risk. By integrating these datasets, the analysis enables a more detailed estimation of how evolving conditions may impact floodplain extents and flood risk within the basin.

The Fathom methodology delivers consistent, model-driven, and spatially detailed future flood hazard estimates that are scenario-based. This dataset significantly enhances the identification of expanded flood risk areas including pluvial, fluvial, and coastal hazards, thereby supporting more informed, transparent, and comprehensive long-term flood risk planning within the Upper Colorado Region.

Analysis of the Fathom data indicates reduced flooding in certain areas under scenarios 1 and 2. However, the Texas Water Development Board (TWDB) has recommended that Regional Flood Planning Groups (RFPGs) utilize scenario 3, which incorporates substantial future climate variability, land subsidence, and land use change, representing the worst-case flood inundation scenario for Texas. For the UCRFP, scenario 3 mapping from the TWDB's cursory future floodplain study for the year 2060 was applied. It is important to note that the future 2060 mapping data developed for this flood plan is intended solely for planning purposes and should not be used for regulatory applications.

The future condition 10%, 1% and 0.2% annual chance flood risk areas boundaries will be provided in the geodatabase in the **'FutFldHazard'** feature class in the January 7 submittal to TWDB.

4.2.1 Future Conditions Data Gaps

Future conditions mapping in the Region is challenged by data gaps that include those present in existing conditions, as well as the lack of comprehensive, detailed future flood models and associated mapping data. While the Texas Water Development Board's (TWDB) 2060 future conditions mapping study represents a significant methodological advancement for statewide mapping, the data is generated from a large-scale, statewide two-dimensional hydrodynamic model. Consequently, further refinement at the local level will be necessary to ensure improved accuracy and relevance.

5 Additional Flood-Prone Areas

As requested in Section 2.4.B of the Exhibit C Technical Guidance, this section describes:

1.d - A geodatabase and associated maps in accordance with TWDB Flood Planning guidance documents that identifies additional flood-prone areas not described in (c) based on location of hydrologic features, historic flooding, and/or local knowledge.

5.1 Historical Flood Data

Table 5-1 below provides a listing and brief description of historical events within the basin.

Table 5-1. Listing of Historical Flood Events

Area	Flood Experience Description
Dawson County	The floods of 1954 and 1955 caused significant flooding in the City of Lamesa. In addition to the floodplain of Sulphur Springs Draw, there are several other flood-prone areas within the city. They are in the vicinity of playa lakes where flooding occurs as a result of runoff into the lakes
Ector County	Major storms experienced in the Odessa area are characterized by heavy rainfall from frontal-type storms. Major flooding can be produced by these localized thunderstorms, which may occur at any time during the year but are more prevalent in the spring and summer months. Significant flooding occurred in 1936, 1959, 1978, 1979, and 1986. In September 2004, flash flooding in the City of Odessa caused the closure of many city roads. A significant flood event occurred in May 2007 that damaged homes and closed roads throughout the county.
Howard County	The storm of May 10, 1957 produced heavy rains throughout Howard County over a 24-hour period. At one location 4.5 inches of rainfall was recorded. This storm caused flooding on Beals Creek at Big Spring (Reference 9). The flood was the maximum recorded during the period of record for stream flow measurements at and above Big Spring by the USGS. The U.S. Army Corps of Engineers (USACE) estimated the discharge of this flood to be 6,600 cubic feet per second (cfs) with an estimated recurrence interval of approximately 30 years. Flooding that occurs on the tributaries of Beals Creek in and around Big Spring is often elevated by flooding from Beals Creek, due to the backwater effect that results. The City of Big Spring has constructed nine flood detention reservoirs on small tributaries south of the central business district.
Midland County	Most of Midland County's flood problems occur because of the combination of intense localized storms and the flat topography. Based on interviews with local residents, major flooding occurred in 1936. Other floods of note occurred in 1959, 1978, 1979 and 1986.
Scurry County	Three major floods in Snyder occurred on June 19,1938, June 12, 1967 and August 13, 1972. The flood of June 19,1938 was the largest and most destructive of the three. The peak flow of the August 13, 1972 flood was measured to be 37,000 cfs at the 37th Street bridge at an elevation of 2,109.16 feet MSL. The calculated 0.2% annual chance profile for Deep Creek at the 37th Street bridge has a peak discharge of 37,200 cfs at an elevation of 2,109.31 feet MSL.
Tom Green County	Tom Green County, particularly San Angelo, has experienced loss of life and physical property due to flooding along its major streams. The earliest flood of considerable size of which definite knowledge is available occurred in June 1853. Other large floods known to have occurred include the disastrous Ben Ficklin flood of 1882, which destroyed that community; and floods in May 1884, October 1896. April 1900, August 1906, September 1936, July 1938, April-June 1957, and September to October 1959. The flood of September 14-19, 1936 was the most damaging flood on record on the Concho River at San Angelo. The 1906 flood with an estimated discharge of 246,000 cubic feet per second (cfs) was the largest flood of record. The 1957 flood with a peak discharge of 106,000 on May 9 at the San Angelo stream gage was partially reduced by the O.C. Fisher Lake, which allowed no discharge from the North Concho River.

This analysis also considers potentially flood-prone areas that the regional flood planning group (RFPG) identifies outside of previously mapped flood hazard areas. They can be identified through the location of hydrologic features, historic flooding, and/or local knowledge. Since the cause and recurrence of flooding in these areas is uncertain, separate flood hazard areas have been developed and are listed with “unknown” flood frequency in this analysis.

Possible flood-prone areas were identified through two sources of data. The first was leveraging Base Level Engineering (BLE) data for the region and mapping areas outside the 10 percent, 1 percent, and 0.2 percent flood hazard areas as possible flood-prone areas. These flood prone areas have less than 0.5 ft depth of flooding from the BLE data.

The second source of data was comments on an ArcGIS Online web map where the public can report areas of flooding. This web map was shared on the Upper Colorado Regional Flood Planning Group (UCRFPG) website, as well as emailed to community officials in the region.

5.2 Low Water Crossings

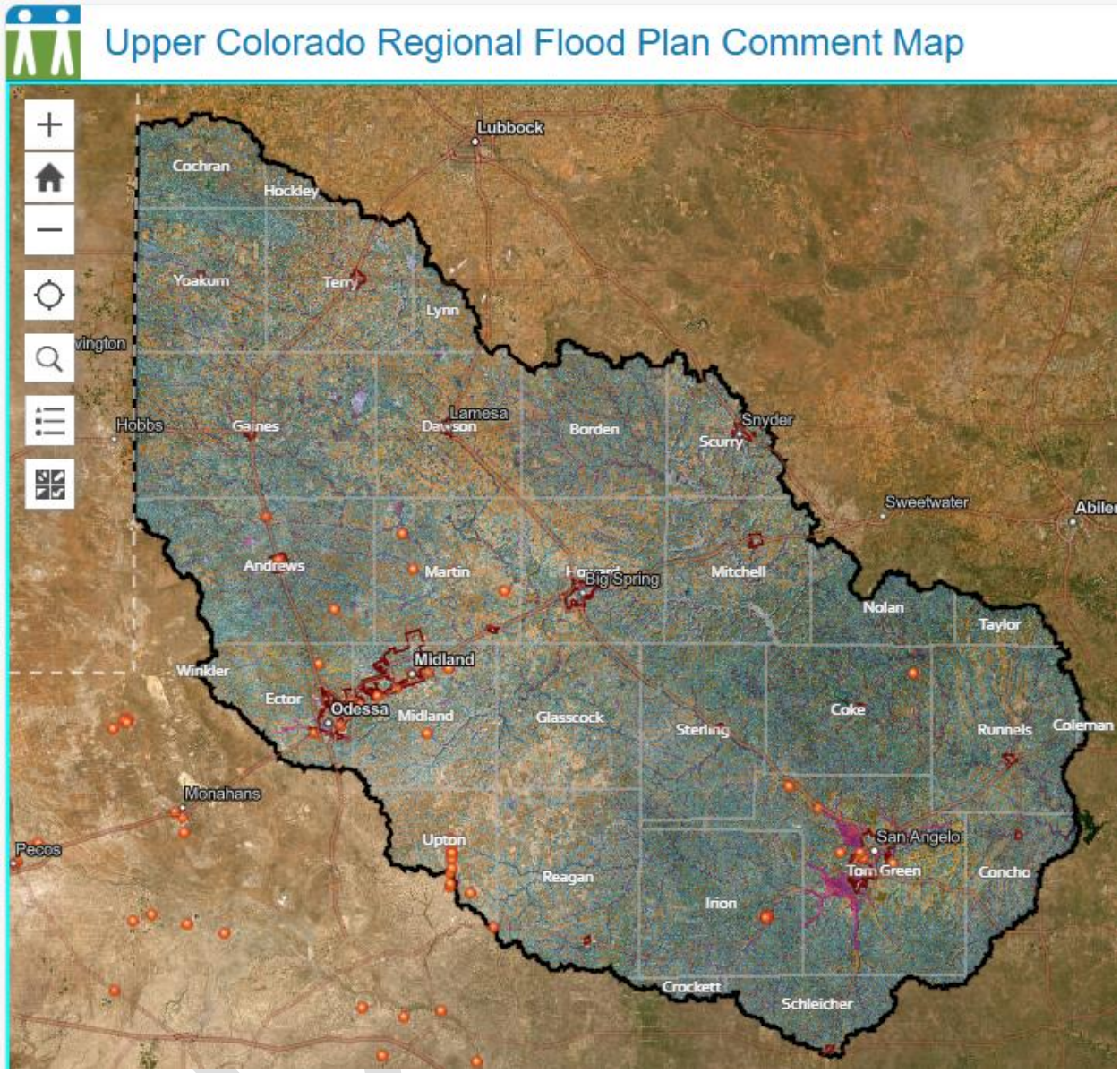
Low water crossings are considered potential flood prone areas due to their inherent life loss risk during flood conditions. Low water crossings are defined where a creek crosses a road that is low enough to be subject to frequent flooding during storm events or during a 50% annual chance (2-year) storm event.

A total of 539 low water crossings have been identified as part of the Regional Flood Plan. These low water crossings are from TNRIS and were last updated in March of 2021. During the first planning cycle for the Regional Flood Planning, the Advisory Groups can utilize the community feedback to identify additional problematic low water crossings not already included in the plan.

5.3 Local Knowledge

An interactive website was developed for Region 9 to show the existing flood risk areas and collect information on additional flood-prone areas from stakeholders and citizens. Responses are indicated by the orange pins in **Figure 5-1** below. Additionally, feedback was obtained from stakeholders at the Cycle 2 Outreach Workshop on September 9 2025, hosted at the Permian Basin Regional Planning Commission in Midland, Texas.

Figure 5-1. Region 9 Interactive Website



6 Availability of Existing Hydrologic and Hydraulic Models

Hydrologic and hydraulic models are available for areas where the following flood risk boundary source data is provided:

- National Flood Hazard Layer (NFHL)
- Base Level Engineering (BLE) Data
- USACE Deep Creek Section 205 Study
- Midland, Odessa and San Angelo Master Drainage Plans

Hydrologic and hydraulic models used for the purposes of defining flood risk boundaries are currently only available roughly 20% of the region, as summarized in **Table 6-1** below.

Table 6-1. List of Models Relevant to the Regional Flood Plan

Model Title	Hydrology Software	Hydraulics Software	Study Area	Sponsor Entity	Date
Crockett County FIS	NUDALLAS	HEC-2	Crockett County	FEMA	1981
Dawson County FIS	17B / Regression	USFHA / RAS	Dawson County	FEMA	2011
Ector County FIS	HEC-1	HEC-2	Ector County	FEMA	2012
Hockley County FIS	17B/Regression	USFHA / HEC-2	Dawson County	FEMA	1977
Howard County FIS	TR-20	HEC-2	Howard County	FEMA	2010
Midland County FIS	HEC-1	HEC-2	Midland County	FEMA	2005
Mitchell County FIS	17B/Regression	USFHA / HEC-2	Mitchell County	FEMA	1985
Nolan County FIS	NUDALLAS	HEC-2	Nolan County	FEMA	1990
Scurry County (Snyder) FIS	NUDALLAS	HEC-2	Scurry County	FEMA	1980
Tom Green County FIS	SWFHYD/HEC-1	HEC-2	Tom Green	FEMA	2012
Deep Creek Section 205	HEC-HMS	HEC-RAS	City of Snyder	USACE	2021

7 List of Available Flood-Related Models of Most Value

As requested in Section 2.4.B of the Exhibit C Technical Guidance, this section describes:

1.e - A list of available flood-related models that the RFPG considers of most value in developing its plan

The following provides a list of available flood-related models, in order of most valuable to least valuable, that are available to define the extents of the 10%, 1.0% and 0.2% annual chance flood risk boundaries.

1. USACE Deep Creek Section 205 HEC-HMS and HEC-RAS Models
2. National Flood Hazard Layer (NFHL)
3. NFHL Preliminary Data
4. NFHL Effective Data
5. Base Level Engineering (BLE) Data
6. First American Flood Data Services (FAFDS)

The following lists other flood risk boundary data sources, which were not based on detailed hydrologic and hydraulic models.

1. NFHL Approximate Study Areas
2. Fathom Draft Cursory Data – July 14, 2021
3. Fathom Cursory Data – October 29, 2021
4. Public Comments

Hydrologic and hydraulic models used for the purposes of defining flood risk boundaries are currently only available roughly 10% of the region, as summarized in **Table 7-1** below.

Table 7-1. List of Models of Most Value to the Regional Flood Plan

Model Title	Hydrology Software	Hydraulics Software	Study Area	Sponsor Entity	Date
Ector County FIS	HEC-1	HEC-2	Ector County	FEMA	2012
Howard County FIS	TR-20	HEC-2	Howard County	FEMA	2010
Midland County FIS	HEC-1	HEC-2	Midland County	FEMA	2005
Tom Green County FIS	SWFHYD/HEC-1	HEC-2	Tom Green	FEMA	2012
Deep Creek Section 205	HEC-HMS	HEC-RAS	City of Snyder	USACE	2021

8 Needs Analysis

As requested in Section 2.4.B of the Exhibit C Technical Guidance, this section describes:

1.f - A summary and associated maps of locations within the FPR that the RFPG considers having the greatest flood risk and flood risk reduction needs.

This section describes the process that the Upper Colorado Regional Flood Planning Group (UCRFPG) adopted to conduct the flood mitigation needs analysis to identify the areas with the greatest gaps in flood risk knowledge and the areas of greatest known flood risk and mitigation needs. The needs analysis then guides the effort to identify flood management evaluations (FMEs), flood mitigation projects (FMPs), and flood management strategies (FMSs).

The scoring criteria framework developed during Cycle 1 was utilized for the 2nd planning cycle. The scoring criteria considered the following items:

- Areas Most Prone to Flooding
    - Number of Buildings
    - Number of Low Water Crossings
    - Number of Road Flooding Locations
    - Agricultural Area
    - Number of Critical Facilities
- Historical Flooding
    - Number of Areas with a History of Flooding
    - Value of FEMA Claims
    - Number of FEMA Claims
    - Number of Historical Storms
    - Damages from Historical Storms
- Known Flood Risk
    - Community Flood Awareness
    - SVI Rating

The maps resulting from the needs analysis assessment will serve as a guide to the UCRFPG's subsequent efforts in Task 4B. The darker green HUC-12s in **Error! Reference source not found.** h ighlight the areas in the Upper Colorado watershed where potentially feasible flood risk studies (FMEs) should be considered as part of Task 4B. The lighter green HUC-12s in **Error! Reference source not found.** emphasize watersheds where the UCRFPG should strive to identify and implement FMSs and FMPs as part of Task 4B to reduce the known flood risks within those areas.

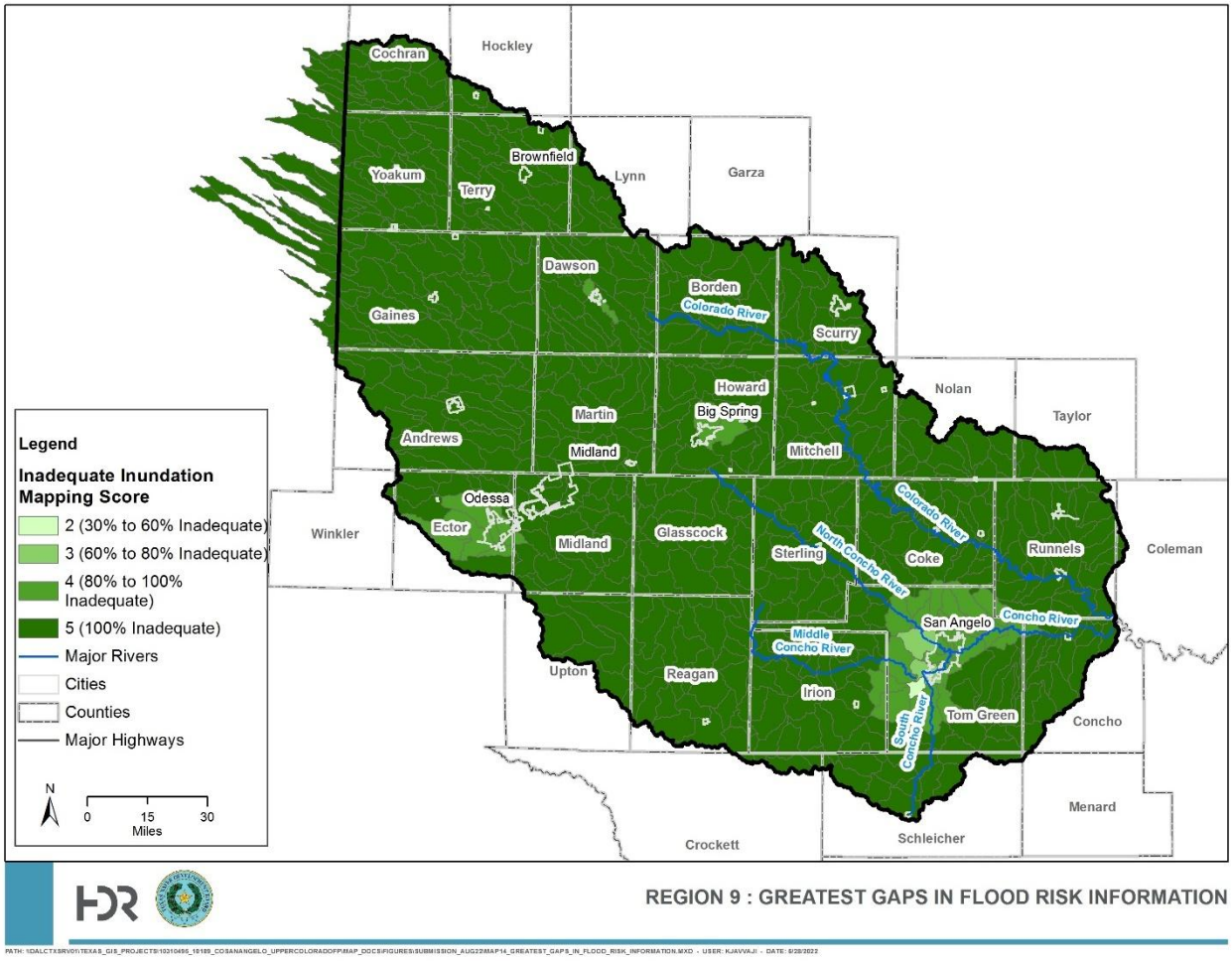


Figure 8-1. Flood Risk Knowledge Gaps

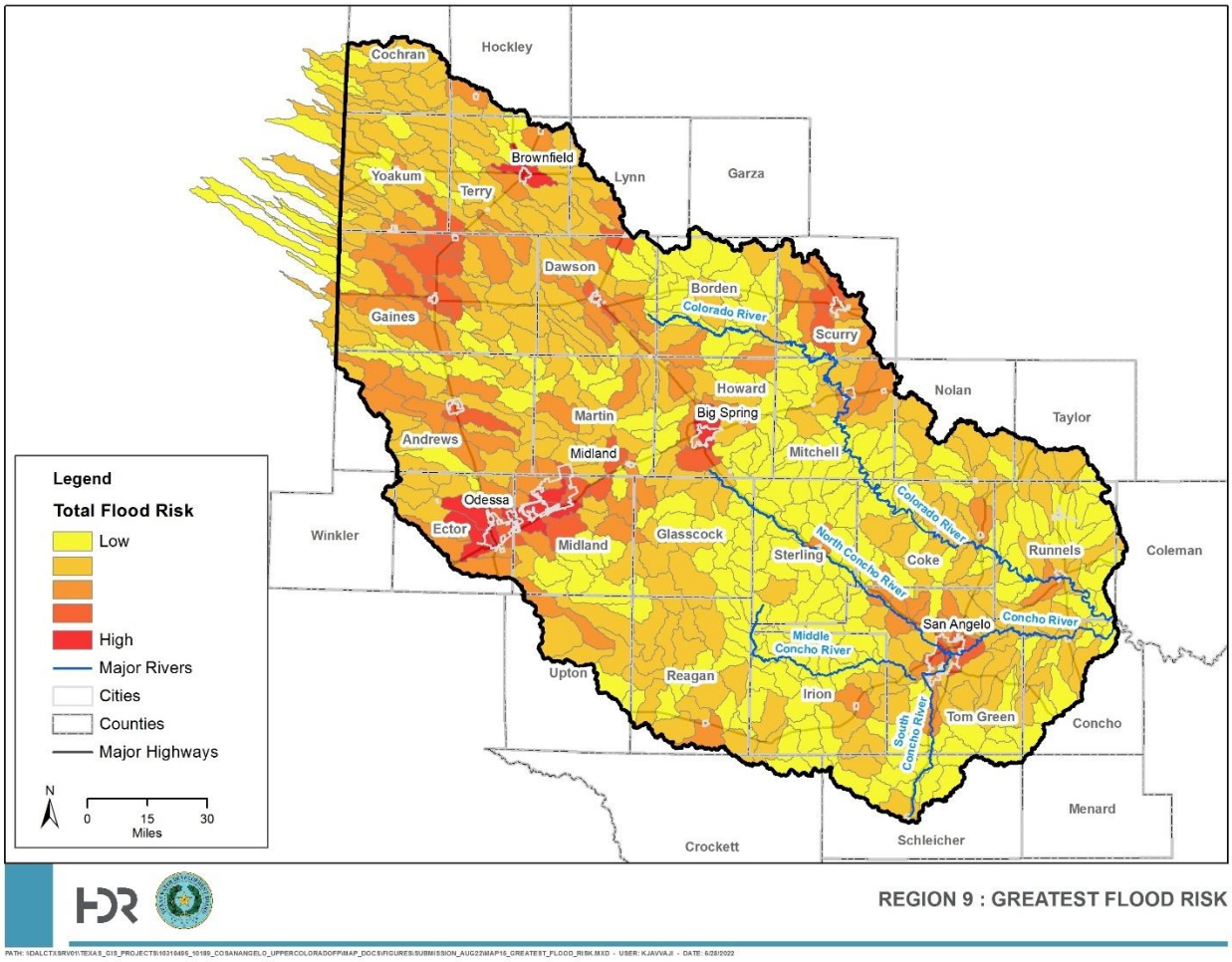


Figure 8-2. Areas of Greatest Known Flood Risk

9 Adopted Flood Mitigation and Floodplain Management Goals

As requested in Section 2.4.B of the Exhibit C Technical Guidance, this section describes:

1.g - The flood mitigation and floodplain management goals adopted by the RFPG per §361.36

The Regional Flood Planning Group is to define overarching flood mitigation and floodplain management goals for the Flood Planning Area. These goals will serve as a guide to the overall approach and recommendations in the plan.

The overarching goal is "to protect against the loss of life and property" as set forth in the Guidance Principles in 31 TAC §362.3. Other overarching goals defined are "enhancing floodplain management and "funding" within the Flood Planning Area.

The goals must be specific and achievable flood mitigation and floodplain management goals that when implemented will demonstrate progress towards the overarching goal. Both short-term goals (10 years) and long-term goals (30 years) were be identified. One additional goal (NFIP Participation) was identified during the current cycle (Cycle 2) of flood planning. This goal will correspond to multiple FMEs already included in the plan.

The following were considered in the development of the goals:

- Guidance Principles as listed in 31 TAC §362.3
- The existing and future condition flood risk analyses
- Consideration of current floodplain management and land use approaches
- Understanding of the residual risk of each goal (i.e. the remaining risk)

Table 8-1 below summarizes the Region 9 Flood Mitigation and Floodplain Management Goals and **Table 8-2** on the next page provides a detailed description of term and applicability of the goals adopted by the Regional Flood Planning Group.

Table 8-1. Overall Region 9 Flood Planning Goals

Goal	Adopted Goal	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 High Hazard Dams that are Non-Functional or Deficient	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	10% Communities & 5% Counties	20% Communities & 10% Counties
6	Environmental Stewardship	25% of FM Projects include nature based	50% of FM Projects include nature based

Goal	Adopted Goal	10 Year	30 Year
7	NFIP Participation	90% Communities & 90% Counties	100% Communities & 100% Counties

Table 8-2. Adopted Flood Management Goals

Goal ID	Goal Name	Description	Term	Target Year	Applicability
09000001	Evaluations to Confirm Flood Risk	Study watersheds containing 50% of Existing Structures in Approximate Flood Risk Boundaries	Short Term (10 year)	2023	Entire RFPG
09000002	Evaluations to Confirm Flood Risk	Study watersheds containing 100% of Existing Structures in Approximate Flood Risk Boundaries	Long Term (30 year)	2053	Entire RFPG
09000003	Reduce Structures in 1% Existing Floodplain	Remove 20% of Existing Structures in Detailed Floodplains	Short Term (10 year)	2023	Entire RFPG
09000004	Reduce Structures in 1% Existing Floodplain	Remove 50% of Existing Structures in Detailed Floodplains	Long Term (30 year)	2053	Entire RFPG
09000005	Improve Safety at Low Water Crossings and Dams	Eliminate or Mitigate 20% of Low Water Crossings	Short Term (10 year)	2023	Entire RFPG
9000006	Improve Safety at Low Water Crossings and Dams	Eliminate or Mitigate 50% of Low Water Crossings	Long Term (30 year)	2053	Entire RFPG
09000007	Improve Safety at Low Water Crossings and Dams	Assess 100% of High Hazard Dams	Short Term (10 year)	2023	Entire RFPG
09000008	Improve Safety at Low Water Crossings and Dams	Rehabilitate 50% of Non-Functional or Deficient High Hazard Dams	Short Term (10 year)	2023	Entire RFPG
09000009	Improve Safety at Low Water Crossings and Dams	Rehabilitate 100% of Non-Functional or Deficient High Hazard Dams	Long Term (30 year)	2053	Entire RFPG
09000010	Improved Standards (NFIP or Equivalent)	Increase to 90% of Cities and 90% of Counties with NFIP or Equivalent Standards	Short Term (10 year)	2023	Entire RFPG
09000011	Improved Standards (NFIP or Equivalent)	Increase to 100% of Cities and 100% of Counties with NFIP or Equivalent Standards	Long Term (30 year)	2053	Entire RFPG
09000012	Dedicated Funding Sources	Increase to 10% of Cities and 5% of Counties with Funding Sources Dedicated to Drainage	Short Term (10 year)	2023	Entire RFPG
09000013	Dedicated Funding Sources	Increase to 20% of Cities and 10% of Counties with Funding Sources Dedicated to Drainage	Long Term (30 year)	2053	Entire RFPG

Table 8-2. Adopted Flood Management Goals

Goal ID	Goal Name	Description	Term	Target Year	Applicability
09000014	Environmental Stewardship	25% of Recommended FM Projects to include nature-based components	Short Term (10 year)	2023	Entire RFPG
09000015	Environmental Stewardship	50% of Recommended FM Projects to include nature-based components	Long Term (30 year)	2053	Entire RFPG
09000016	NFIP Participation	Increase to 90% of City and 90% of County participation in the FEMA NFIP program	Short Term (10 year)	2028	Entire RFPG
09000017	NFIP Participation	Increase to 100% of City and 100% of County participation in the FEMA NFIP program	Long Term (30 year)	2058	Entire RFPG

10 Documented Process to Identify Feasible Flood Projects and Strategies

As requested in Section 2.4.B of the Exhibit C Technical Guidance, this section describes:

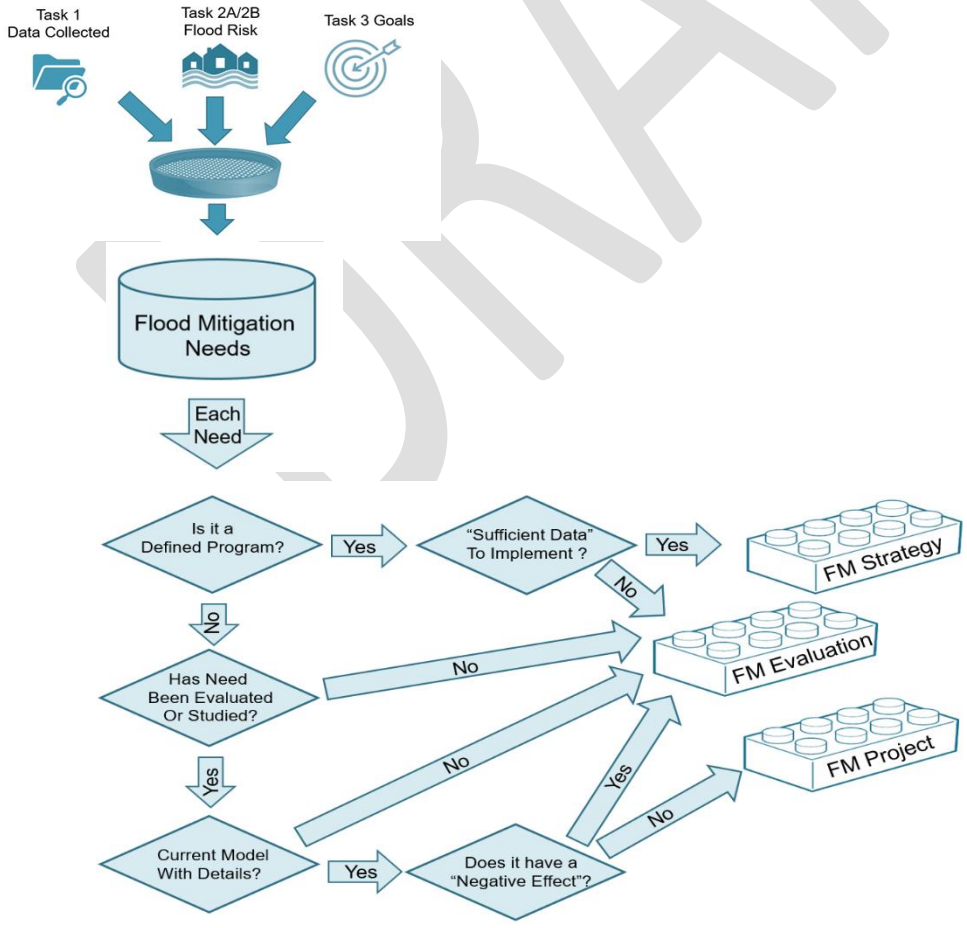
1.h - The documented process used by the RFPG to identify potentially feasible FMSs and FMPs

The process for identifying potential Flood Management Evaluations, Strategies, and Projects for the 2023 Upper Colorado Regional Flood Plan was presented at the Regional Food Planning Meeting on October 7, 2021. The process approved by the Region 9 RFPG is shown in **Figure 9-1**.

In Task 1 the available flood related reports were collected, including the master drainage plans, Section 205 Flood Reconnaissance Studies, FIS Reports and Hazard Mitigation Plans. The Existing Flood Risk and Vulnerability data was processed for each HUC-12 sub-watershed, which were ranked on a series of 10 criteria to identify the areas with the highest flood mitigation needs.

This data was combined with the Regional Goals described in Section 7 to develop a set of Flood Mitigation Needs, each of which was classified into a FM Strategy, FM Evaluation or FM Project based on the flowchart below.

Figure 9-1. Region 9 Identification Process Flowchart



11 Potential Flood Evaluations and Potential Feasible Flood Projects and Strategies

As requested in Section 2.4.B of the Exhibit C Technical Guidance, this section describes:

1.i - A list of potential FMEs and potentially feasible FMSs and FMPs identified by the RFPG, if any

A list of potential Flood Management Evaluations (FMEs) and potentially feasible Flood Mitigation Strategies (FMSs) and Flood Mitigation Projects (FMPs) has been prepared by the Regional Flood Planning Group. The associated tables are provided in **Appendix A-2, A-3,** and **A-4**.

The list was obtained by reviewing a list of projects funding through the TWDB Flood Infrastructure Fund (FIF), stakeholder engagement, and through the review of relevant studies.

The definitions for FMEs, FMPs, and FMSs are as follows:

A Flood Management Evaluation (FME) is a proposed flood study of a specific, flood-prone area that is needed in order to assess flood risk and/or determine whether there are potentially feasible FMSs or FMPs. Types of FMEs include:

- Watershed Planning
  - Hydrologic and hydraulic modeling
  - Flood mapping updates
  - Regional watershed studies
- Engineering Project Planning
  - Feasibility assessments
  - Preliminary engineering
  - Studies on flood preparedness

A Flood Mitigation Project (FMP) is a proposed project, either structural or non-structural, that has non-zero capital costs or other non-recurring cost and when implemented will reduce flood risk, mitigate flood hazards to life or property. The RFPGs are strongly encouraged to consider nature-based flood risk reduction solutions in their overall approach. Types of FMPs include:

- Structural Flood Mitigation Projects
  - Low water crossings or bridge improvements
  - Stormwater infrastructure (channels, ditches, ponds, storm drains)
  - Regional detention
  - Reservoirs
  - Dam improvements, maintenance and repair
  - Flood walls / levees
  - Coastal protections

  - Natural based projects (i.e. living levees, increasing storage, increasing channel roughness, increasing losses, de-synchronizing peak flows, dune management, river restoration, riparian restoration, run-off pathway management, wetland restoration, Low Impact Development, Green Infrastructure)
  - Comprehensive regional project – includes a combination of projects intended to work together
- Non-Structural Flood Mitigation Projects
  - Property or easement acquisition
  - Elevation of individual structures
  - Flood readiness and resilience
  - Flood early warning systems
  - Regulatory requirements for reduction of flood risk

A Flood Management Strategy (FMS) is a proposed plan to reduce flood risk or mitigate flood hazards to life or property. A FMS may or may not require associated FMPs to be implemented. FMS at a minimum to include any proposed action that the group would like to identify, evaluate, and recommend that does not qualify as either a FME or FMP.

The proposed process for identifying potential Flood Management Evaluations, Strategies, and Projects for the 2023 Upper Colorado Regional Flood Plan can be found under Section 8 - Documented Process to Identify Feasible Flood Projects and Strategies.

Table 10-1 below provides a summary of the listed FMEs, FMPs, and FMSs in each goal category, and **Table 10-2** on the next page summarizes the listed FMEs, FMPs, and FMSs by county.

Table 10-1. FMPs, FMEs, FMSs by Goals (as of 11/2025)

Goal	Goal Description	FMPs	FMEs	FMSs
1	Evaluations to Confirm Flood Risk	0	96	12
2	Reduce Structures in 1% Existing Flood inundation	18	31	15
3	Improve Safety at Low Water Crossings and Dams	2	16	18
4	Improved Standards (NFIP or Equivalent)	0	0	30
5	Dedicated Funding Sources	0	3	0
6	Environmental Stewardship	0	0	4
7	NFIP Participation	0	0	27
	Other (Goal ID 09000999)	0	0	34
Total	**(no overlap)**	**20**	**146**	**140**

Table 10-2. FMPs, FMEs, FMPs by County (as of 11/2025)

County	Flood Mitigation Projects	Flood Management Evaluations	Flood Management Strategies
Andrews County	2	5	3
Borden County	0	1	2
Cochran County	0	2	5
Coke County	0	3	4
Concho County	0	3	5
Crockett County	0	3	3
Dawson County	0	5	3
Ector County	0	7	4
Gaines County	0	3	3
Glasscock County	0	3	2
Hockley County	0	3	1
Howard County	0	4	2
Irion County	0	5	7
Lynn County	0	2	2
Martin County	0	3	2
Midland County	12	9	9
Mitchell County	0	7	13
Nolan County	0	5	4
Reagan County	0	4	8
Runnells County	0	4	10
Schleicher County	0	3	5
Scurry County	0	6	7
Sterling County	0	4	5
Taylor County	0	6	7
Terry County	0	4	4
Tom Green County	6	26	3
Upton County	0	3	2
Yoakum County	0	2	2
Multiple Counties	0	11	13
Total (no overlap)	20	146	140

12 Identified Flood Projects and Strategies determined Infeasible

As requested in Section 2.4.B of the Exhibit C Technical Guidance, this section describes:

> ***1.j - A list of FMSs and FMPs that were identified but determined by the RFPG to be infeasible, including the primary reason for it being infeasible.***

At this time no FMSs, FMEs or FMPs have been determined to be infeasible by the Region 9 Regional Flood Planning Group.

13 Updates to Task 10 – Adoption of Plan and Public Participation

Stakeholder outreach and public participation are important to identify and confirm flood risk and project needs in the state. The Upper Colorado Regional Flood Planning Group (Upper Colorado RFPG) has utilized a variety of methods to gather stakeholder and public feedback on the development of the flood plan for the region. For the second planning cycle, a new regional website with a standalone URL address has been developed by the HDR Team to provide a robust tool to inform and communicate with the public on the progress of the Upper Colorado Regional Flood Plan. The Upper Colorado RFPG has complied with the Texas Open Meeting Act and Public Information Act requirements during this planning cycle.

In addition, data collection efforts have been conducted with key stakeholders (e.g., community and county representatives) and the public through an online survey. The Upper Colorado RFPG Community Survey included over 40 questions, data requests, and interactive maps addressing a variety of topics and information relevant to regional flood planning. The HDR Team also reached out directly via phone calls and emails to key stakeholders, including representatives from 32 counties and over 36 cities, to gather any missing data and/or to further clarify information. The Upper Colorado RFPG received a response rate to the community survey of approximately 52%.

The Upper Colorado RFPG continues to hold public meetings on a regular basis to discuss project tasks, as well as provide an opportunity for public comment at the beginning of each meeting. In addition to the online survey, the Upper Colorado RFPG conducted a public workshop with an ‘open house’ format on September 9, 2025, at the Permian Basin Regional Planning Commission (Permian Basin RPC) in the City of Midland. Phone calls were made in advance to key cities and counties located nearby to encourage their attendance.

The format of the interactive workshop allowed attendees an opportunity to visit with the HDR Team and TWDB staff and to provide feedback at each of the following workshop stations:

- Station 1: Goals and Overview of Region 9–Upper Colorado
- Station 2: TWDB – State Flood Plan and Funding Programs
- Station 3: Base Level Engineering Demonstration
- Station 4: Flooding Issues Identification

- Station 5: FMX List Review

A rolling presentation was shown on multiple side screens in the meeting room throughout the duration of event, which provided highlights of the Upper Colorado Regional Flood Plan and State/Regional flood planning process. Also, an informational handout about the regional flood planning process, including the new Upper Colorado RFPG website and email address, was provided to the attendees at the sign-in table. Questions from the public were addressed at each of the five workshop stations. Over thirty people attended the workshop, including representatives from seven cities, five counties, TxDOT, National Weather Service, and the Permian Basin RPC.

Appendix A-1

Exhibit C, Table 6
Existing Floodplain Management Practices

Exhibit C – Table 6 - Existing Floodplain Management Practices

Entity	Entity Population [A]	Floodplain management regulations (Yes/ No/ Unknown)	Adopted minimum regulations pursuant to Texas Water Code Section 16.3145? (Yes/ No)	NFIP Participant (Yes/ No)	Higher Standards Adopted (Yes/ No)	Floodplain Management Practices (Strong/ Moderate/ Low/None)[A]	Level of enforcement of practices (High/ Moderate/ Low/ None)[C]	Existing Stormwater or Drainage Fee (Yes/No)	Web Link to entity regulations
Andrews County	18923	Unknown	No	No	No	None	Moderate	No	Unknown
Borden County	557	Yes	Yes	Yes	No	Low	Low	No	Unknown
Cochran County	2583	Yes	Yes	Yes	No	Low	None	No	Unknown
Coke County	3396	Yes	Yes	Yes	No	Low	None	No	Unknown
Coleman County	7990	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Concho County	3326	Yes	Yes	Yes	No	Low	None	No	Unknown
Crockett County	2799	Yes	Yes	Yes	No	Low	Low	No	Unknown
Dawson County	11758	Unknown	No	NO	No	None	Unknown	No	Unknown
Ector County	170022	Yes	Yes	Yes	No	Low	Low	No	Unknown
Gaines County	22892	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Garza County	4645	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Glasscock County	1153	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Hockley County	21505	Yes	Yes	Yes	No	Low	None	No	Unknown
Howard County	30833	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Irion County	1526	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Lynn County	5952	Unknown	No	No	Yes	Moderate	None	No	Unknown
Martin County	5179	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Menard County	1911	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Midland County	183587	Yes	Yes	Yes	No	Low	Low	No	Midland County website, public works home page
Mitchell County	8968	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Nolan County	14182	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Reagan County	3139	Yes	Yes	Yes	No	Low	None	No	Unknown
Runnels County	9751	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Schleicher County	2302	Yes	Yes	Yes	No	Low	None	No	Unknown
Scurry County	16211	Unknown	No	NO	No	None	Unknown	No	Unknown
Sterling County	1387	Yes	Yes	Yes	No	Low	None	No	Unknown
Taylor County	148813	Yes	Yes	Yes	Yes	Moderate	Moderate	No	https://www.taylorcounty.texas.gov/DocumentCenter/View/3587/Subdivision-Development-Procedures--Regulations
Terry County	11602	Yes	Yes	Yes	No	Low	Moderate	No	Unknown
Tom Green County	120103	Yes	Yes	Yes	Yes	Low	High	No	Unknown
Upton County	3128	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Winkler County	7381	Unknown	No	No	No	None	Unknown	No	Unknown

Entity	Entity Population [A]	Floodplain management regulations (Yes/ No/ Unknown)	Adopted minimum regulations pursuant to Texas Water Code Section 16.3145? (Yes/ No)	NFIP Participant (Yes/ No)	Higher Standards Adopted (Yes/ No)	Floodplain Management Practices (Strong/ Moderate/ Low/None)[A]	Level of enforcement of practices (High/ Moderate/ Low/ None)[C]	Existing Stormwater or Drainage Fee (Yes/No)	Web Link to entity regulations
Yoakum County	7581	Yes	Yes	No	No	Low	Moderate	No	Unknown
Ackerly	254	Unknown	No	No	No	None	Unknown	No	Unknown
Andrews	13502	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Ballinger	3581	Yes	Yes	Yes	Yes	Low	Unknown	No	Unknown
Big Lake	2753	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Big Spring	22373	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Bronte	959	Unknown	No	No	No	None	Unknown	No	Unknown
Brownfield	8652	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Coahoma	902	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Colorado City	3987	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Denver City	4301	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Eldorado	1548	Unknown	No	No	No	None	Unknown	No	Unknown
Forsan	215	Unknown	No	No	No	None	Unknown	No	Unknown
Goldsmith	226	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Lamesa	8266	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Los Ybanez	21	Unknown	No	No	No	None	Unknown	No	Unknown
Mertzon	766	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Midland	138397	Yes	Yes	Yes	Yes	Strong	Medium	No	Unknown
Miles	923	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
New Home	343	Yes	Yes	Yes	No	Low	None	No	Unknown
Odessa	115743	Yes	Yes	Yes	Yes	Strong	Medium	Yes	https://www.odessa-tx.gov/183/Stormwater https://www.odessa-tx.gov/DocumentCenter/View/5227/Ordinance-Stormwater-Discharge-Fee-PDF
O'Donnell	724	Unknown	No	NO	No	None	Unknown	No	Unknown
Plains	1328	Unknown	No	No	No	None	Unknown	No	Unknown
Robert Lee	1037	Yes	Yes	Yes	No	Low	None	No	Unknown
San Angelo	99262	Yes	Yes	Yes	Yes	Low	Unknown	No	Unknown
Seagraves	2227	Yes	Yes	Yes	No	Low	Low	No	Unknown
Seminole	7231	Unknown	No	No	No	None	Unknown	No	Unknown
Snyder	11187	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Stanton	2654	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Sterling City	1138	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Sundown	1292	Unknown	No	No	No	None	Unknown	No	Unknown
Trent	294	Yes	Yes	Yes	No	Low	None	No	Unknown

Entity	Entity Population [A]	Floodplain management regulations (Yes/ No/ Unknown)	Adopted minimum regulations pursuant to Texas Water Code Section 16.3145? (Yes/ No)	NFIP Participant (Yes/ No)	Higher Standards Adopted (Yes/ No)	Floodplain Management Practices (Strong/ Moderate/ Low/None)[A]	Level of enforcement of practices (High/ Moderate/ Low/ None)[C]	Existing Stormwater or Drainage Fee (Yes/No)	Web Link to entity regulations
Westbrook	205	Unknown	No	NO	No	None	Unknown	No	Unknown
Winters	2319	Yes	Yes	Yes	No	Low	Unknown	No	Unknown
Blackwell	252	Unknown	No	NO	No	None	Unknown	No	Unknown
Loraine	508	Unknown	No	NO	No	None	Unknown	No	Unknown
Meadow	613	Unknown	No	NO	No	None	Unknown	No	Unknown
Paint Rock	241	Unknown	No	NO	No	None	Unknown	No	Unknown
Wellman	226	Unknown	No	No	No	None	Unknown	No	Unknown
TxDOT	Unknown	Unknown	No	No	No	None	Moderate	No	Unknown
Upper Colorado River Authority	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Colorado River MWD	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Brazos River Authority	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Central Colorado River Authority	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Lower Colorado River Authority	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Canadian River Municipal Water Authority	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Concho Valley Council of Governments	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Permian Basin Regional Planning Commission	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
South Plains Association of Governments	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
West Central Texas Council of Governments	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Coke County Kickapoo WCID 1	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Ector County Utility District	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Gaines County SWMD	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Howard County WCID 1	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Martin County FWSD 1	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Midland County FWSD 1	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Midland County Utility District	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Downtown Midland Management District	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown

Entity	Entity Population [A]	Floodplain management regulations (Yes/ No/ Unknown)	Adopted minimum regulations pursuant to Texas Water Code Section 16.3145? (Yes/ No)	NFIP Participant (Yes/ No)	Higher Standards Adopted (Yes/ No)	Floodplain Management Practices (Strong/ Moderate/ Low/None)[A]	Level of enforcement of practices (High/ Moderate/ Low/ None)[C]	Existing Stormwater or Drainage Fee (Yes/No)	Web Link to entity regulations
Nolan County FWSD 1	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Reagan County WSD	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Red Creek MUD	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Salt Fork Water Quality District	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Tom Green County FWSD 1	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Tom Green County FWSD 2	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Tom Green County FWSD 3	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Tom Green County WCID 1	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Upton County Water District	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Valley Creek Water Control District	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown
Willow Creek Water Control District	Unknown	Unknown	No	No	No	None	Unknown	No	Unknown

[A] RFPGs should report the overall population of the entity regardless of whether the entity crosses regional boundaries.

[B] The following may serve as a guide for evaluating practices:

None (no floodplain management practices in place);

Low (regulations meet the minimum NFIP standards);

Moderate (some higher standards, such as freeboard, detention requirements, or fill restrictions);

Strong (e.g., significant regulations that exceed NFIP standard with enforcement, or community belongs to the Community Rating System).

[C] The following may serve as a guide for evaluating enforcement:

high – actively enforces the entire ordinance, performs many inspections throughout construction process, issues fines, violations, and Section 1316s where appropriate, and enforces substantial damage and substantial improvement;

moderate – enforces much of the ordinance, performs limited inspections and is limited in issuance of fines and violations;
low – provides permitting of development in the floodplain, may not perform inspections, may not issue fines or violations;

none – does not enforce floodplain management regulations.

Appendix A-2

Exhibit C, Table 12
Potential Flood Management Evaluations
Identified by the
Regional Flood Planning Group

Table 12. Identified Flood Management Evaluations*

FME ID	FME Name	Description	County	Watersheds[A]	FME Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources	Potential Funding Amount	Estimated number of structures at 1% annual flood risk[B]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Number of low water crossings in project area at annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road segment closures (#)	Estimated farm & ranch land at 1% annual flood risk (acres)
091000001	Andrews County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Andrews		Watershed Planning	1495.20	Riverine, Local	Andrews County	000151,00000152,00000154,09000174,00000272,09001828,09002972	No	$500,000			959	763	1455	0	3	173.2	0	8416.517
091000002	Andrews County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Andrews		Watershed Planning	1495.20	Riverine, Local	Andrews County	000151,00000152,00000154,09000174,00000272,09001828,09002972	No	$1,288,000			959	763	1455	0	3	173.2	0	8416.517
091000003	Andrews County GIS Development	Develop GIS an inventory of stormwater infrastructure	Andrews		Other	1495.20	Riverine, Local	Andrews County	000151,00000152,00000154,09000174,00000272,09001828,09002972	No	$100,000			959	763	1455	0	3	173.2	0	8416.517
091000004	Borden FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Borden		Watershed Planning	902.98	Riverine, Local, Playa	Borden County	000117,00000172,09000173,09000174,00000183,00000184,00000272,00000275,00000278,00	No	$887,000			69	9	20	0	2	26.1	0	10740.18
091000005	City of Big Lake FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Reagan		Watershed Planning	2.38	Riverine, Local	Big Lake	09003500	No	$31,000			75	53	110	0	2	2.4	0	5.194128
091000006	City of Blackwell Storm Drain and Culvert Improvements Stud	Proposed project planning for upgrading undersized stormwater drains and culverts.	Nolan		Project Planning	0.59	Riverine, Local	Blackwell	000261,00000278,00000284,09000499,09000852,09002581	No	$300,000			9	3	14	0	0	0.5	0	0.07071
091000007	City of Brownfield DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Terry		Watershed Planning	6.54	Riverine, Local	Brownfield	00000205,00000275,00000308,09003111	No	$250,000			245	125	537	0	1	17.8	0	416.09
091000008	City of Colorado City DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Mitchell		Watershed Planning	5.31	Riverine, Local, Playa	Colorado City	00000172,00000278,09003443	No	$250,000			143	93	252	2	1	10.1	0	55.57276
091000009	City of Lamesa DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Dawson		Watershed Planning	4.72	Riverine, Local	Dawson County	000118,09000173,09000174,00000184,00000205,00000272,00000275,00000295,00000308,09001828,09002888,09000	No	$250,000			185	0	551	0	6	11.9	0	82.95412
091000010	City of Loraine Kindred St Detention Project	Identify scope of detention project on Kindred Street. Offsite detention and property buyout required in order to handle runoff from culvert project identification on Kinder Street. Implement the most cost-effective solution to reduce or eliminate floodin	Mitchell		Other	0.01		Loraine	00000172,00000278,09003448	Yes	$25,000			0	0	0	0	0	0.0	0	0
091000011	City of Odessa Buyout Program Study	In Muskingum Draw floodplain between 8th Street and University Boulevard, numerous homes and small businesses (approximately 400) are subject to damage from flooding. Proposed evaluation of potential buyout project.	Midland,Ector		Project Planning	44.26	Riverine, Local	Odessa	00000151,00000152,00000272,09000288,09002836	Yes	$411,700			6574	5476	24528	10	26	154.6	0	26.06533
091000012	City of Odessa DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Ector		Project Planning	44.26	Riverine, Local	Odessa	000272,09000288,09002836	No	$750,000			6574	5476	24528	10	26	154.6	0	26.06533
091000013	City of Odessa FEMA Mapping	Prepare Comprehensive Floodplain and Drainage Study for the City of Odessa. Determine BFE in currently identified A zones on FEMA maps.	Ector,Midland		Watershed Planning	51.15	Riverine, Local	Odessa	000272,09000288,09001698,09002836,09002838	No	$192,000			6774	5481	25522	10	26	167.1	0	46.26301
091000014	City of O'Donnell DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Lynn,Dawson		Watershed Planning	0.86	Riverine, Local	O'Donnell	000272,00000275,00000295,00000308,09003482	No	$250,000			284	184	246	1	0	9.7	0	394.4998
091000015	City of Snyder DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Scurry		Watershed Planning	8.32	Riverine, Local, Playa	Snyder	000170,00000172,00000183,00000272,00000275,00000278,09000288,00000295,00000445,09	No	$250,000			445	266	1365	1	3	20.6	0	70.46579
091000016	City of Sterling City DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Sterling		Watershed Planning	0.99	Riverine, Local	Sterling City	09000149,00000261,00000284,09002715	No	$250,000			132	90	148	0	7	5.0	0	20.74763
091000017	Cochran County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Cochran		Watershed Planning	773.56	Riverine, Local	Cochran County	000205,09000206,00000275,00000295	No	$671,000			23	12	51	0	0	144.0	0	15910.84
091000018	Cochran County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Cochran		Watershed Planning	773.56	Riverine, Local	Cochran County	00000187	No	$500,000			23	12	51	0	0	144.0	0	15910.84
091000019	Coke County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Coke		Watershed Planning	924.57	Riverine, Local, Playa	Coke County	09000147	No	$500,000			245	104	123	0	14	55.4	0	5509.607
091000020	Coke County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Coke		Watershed Planning	924.57	Riverine, Local, Playa	Coke County	000147,09000149,00000170,00000172,00000261,00000278,00000284,09000539,09002162,09002581,09002685,09000	No	$920,000			245	104	123	0	14	55.4	0	5509.607
091000021	Coke County GIS Development	Develop a GIS inventory of stormwater infrastructure	Coke		Other	924.57	Riverine, Local, Playa	Coke County	09000147	No	$100,000			245	104	123	0	14	55.4	0	5509.607
091000022	Concho County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Concho		Watershed Planning	988.88	Riverine, Local	Concho County	00000124	No	$500,000			103	52	77	0	4	23.6	0	13016.57
091000023	Concho County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Concho		Watershed Planning	988.88	Riverine, Local	Concho County	000124,09000131,00000144,00000145,00000261,00000278,00000284,00000301,00000307,09	No	$962,000			103	52	77	0	4	23.6	0	13016.57
091000024	Concho County GIS Development	Develop a GIS inventory of stormwater infrastructure	Concho		Other	988.88	Riverine, Local	Concho County	00000124	No	$100,000			103	52	77	0	4	23.6	0	13016.57
091000025	Crockett County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Crockett		Watershed Planning	2797.09	Riverine, Local	Crockett County	00000052	No	$500,000			0	0	0	0	0	0.7	0	5.348514
091000026	Crockett County FEMA Mapping	Update existing FEMA Mapping	Crockett		Watershed Planning	2797.09	Riverine, Local	Crockett County	000068,00000126,00000127,00000261,00000272,00000284,00000684	No	$985,000			0	0	0	0	0	0.7	0	5.348514
091000027	Crockett County GIS Development	Develop a GIS inventory of stormwater infrastructure	Crockett		Other	2797.09	Riverine, Local	Crockett County	00000052	No	$100,000			0	0	0	0	0	0.7	0	5.348514
091000028	Dawson County GIS Development	Develop a GIS inventory of stormwater infrastructure	Dawson		Other	898.81	Riverine, Local	Dawson County	000118,09000173,09000174,00000184,00000205,00000272,00000275,00000295,00000308,09001828,09002888,09000	No	$100,000			474	9	763	0	9	537.9	0	81984.1
091000029	Dawson County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Dawson		Watershed Planning	898.81	Riverine, Local	Dawson County	000118,09000173,09000174,00000184,00000205,00000272,00000275,00000295,00000308,09001828,09002888,09000	No	$500,000			474	9	763	0	9	537.9	0	81984.1
091000030	Dawson County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Dawson		Watershed Planning	898.81	Riverine, Local	Dawson County	000118,09000173,09000174,00000184,00000205,00000272,00000275,00000295,00000308,09001828,09002888,09000	No	$812,000			474	9	763	0	9	537.9	0	81984.1
091000031	Ector County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Ector		Watershed Planning	899.61	Riverine, Local	Ector County	000151,00000152,00000154,00000272,09000288,00000684,09001698,09002836,09003576	No	$500,000			13045	10079	31733	13	34	306.5	0	168.5142
091000032	Ector County GIS Development	Develop a GIS inventory of stormwater infrastructure	Ector		Other	899.61	Riverine, Local	Ector County	000151,00000152,00000154,00000272,09000288,00000684,09001698,09002836,09003576	No	$100,000			13045	10079	31733	13	34	306.5	0	168.5142
091000033	Ector County Buyout Program Study	In the area of 61st Street and Benefield, Florida in north western area of county, structures have experienced repetitive losses from flooding. Proposed evaluation of potential mitigation project.	Ector		Project Planning	899.61	Riverine, Local	Ector County	00000102,00000152,00000154,00000272,09000288,09001698,09002836,09003576	Yes	$100,000			13045	10079	31733	13	34	306.5	0	168.3893

Table 12. Identified Flood Management Evaluations*

FME ID	FME Name	Description	County	Watersheds[A]	FME Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources	Potential Funding Amount	Estimated number of structures at 1% annual flood risk[B]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Number of low water crossings in project area at annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road segment closures (#)	Estimated farm & ranch land at 1% annual flood risk (acres)
091000034	Ector County FEMA Mapping	Update existing FEMA Mapping.	Ector		Watershed Planning	899.61	Riverine, Local	Ector County	000151,00000152,00000154,00000272,09000288,00000684,09001698,09002836,09003576	No	$857,000			13045	10079	31733	13	34	306.5	0	168.5142
091000035	Ector County Stormwater Contaminant Study	Conduct a study to determine pollutant levels in County areas nearby sewer system for level of contaminants before and after a flood event.	Ector		Preparedness	899.61	Riverine, Local	Ector County	000151,00000152,00000154,00000272,09000288,00000684,09001698,09002836,09003576	No	$100,000			13045	10079	31733	13	34	306.5	0	168.5142
091000036	Gaines County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Gaines		Watershed Planning	1497.58	Riverine, Local	Gaines County	000118,09000174,00000205,09000206,00000272,00000275,09001828,09002681,09002684,09	No	$500,000			1890	814	2654	1	5	434.3	0	147852.4
091000037	Gaines County GIS Development	Develop a GIS inventory of stormwater infrastructure	Gaines		Other	1497.58	Riverine, Local	Gaines County	000118,09000174,00000205,09000206,00000272,00000275,09001828,09002681,09002684,09	No	$100,000			1890	814	2654	1	5	434.3	0	147852.4
091000038	Gaines County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Gaines		Watershed Planning	1497.58	Riverine, Local	Gaines County	000118,09000174,00000205,09000206,00000272,00000275,09001828,09002681,09002684,09	No	$1,272,000			1890	814	2654	1	5	434.3	0	147852.4
091000039	Glasscock County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Glasscock		Watershed Planning	897.15	Riverine, Local, Playa	Glasscock County	09000150	No	$500,000			141	3	74	0	0	33.8	0	26320.96
091000040	Glasscock County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Glasscock		Watershed Planning	897.15	Riverine, Local, Playa	Glasscock County	000149,09000150,00000151,09000173,09000174,00000261,00000272,00000684,00001240	No	$845,000			141	3	74	0	0	33.8	0	26320.96
091000041	Glasscock County GIS Development	Develop a GIS inventory of stormwater infrastructure	Glasscock		Other	897.15	Riverine, Local, Playa	Glasscock County	09000150	No	$100,000			141	3	74	0	0	33.8	0	26320.96
091000042	Hockley County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Hockley		Watershed Planning	906.67	Riverine, Local	Hockley County	00000186	No	$500,000			44	18	1553	3	2	42.3	0	1395.676
091000043	Hockley County FEMA Mapping	Update existing FEMA Mapping	Hockley		Watershed Planning	906.67	Riverine, Local	Hockley County	000187,00000205,00900206,00000275,00000295,00000308,09003169	No	$987,000			44	18	1553	3	2	42.3	0	1395.676
091000044	Hockley County GIS Development	Develop a GIS inventory of stormwater infrastructure	Hockley		Other	906.67	Riverine, Local	Hockley County	000187,00000205,00900206,00000275,00000295,00000308,09003169	No	$100,000			44	18	1553	3	2	42.3	0	1395.676
091000045	Howard County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Howard		Watershed Planning	900.69	Riverine, Local, Playa	Howard County	000149,09000150,00000172,09000173,09000174,00000261,00000272,00000278,00000284,09000288,09001680,0900	No	$500,000			1372	662	4038	2	20	196.1	0	37027.93
091000046	Howard County GIS Development	Develop a GIS inventory of stormwater infrastructure	Howard		Other	900.69	Riverine, Local, Playa	Howard County	000149,09000150,00000172,09000173,09000174,00000261,00000272,00000278,00000284,09000288,09001680,0900	No	$100,000			1372	662	4038	2	20	196.1	0	37027.93
091000047	Howard County FEMA Mapping	Update existing FEMA Mapping	Howard		Watershed Planning	900.69	Riverine, Local, Playa	Howard County	000149,09000150,00000172,09000173,09000174,00000261,00000272,00000278,00000284,09000288,09001680,0900	No	$896,000			1372	662	4038	2	20	196.1	0	37027.93
091000048	Irion County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Irion		Watershed Planning	1047.45	Riverine, Local	Irion County	09000068	No	$500,000			354	104	181	0	8	47.8	0	2460.404
091000049	Irion County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Irion		Watershed Planning	1047.45	Riverine, Local	Irion County	000068,00000126,00900131,00000261,00000284,00001240,09002400	No	$962,000			354	104	181	0	8	47.8	0	2460.404
091000050	Irion County GIS Development	Develop a GIS inventory of stormwater infrastructure	Irion		Other	1047.45	Riverine, Local	Irion County	09000068	No	$100,000			354	104	181	0	8	47.8	0	2460.404
091000051	Lynn County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Lynn		Watershed Planning	890.17	Riverine, Local	Lynn County	000183,00000184,00000186,00000205,00000272,00000275,00000295,00000308,00000445,09	No	$500,000			340	204	347	1	0	152.0	0	25468.81
091000052	Lynn County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Lynn		Watershed Planning	890.17	Riverine, Local	Lynn County	000183,00000184,00000186,00000205,00000272,00000275,00000295,00000308,00000445,09	No	$780,000			340	204	347	1	0	152.0	0	25468.81
091000053	Martin County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Martin		Watershed Planning	912.08	Riverine, Local	Martin County	000117,09000118,09000150,00000151,09000173,09000174,00000272,09000405,09002738,09	No	$500,000			902	451	1987	3	5	229.1	0	60436.15
091000054	Martin County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Martin		Watershed Planning	912.08	Riverine, Local	Martin County	000117,09000118,09000150,00000151,09000173,09000174,00000272,09000405,09002738,09	No	$788,000			902	451	1987	3	5	229.1	0	60436.15
091000055	Martin County GIS Development	Develop a GIS inventory of stormwater infrastructure	Martin		Other	912.08	Riverine, Local	Martin County	000117,09000118,09000150,00000151,09000173,09000174,00000272,09000405,09002738,09	No	$100,000			902	451	1987	3	5	229.1	0	60436.15
091000056	Midland County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Midland		Watershed Planning	898.32	Riverine, Local	Midland County	000127,09000150,00000151,00000152,09000174,00000272,09000288,00000684,09000692,09001049,09002050,0900	No	$500,000			8432	5663	23148	22	28	289.5	0	8596.422
091000057	Midland County FEMA Mapping	Update existing FEMA Mapping	Midland		Watershed Planning	898.32	Riverine, Local	Midland County	000127,09000150,00000151,00000152,09000174,00000272,09000288,00000684,09000692,09001049,09002050,0900	No	$926,000			8432	5663	23148	22	28	289.5	0	8596.422
091000058	Midland County GIS Development	Develop a GIS inventory of stormwater infrastructure	Midland		Other	898.32	Riverine, Local	Midland County	000127,09000150,00000151,00000152,09000174,00000272,09000288,00000684,09000692,09001049,09002050,0900	No	$100,000			8432	5663	23148	22	28	289.5	0	8596.422
091000059	Mitchell County FEMA Mapping	Update Existing FEMA Mapping	Mitchell		Watershed Planning	913.24	Riverine, Local, Playa	Mitchell County	000147,09000149,00000170,00000172,09000173,00000261,00000272,00000278,00000284,00000295,00000445,0900	No	$929,000			344	206	628	2	11	107.6	0	16809.28
091000060	Mitchell County GIS Development	Develop a GIS inventory of stormwater infrastructure	Mitchell		Other	913.24	Riverine, Local, Playa	Mitchell County	000147,09000149,00000170,00000172,09000173,00000261,00000272,00000278,00000284,00000295,00000445,0900	No	$100,000			344	206	628	2	11	107.6	0	16809.28

Table 12. Identified Flood Management Evaluations*

FME ID	FME Name	Description	County	Watersheds[A]	FME Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources	Potential Funding Amount	Estimated number of structures at 1% annual flood risk[B]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Number of low water crossings in project area at annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road segment closures (#)	Estimated farm & ranch land at 1% annual flood risk (acres)
091000061	Mitchell County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Mitchell		Watershed Planning	913.24	Riverine, Local, Playa	Mitchell County	000147,09000149,00000170,00000172,09000173,00000261,00000272,00000278,00000284,00000295,00000445,09000	No	$500,000			344	206	628	2	11	107.6	0	16809.28
091000062	Nolan County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Nolan		Watershed Planning	910.70	Riverine, Local, Playa	Nolan County	000147,00000168,00000170,00000172,00000261,00000278,00000284,00000295,09000499,09	No	$500,000			90	16	22	0	5	21.0	0	4147.819
091000063	Nolan County FEMA Mapping	Update existing FEMA Mapping	Nolan		Watershed Planning	910.70	Riverine, Local, Playa	Nolan County	000147,00000168,00000170,00000172,00000261,00000278,00000284,00000295,09000499,09	No	$924,000			90	16	22	0	5	21.0	0	4147.819
091000064	Nolan County GIS Development	Develop a GIS inventory of stormwater infrastructure	Nolan		Other	910.70	Riverine, Local, Playa	Nolan County	000147,00000168,00000170,00000172,00000261,00000278,00000284,00000295,09000499,09	No	$100,000			90	16	22	0	5	21.0	0	4147.819
091000065	Nolan County Buyout Program Study	Proposed evaluation of potential buyout project for repetitive loss properties in Nolan County.	Nolan		Project Planning	910.70	Riverine, Local, Playa	Nolan County	000147,00000168,00000170,00000172,00000261,00000278,00000284,00000295,09000499,09	No	$100,000			90	16	22	0	5	21.0	0	4147.819
091000066	Reagan County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Reagan		Watershed Planning	1170.90	Riverine, Local	Reagan County	00000126	No	$500,000			161	79	167	0	2	38.9	0	15439.37
091000067	Reagan County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Reagan		Watershed Planning	1170.90	Riverine, Local	Reagan County	00000126	No	$998,000			161	79	167	0	2	38.9	0	15439.37
091000068	Reagan County GIS Development	Develop a GIS inventory of stormwater infrastructure	Reagan		Other	1170.90	Riverine, Local	Reagan County	00000126	No	$100,000			161	79	167	0	2	38.9	0	15439.37
091000069	Runnels County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Runnels		Watershed Planning	1051.79	Riverine, Local	Runnels County	00000145	No	$500,000			164	41	179	1	18	124.7	0	39553.13
091000070	Runnels County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Runnels		Watershed Planning	1051.79	Riverine, Local	Runnels County	00000145	No	$1,047,000			164	41	179	1	18	124.7	0	39553.13
091000071	Runnels County GIS Development	Develop a GIS inventory of stormwater infrastructure	Runnels		Other	1051.79	Riverine, Local	Runnels County	00000145	No	$100,000			164	41	179	1	18	124.7	0	39553.13
091000072	San Angelo Goodfellow Draw Low Water Crossing Improveme	Proposed 10'x5' Box culverts beneath Era Street and Evelyn avenue and channel improvements in Goodfellow Draw to allow passage of the 25-year storm. In existing conditions, there are no culverts present (2 LWCs).	Tom Green		Project Planning	0.01	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$1,813,953			16	16	53	0	1	0.2	0	0
091000073	San Angelo Lester Lane Culvert Improvement Project	Replace existing 24"x36" CMP arch pipe under Tres Rios Drive with 5'x3' concrete box culvert.	Tom Green		Project Planning	0.01	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$195,277			0	0	0	0	0	0.0	0	0
091000074	San Angelo LWC 3	Low water crossing, street flooding. College Hills Blvd and Sunset Dr	Tom Green		Project Planning	0.02		San Angelo	09000131,00000261,00000284,09003257	Yes	$6,541,000			0	0	0	0	0	0.0	0	0
091000075	San Angelo Street Flooding 11	Upgrade, improve, and expand drainage systems throughout the city. Implementation of sediment and scour control measures.	Tom Green		Project Planning	61.91	Riverine, Local	San Angelo	000068,00000124,09000131,00000145,00000261,00000278,00000284,09000496,09000497,09000539,09000775,0900	Yes	$25,000			2587	1821	8034	6	27	93.6	0	558.4952
091000076	San Angelo Street Flooding 12	Excessive street flow, street flooding Amarillo St at 39th, Goliad	Tom Green		Project Planning	0.02	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$25,000			4	4	11	0	0	0.1	0	0
091000077	San Angelo Street Flooding 13	Heavy street flow. 23rd at Armstrong	Tom Green		Project Planning	61.91	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$25,000			2587	1821	8034	6	27	93.6	0	558.4952
091000078	San Angelo Street Flooding 14	Heavy street flow, street flooding. Robin Hood at Amistad	Tom Green		Project Planning	0.01	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$25,000			0	0	0	0	0	0.2	0	0.061551
091000079	San Angelo Street Flooding 15	Low water crossing, street flooding. Foster St. South of loop 306	Tom Green		Project Planning	0.01		San Angelo	09000131,00000261,00000284,09003257	Yes	$3,500,000			0	0	0	0	0	0.0	0	0
091000080	San Angelo Street Flooding 16	Low water crossing, street flooding. Red Bluff Rd. at Lincoln Park Rd	Tom Green		Project Planning	0.00	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$25,000			1	1	0	0	0	0.0	0	0
091000081	San Angelo Street Flooding 17	Unclear on issue. Christoval at Chadburne	Tom Green		Project Planning	0.01		San Angelo	09000131,00000261,00000284,09003257	Yes	$25,000			0	0	0	0	0	0.0	0	0
091000082	San Angelo Street Flooding 3	Street flow south of Oxford enters Red Arroyo, 3-4' deep in street	Tom Green		Project Planning	0.12	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$6,645,000			12	1	81	0	2	1.8	0	0.664265
091000083	San Angelo Sul Ross Avenue and Lindenwood Drive Culvert In	Proposed 9'x8' box culvert running underground along Sul Ross Avenue from Loop 306 to Lindenwood Drive, then along Lindenwood Drive to downstream storage. Excessive street flow, street flooding Sul Ross St. at Sunset Dr.	Tom Green		Project Planning	0.07	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	Yes	$1,037,911			4	4	52	0	1	0.6	0	0
091000084	San Angelo Sulper Draw Park Drainage Improvements	Low water crossing, street flooding. Monroe at Sulfur Draw Park. Excessive street flow, street flooding. Taylor St at Conchita St. Heavy street flow. Madison St. between Ave J to Algerita. Heavy street flow. Beauregard Ave (Campus to N Concho River)	Tom Green		Project Planning	0.46		San Angelo	09000131,00000261,00000284,09003257	No	$532,640			96	94	0	0	0	0.0	0	0
091000085	San Angelo Sunset Lake Flooding Improvement	Evaluate the increase in flood water surface. Analyize the flood pool level for Sunset Lake. Review the outlet structures, over flow points, and the excessive 70,000 cu yds of requireded dredging. Restore or improve lake levels to FEMA FIS studies.	Tom Green		Project Planning	0.29		San Angelo	09000131,00000261,00000284,09003257	Yes	$100,000			7	0	0	0	1	0.0	0	0
091000086	Schleicher County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Schleicher		Watershed Planning	1308.80	Riverine, Local	Schleicher County	00000051	No	$500,000			99	40	186	0	2	16.6	0	1263.946
091000087	Schleicher County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Schleicher		Watershed Planning	1308.80	Riverine, Local	Schleicher County	00000051	No	$1,207,000			99	40	186	0	2	16.6	0	1263.946
091000088	Schleicher County GIS Development	Develop a GIS inventory of stormwater infrastructure	Schleicher		Other	1308.80	Riverine, Local	Schleicher County	00000051	No	$100,000			99	40	186	0	2	16.6	0	1263.946
091000089	Scurry County FEMA Mapping	Update existing FEMA Mapping	Scurry		Watershed Planning	906.45	Riverine, Local, Playa	Scurry County	000170,00000172,00000183,00000272,00000275,00000278,09000288,00000295,00000445,09	No	$903,000			606	324	1486	1	10	75.9	0	11744.7
091000090	Scurry County GIS Development	Develop a GIS inventory of stormwater infrastructure	Scurry		Other	906.45	Riverine, Local, Playa	Scurry County	000170,00000172,00000183,00000272,00000275,00000278,09000288,00000295,00000445,09	No	$100,000			606	324	1486	1	10	75.9	0	11744.7
091000091	Scurry County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Scurry		Watershed Planning	906.45	Riverine, Local, Playa	Scurry County	000170,00000172,00000183,00000272,00000275,00000278,09000288,00000295,00000445,09	No	$25,000			606	324	1486	1	10	75.9	0	11744.7
091000092	Scurry County USACE Flood Study	Comprehensive study of flood risk and reduction alternatives, with the assistance of the USACE.	Scurry		Watershed Planning	8.32	Riverine, Local, Playa	Scurry County	00000116,00000278,09000288,09003309	No	$2,000,000			445	266	1365	1	3	20.6	0	70.46579
091000093	Sterling County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Sterling		Watershed Planning	919.22	Riverine, Local, Playa	Sterling County	09000149	No	$500,000			179	97	172	0	7	29.7	0	2289.666
091000094	Sterling County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Sterling		Watershed Planning	919.22	Riverine, Local, Playa	Sterling County	09000149	No	$897,000			179	97	172	0	7	29.7	0	2289.666
091000095	Sterling County GIS Development	Develop a GIS inventory of stormwater infrastructure	Sterling		Other	919.22	Riverine, Local, Playa	Sterling County	09000149	No	$100,000			179	97	172	0	7	29.7	0	2289.666
091000096	Taylor County GIS Development	Develop a GIS inventory of stormwater infrastructure	Taylor		Other	915.61	Riverine, Local	Taylor County	000168,00000170,00000278,00000284,00000295,00000307	No	$100,000			70	51	46	0	10	17.8	0	3752.044

Table 12. Identified Flood Management Evaluations*

FME ID	FME Name	Description	County	Watersheds[A]	FME Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources	Potential Funding Amount	Estimated number of structures at 1% annual flood risk[B]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Number of low water crossings in project area at annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road segment closures (#)	Estimated farm & ranch land at 1% annual flood risk (acres)
091000097	Taylor County Dam Inspection Program	Annual dam inspection, partner with SWCD to help fund repairs and maintenance, partner with property owners to report new damage or erosion, and patrol for illegal dumping at dams.	Taylor		Other	915.61	Riverine, Local	Taylor County	00000144,00000145,00000168,00000170,00000278,00000284,00000295,00000307	No	$100,000			70	51	46	0	10	17.8	0	3752.044
091000098	Taylor County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Taylor		Watershed Planning	915.62	Riverine, Local	Taylor County	000170,00000278,00000284,00000295,00000307	No	$500,000			70	51	46	0	10	17.8	0	3752.044
091000099	Taylor County FEMA Mapping	Update Existing FEMA Mapping	Taylor		Watershed Planning	915.61	Riverine, Local	Taylor County	00000168	No	$955,000			70	51	46	0	10	17.8	0	3752.044
091000100	Taylor County Repetitive Loss Properties Study	Proposed evaluation of potential mitigation project for repetitive loss properties in Taylor County.	Taylor		Project Planning	915.62	Riverine, Local	Taylor County	000170,00000278,00000284,00000295,00000307	No	$100,000			70	51	46	0	10	17.8	0	3752.044
091000101	Taylor County USACE Comprehensive Flood Risk Study	Undertake a comprehensive study of flood risk and reduction alternatives, with the assistance of the US Army Corps of Engineering. Implement feasible alternative for flood reduction. Revise flood damage prevention ordinance to include flood risk areas ide	Taylor		Watershed Planning	915.62	Riverine, Local	Taylor County	00000145,00000168,00000170,00000278,00000284,00000295,00000307	No	$2,000,000			70	51	46	0	10	17.8	0	3752.044
091000102	Terry County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Terry		Watershed Planning	887.75	Riverine, Local	Terry County	000184,00000186,00000187,00000205,09000206,00000272,00000275,00000295,00000308,09001828,09003111,09000	No	$500,000			499	183	1118	0	6	633.7	0	89576.49
091000103	Terry County FEMA Mapping	Update existing FEMA Mapping & create FEMA mapping in previously unmapped areas	Terry		Watershed Planning	887.75	Riverine, Local	Terry County	000184,00000186,00000187,00000205,09000206,00000272,00000275,00000295,00000308,09001828,09003111,09000	No	$1,011,000			499	183	1118	0	6	633.7	0	89576.49
091000104	Terry County GIS Development	Develop a GIS inventory of stormwater infrastructure	Terry		Other	887.75	Riverine, Local	Terry County	000184,00000186,00000187,00000205,09000206,00000272,00000275,00000295,00000308,09001828,09003111,09000	No	$100,000			499	183	1118	0	6	633.7	0	89576.49
091000105	Tom Green County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Tom Green		Watershed Planning	1533.92	Riverine, Local	Tom Green County	09000131	No	$500,000			5166	3373	9987	7	47	253.5	0	48794.72
091000106	Tom Green County FEMA Mapping	Update Existing FEMA Mapping	Tom Green		Watershed Planning	1533.92	Riverine, Local	Tom Green County	000068,00000124,09000131,00000145,00000261,00000278,00000284,09000496,09000497,09000539,09000775,09000	No	$1,457,000			5164	3371	9987	7	46	252.8	0	48639.63
091000107	Tom Green County GIS Development	Develop a GIS inventory of stormwater infrastructure	Tom Green		Other	1533.92	Riverine, Local	Tom Green County	09000131	No	$100,000			5166	3373	9987	7	47	253.5	0	48794.72
091000108	Town of Ballinger DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Runnels		Watershed Planning	3.40	Riverine, Local	Ballinger	00000145,00000278,00000284,09002451	No	$250,000			13	7	127	1	0	14.9	0	122.5136
091000109	Town of Loraine Drainway Project Planning	Identify scope of drainways project to remove soil caused by runoff in roadside ditches. Evaluate and study size and number of culverts to minimize drainage projects.	Mitchell		Watershed Planning	1.04	Riverine, Local, Playa	Loraine	00000172,00000278,09003448	No	$25,000			9	7	6	0	0	5.4	0	1.730034
091000110	Upper Colorado Warning System Outreach and Study	Basin-wide Study Program: Improve on Warning signs, lights, or systems.	Taylor,Nolan,Mitchell,Howard,Martin,A		Other	21171.46	Riverine, Local, Playa	Upper Colorado River Authority	000052,09000068,00000102,00000115,00000116,00000117,09000118,00000124,00000126,00000127,09000131,00000144,00000145,09000147,09000149,09000150,00000151,00000152,00000154,00000168,0000	No	$100,000			36361	23637	81195	56	255	4338.4	0	719343.1
091000111	Upton County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Upton		Watershed Planning	1235.94	Riverine, Local	Upton County	00000127	No	$500,000			41	16	23	0	1	34.1	0	6457.232
091000112	Upton County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Upton		Watershed Planning	1235.94	Riverine, Local	Upton County	00000127	No	$1,080,000			41	16	23	0	1	34.1	0	6457.232
091000113	Upton County GIS Development	Develop a GIS inventory of stormwater infrastructure	Upton		Other	1235.94	Riverine, Local	Upton County	00000127	No	$100,000			41	16	23	0	1	34.1	0	6457.232
091000114	Yoakum County DMP	Create Drainage Master Plan, including evaluation of potential mitigation projects.	Yoakum		Watershed Planning	797.70	Riverine, Local	Yoakum County	000187,00000205,00900206,00000272,00000275,09001828,09002479,	No	$500,000			543	263	776	0	2	292.3	0	65855.14
091000115	Yoakum County FEMA Mapping	Create FEMA Mapping in previously unmapped areas	Yoakum		Watershed Planning	797.70	Riverine, Local	Yoakum County	09000206	No	$717,000			543	263	776	0	2	292.3	0	65855.14
091000116	Butler Farms Bridge	Provide access to Butler Farms subdivision through construction of a bridge structure on Foster Road as well as construction of a secondary access to the subdivision	Tom Green		Other	1.93	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	No	$25,000			24	8	0	0	0	0.0	0	4.655433
091000117	Southwest Blvd Channel Widening	Widen channel from just upstream of Loop 306 to just downstream of Southwest Blvd. Install a 300 flood bridge with high chord of 1888msl. Install storm drain line in Southwest Blvd.	Tom Green		Other	0.03	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	No	$25,000			7	0	0	0	1	0.0	0	0
091000124	MI4F Playa Detention	The project consists of elevating the outlet elevation from approximately 2843 to 2847 by constructing a berm embankment approximately 600 feet in length. The project also includes one (1) 6' x 4' RCBC outlet pipe. The outlet will extend approximately 2,*	Midland		Project Planning	75.31	Riverine	Midland	09002838	No	$25,000			0	0	0	0	0	0.0	0	0
091000125	North Fork Red Arroyo Detention	8 ac and 12 ac regional detention basins	Tom Green		Other	0.03	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	No	$25,000			0	0	0	0	0	0.0	0	1.086192
091000126	Pecan and 3rd Sreet	2.1 ac regional detention. intersection and downstream channel improvements	Tom Green		Other	0.00	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	No	$25,000			0	0	0	0	0	0.0	0	0
091000127	Spaulding St Storm Drain	Raise Spaulding St. at East Angelo Draw by 5.4 feet and install (4) 9 x 8' box culverts under Spaulding; raise Bell St. at East Angelo Draw by 2.4 feet and install (4) 9 x8' culverts.	Tom Green		Other	61.91	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	No	$25,000			2587	1821	0	6	27	0.0	0	558.4952
091000128	City of San Angelo 400 Block of E. 14th St. Buyout	This area floods homes during heavy rainfall. Demo existing building and convert to park area.	Tom Green		Other	0.00	Riverine, Local	San Angelo	09000131,00000261,00000284,09003257	No	$150,000			0	0	0	0	0	0.0	0	0
091000129	Midland Draw Channel Improvements	The proposed channel has a 250-foot top width for the entire length of the reach. There are three existing crossings, two to remain, one to be expanded, and one new crossing. The first crossing, at Loop 349, is to remain. The second crossing, at the futu*	Midland		Project Planning	0.76	Riverine, Local	Midland County	00000151,00000272	No	$845,000			37	36	138	0	1	1.9	0	4.6
091000130	City of Odessa Flood Early Warning System	Install a flood early warning system along flood prone waterways for the City of Odessa.	Midland, Ector		Preparedness	255.90	Riverine	Odessa	09002836	No	$100,000			18125	14107	42321	21	49	104.0	49	0
091000131	Mitchell County Flood Early Warning System	Install a flood early warning system along flood-prone waterways in unincorporated areas of the county.	Mitchell		Preparedness	913.24	Riverine, Other	Mitchell County	00000172	No	$100,000			1497	1047	3141	2	26	48.0	26	0
091000132	Irion County Flood Early Warning System	Install a flood early warning system along flood-prone waterways in unincorporated areas of the county.	Irion		Preparedness	1047.46	Riverine	Irion County	09000068	No	$100,000			359	104	312	0	23	50.0	23	0
091000133	City of Snyder Flood Early Warning System	Install a flood early warning system along flood prone waterways for the City of Snyder.	Scurry		Preparedness	81.44	Riverine	Snyder	09003309	No	$100,000			518	301	903	1	2	13.0	2	0

Table 12. Identified Flood Management Evaluations*

FME ID	FME Name	Description	County	Watersheds[A]	FME Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources	Potential Funding Amount	Estimated number of structures at 1% annual flood risk[B]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Number of low water crossings in project area at annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road segment closures (#)	Estimated farm & ranch land at 1% annual flood risk (acres)
091000134	City of Big Spring Flood Early Warning System	Install a flood early warning system along flood prone waterways for the City of Big Spring.	Howard		Preparedness	92.07	Riverine	Howard County	09003421	No	$100,000			1121	636	1908	6	22	26.0	22	0
091000135	City of San Angelo Flood Early Warning System	Install a flood early warning system along flood prone waterways for the City of San Angelo.	Tom Green		Preparedness	178.93	Riverine	San Angelo	09003257	No	$100,000			5863	368	1104	7	45	46.0	45	0
091000136	City of Midland Flood Early Warning System	Install a flood early warning system along flood prone waterways for the City of Midland.	Midland		Preparedness	291.13	Riverine	Midland	09002838	No	$100,000			12071	8944	26832	23	43	97.0	43	0
091000137	Midland Industrial Channel	Channel improvements are planned for the Industrial Channel beginning at the channel's confluence with Midland Draw just south of U.S. Highway 80 (Business 20) at Station 0+00 and ending at a point just downstream of Lamesa Road at Station 87+56. Maintena	Midland		Project Planning	9.78	Riverine, Local	Midland	00000151,00000272	No	$122,000	Midland Storr	122000	5984	4126	8713	9	0	37.8	0	99.8
091000138	Southwest_Andrews_Playa	Proposed excavation in playa located South of FM 1910 and East of new SW Mustang Dr. Approximate 183,000 cu-yd. of removed earth material. Project aims to maintain existing floodplain to account for anticipated development.	Andrews		Project Planning	0.78	Riverine, Local	Andrews	9000102	No	$84,000	Stormwater Fe	84000	14	0	26	0	0	0.4	0	3.045436
091000139	Northwest_Andrews_Playa	Proposed excavation in playa located South of Taylor and West of new 5th Street (FM301). Approximate 53,000 cu.yd. of removed earth material. Project aims to maintain existing floodplain to account for anticipated development.	Andrews		Project Planning	2.35	Riverine, Local	Andrews	09000102	No	$84,000	Stormwater Fe	84000	15	13	7	0	0	1.5	0	3.189626
091000140	Sulphur_Springs_Draw_Dam	Perform a watershed-wide evaluation of the dams to assess flood protection performance for the 100-year and 500-year events, develop breach analyses mapping and assess hazard classification, develop risk indices, and evaluate dam safety performance.	Yoakum,Terry,Gaines,Dawson,Borden,I		Watershed Planning	1877.35	Riverine, Local	Colorado River MWD	09000288	No	$14,500			603	80	383	0	0	925.4	0	138578.3
091000141	Milldde Colorado Elm Dams	Perform a watershed-wide evaluation of the dams to assess flood protection performance for the 100-year and 500-year events, develop breach analyses mapping and assess hazard classification, develop risk indices, and evaluate dam safety performance.	Nolan,Taylor,Runnels,Coke,Tom Green,		Watershed Planning	1152.66	Riverine, Local	Valley Creek Water Control District	09000852	No	$193,700			253	100	117	1	3	128.0	3	33103.29
091000142	I20_Playa_to_Pit	Ridgewood Outfall: Outfall Pipe from Retention basin to playa south of Business 20; OIME Outfall: Pipe to connect playa, caliche pit to I-20; Faudree South Outfall: Need to acquire caliche pit in the center	Ector,Midland		Project Planning	47.39	Riverine, Local	Midland County	09000151	No	$25,000	Midland Coun	50000	1782	1229	2550	3	0	75.9	0	22.5163
091000143	Colorado_Headwaters_Dams	Perform a watershed-wide evaluation of the dams to assess flood protection performance for the 100-year and 500-year events, develop breach analyses mapping and assess hazard classification, develop risk indices, and evaluate dam safety performance.	Terry,Lynn,Garza,Borden,Scurry,Nolan,I		Watershed Planning	2912.38	Riverine, Local, Playa	Colorado River MWD	09000288	No	$110,600			1587	770	1567	2	5	880.1	5	109763.1
091000144	South Concho Dam	Perform a watershed-wide evaluation of the dams to assess flood protection performance for the 100-year and 500-year events, develop breach analyses mapping and assess hazard classification, develop risk indices, and evaluate dam safety performance.	Irion,Tom Green,Crockett,Schleicher		Watershed Planning	1330.86	Riverine, Local	San Angelo	09003257	No	$49,500			2071	1048	1872	0	2	121.6	2	7608.985
091000145	Upper Colorado Dams	Perform a watershed-wide evaluation of the dams to assess flood protection performance for the 100-year and 500-year events, develop breach analyses mapping and assess hazard classification, develop risk indices, and evaluate dam safety performance.	Mitchell,Nolan,Sterling,Coke,Runnels		Watershed Planning	1373.41	Riverine, Local, Playa	Colorado River MWD	09000288	No	$88,800			311	108	139	0	1	64.2	1	12129.95
091000146	I20_Drainage_System	G: Some excavation/ fill reshaping completed. County needs to acquire a downstream easement; H: Acquire easement from cotton field to an existing caliche pit, Cotton field, and easement and construct minor channel; I: enlarge or deepen Lower South Draw	Midland		Project Planning	32.54	Riverine, Local	Midland County	09000151	No	$25,000	Midland Coun	50000	1273	589	2556	3	0	60.0	0	241.733
091000147	Midland County Panel A Project	Proposed channel improvements, retention basins near Avalon Drive.	Midland		Project Planning	9.03	Riverine, Local	Midland County	09000151	No	$25,000	Midland Coun	50000	90	13	35	0	0	4.4	0	1.80685
091000148	Mineral Wells Road - South Concho River Crossing	New bridge crossing South Concho River	Tom Green		Project Planning	0.01	Riverine	Tom Green County	09000131	No	$250,000			0	0	0	0	1	0.1	0	0
091000149	North Concho River - Post Oak Crossing	Raise road level and install 4 culvert pipes	Tom Green		Project Planning	0.00	Riverine	Tom Green County	09000131	No	$250,000			0	0	0	0	1	0.2	0	0
091000150	City of Lamesa GIS Development	Develop a GIS inventory of stormwater infrastructure	Dawson		Other	4.72	Riverine	Lamesa	09003125	No	$100,000			185	0	551	0	6	11.9	0	82.95412
091000151	Ector County Monahan's Draw Study	Perform a flood study for Monahan's Draw to develop potential flood mitigation solutions	Ector		Project Planning	4.47	Riverine	Ector County	00000152	No	$250,000										
091000152	City of Mertzon FEMA Mapping	Update existing FEMA Mapping	Irion		Watershed Planning	1.57	Riverine	Mertzon	09002400	No	$150,000										

** This summary table is only applicable for the Technical Memorandum midpoint deliverable and shall include all identified potential flood management evaluations.*

[A] Leave blank if too many for text field length (254 characters)

[B] Should not include power generating structures

Appendix A-3

Exhibit C, Table 13
Potentially Feasible Flood Mitigation Projects
Identified by the
Regional Flood Planning Group

Table 13. Identified Potentially Feasible Flood Mitigation Projects*

FMP ID	FMP Name	Description	Associated Goals (ID)	County	Watersheds*	FMP Type	FMP Area (sqmi)	Flood Risk Type (Riverine, Coastal, Urban, Playa, Other)	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Project Cost ($)	Area in 1% annual chance Floodplain	Area in 0.2% annual chance Floodplain	Estimated number of structures at 100yr flood risk*	Residential structures at 1% annual flood risk*	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Emergency Facilities in 1% annual flood risk (#)*	Number of low water crossing in project areas at 1% annual flood risk (#)	Estimated length of roads at 1% annual flood risk (Miles)	Estimated number of road closures (#)	Estimated farm & ranch land at 1% annual flood risk (acres)*	Number of structures removed from 1% annual flood risk*	Number of structures removed from 0.2% annual flood risk*	Residential structures removed from 1% annual flood risk	Estimated Population removed from 1% annual flood risk	Critical facilities removed from 1% annual flood risk (#)	Emergency Facilities Removed in 1% annual flood risk (#)*	Number of low water crossings removed in project area from 1% annual flood risk (#)	Estimated length of roads removed from 1% annual flood risk (Miles)	Estimated reduction in road closure occurrences	Estimated farm & ranch land removed from 1% annual flood risk (acres)*	Estimated reduction in fatalities (if available)	Estimated reduction in injuries (if available)	Pre-Project Level-of-Service	Post-Project level-of-Service	Percent Nature-based Solution (by cost)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Texas Flood SVI	Water Supply Benefit (Y/N)	Benefit-Cost Ratio
093000005	Avenue P Detention	Construct additional 8 x 8 box culverts downstream of Bryant Blvd continuing along Avenue P downstream to Chadbourne St	09000004	Tom Green		Other	0.100746		Tom Green County	09000131,00000261,00000284,09003257	No	2388000	0.007421	0.007052	29	1	61	0	0	0	1.539792	0	64.47514	1	1	2	1	16	0	0	0	0	16.11878			Unknown	Unknown	25	No		0.6	No	0.1
093000007	Playa M4F	The project consists of elevating the outlet elevation from approximately 2843 to 2847 by constructing a berm embankment, approximately 600 feet in length. The project also includes one (1) 6' x 4' RCBC outlet pipe. The outlet will extend approximately 2,	09000004	Midland		Detention Po	2.67537	Riverine, Local	Midland	00000151,00000272	No	1540000	1.13	<Null>	0	0	0	0	0	0	0	0	0.988971	0	0	0	0	0	0	0	0	0	0			50-year LOS	100-year LOS	8	No		0.2623	No	4.8
093000008	Jal Draw, Proj. A	The proposed channel has a 250-foot top width for the entire length of the reach. The existing upstream crossings at Loop 349 and County Road 60 are to remain. There are two proposed crossings. The Loop 349 Backage Road crossing is proposed to be sixteen*	09000004	Midland		Channel	0.152009	Riverine	Midland	00000151,00000272	No	11481000	0.2856	0.5401	1	1	2	0	0	1	0.071	1	0	1	1	1	1	2	0	1	6	1	0			50-year LOS	100-year LOS	10	No		0.3662	No	0.1
093000009	Jal Draw, Proj. B	The proposed channel has a 250-foot top width for the entire length of the reach. There is one proposed crossing at the future extension of Mockingbird Lane. This crossing is proposed to be fourteen 10' x 6' RCB.	09000004	Midland		Channel	0.202295	Riverine	Midland	00000151,00000272	No	11047000	0.3694	0.5346	54	24	40	0	0	0	4.75	0	0	54	54	33	34	40	0	0	4	0	0			5-year LOS	100-year LOS	10	No		0.3662	No	0.3
093000010	Jal Draw, Proj. C	The proposed channel has a 250-foot top width for the entire length of the reach. There are two proposed crossings. The pipeline bank crossing is proposed to be fourteen (14) 10' x 6' RCBC's. The CR 1250 crossing is proposed to be fourteen (14) 30" x 6 *	09000004	Midland		Channel	0.267023	Riverine	Midland	00000151,00000272	No	10365000	0.4229	0.5254	0	0	0	0	0	0	3.598	0	0	0	0	0	0	0	0	0	0	0	0			5-year LOS	100-year LOS	10	No		0.3662	No	0
093000011	Jal Draw, Proj. E	The proposed channel has a top width of 500-feet for much of the reach to match the existing top width. There are two existing crossings, one at Crowley Road and the other at Holiday Hill Road. FNI recommends that both crossings remain.	09000004	Midland		Channel	0.129892	Riverine	Midland	00000151,00000272,09002838	No	3779000	0.2321	0.1207	0	0	0	0	0	2	1.91	2	31.59	0	0	0	0	0	0	0	1	0	12.64			5-year LOS	100-year LOS	10	No		0.2623	No	0
093000013	Northwest Andrews Playa Lake Excavation	Proposed Excavation in playa located south of Taylor and west of new 5th Street (FM301). Approximate 53,000 cu.-yd. of removed earth material.	09000003, 09000004	Andrews		Other	1.865861	Riverine, Local	Andrews	00000102,00000272, 00000272, 09000302,	No	840000	0.232436	0.075634	2	13	24	0	0	0	1.08	0	1.2	0	0	0	0	0	0	0	0	0	0			Unknown	Unknown	0	No		0.25	No	3.9
093000015	Midland Draw, Project A	The proposed channel has a 250-foot top width for the entire length of the reach. There are three existing crossings, two to remain, one to be expanded, and one new crossing. The first crossing, at Loop 349, is to remain. The second crossing, at the fute*	09000004	Midland		Channel	0.1882253	Riverine	Midland	00000151,00000272	No	11592000	0.356	0.5288	0	0	0	0	0	2	14.473	2	0	0	0	0	0	0	0	1	14	2	0			25-year LOS	100-year LOS	10	No		0.2623	No	0.3
093000016	Midland Draw, Project B	The proposed channel has a 250-foot top width for the entire length of the reach. There is one proposed crossing. The Midland Drive crossing is proposed to be twelve (12) 10' x 4' RCBC's.	09000004	Midland		Channel	0.120445	Riverine	Midland	00000151,00000272,09002838	No	9045000	0.3479	0.5046	12	12	36	0	0	0	5.463	0	0.98	12	12	85	12	36	0	0	5	0	0			5-year LOS	100-year LOS	10	No		0.2623	No	0.1
093000017	Midland Draw, Project C	The proposed channel has a 250-foot top width for the entire length of the reach. There are two proposed crossings within the reach. The first is at a City of Midland 30" raw water line crossing, which is proposed to be twelve (12) 10' x 5' RCBC's. The s*	09000004	Midland		Channel	0.132727	Riverine	Midland	00000151,00000272,09002838	No	13676000	0.1956	0.2689	0	0	0	0	0	0	5.128	0	37	0	0	0	0	0	0	0	5	0	25.13			100-year LOS	100-year LOS	10	No		0.2623	No	0
093000018	Midland Draw, Project D	The proposed channel has a 300-foot top width. There are three proposed crossings. The first crossing, at Midkiff Road, is proposed to be twelve (12) 10' x 6' RCBC's. The second crossing, at Mayfield Plaze, is proposed to be twelve (12) 10' x 6' RCBC's. *	09000004	Midland		Channel	0.080171	Riverine	Midland	00000151,00000272,09002838	No	28762000	0.1444	0.3841	0	0	0	0	0	0	3.323	0	0	0	0	0	0	0	0	0	3	0	0			100-year LOS	100-year LOS	10	No		0.2623	No	0
093000019	Midland Draw, Project E	The proposed channel has a 300-foot top width for the entire reach. There are three proposed crossings, one is an existing crossing to be expanded. The first crossing, at a pipeline bank west of Garfield Street, is currently one (1) 10' x 5' RCBC and is*	09000004	Midland		Channel	0.113635	Riverine	Midland	00000151,00000272,09002838	No	13600000	0.1549	0.3608	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0			5-year LOS	100-year LOS	10	No		0.2623	No	0
093000020	Midland Draw, Project F	This reach is the downstream terminus of the proposed channel, with a top width of 400ft. The improved channel alignment is shown as a potential drainage buffer area between the polo ground and existing and proposed developments.	09000004	Midland		Channel	0.137114	Riverine	Midland	00000151,00000272,09002838	No	5883000	0.1933	0.3628	0	0	0	0	0	0	6.071	0	0	8	8	0	0	0	0	0	5	0	0			50-year LOS	100-year LOS	10	No		0.3071	No	0
093000022	Industrial Channel Project A	Channel improvements are planned for the Industrial Channel beginning at the channel's confluence with Midland Draw just south of U.S. Highway 80 (Business 20) at Station 0+00. The first reach of improvements extend upstream to the eastern edge of an ex*	09000004	Midland		Other	0.068805		Midland County	00000151,00000272	No	1120000	0.052106	0.007901	242	0	27	0	0	0	4.093221	0	45.08571	1	1	1	1	7	0	0	1	0	11.27143			Unknown	Unknown	25	No		1.8	No	1.1
093000031	Cauley Lane Regional Detention	The proposed project includes a 2,350 ft drainage channel with berms that diverts flow to a 34-ac regional detention pond that acts as a playa.	09000004	Tom Green		Other	0.041264	Riverine, Playa	Tom Green County	09000131,00000261,00000284,09003257	No	9851000	0.009764	0	143	2	234	0	0	0	0.881946	0	25.75146	143	143	143	143	234	1	2	3	0	0			Unknown	1% Annual Chance	0	No		0.25	No	0.9
093000035	Bradford Datention	The proposed project includes a 500-ft long drainage channel and culvert crossing that diverts runoff into a 7-ac regional detention pond that will be pumped to send flow to the East Angelo Draw.	09000004	Tom Green		Channel	0.017944	Local	Tom Green County	09000131,00000261,00000284,09003257	No	5528000	0.001144	0	760	0	1378	0	0	0	0.256554	0	1.868175	26	26	26	26	1	0	0	0	0	0			Unknown	1% Annual Chance	0	No		0.25	No	0.6
093000038	24th and Poe	The proposed project includes roadway widening improvements graded divert runoff into an existing drainage channel that will also be widened.	09000006	Tom Green		Other	0.012168	Local	Tom Green County	09000131,00000261,00000284,09003257	No	3075000	0.005585	0.000135	163	0	400	0	0	0	0.659281	0	4.846851	8	8	8	8	10	0	0	0	0	0			Unknown	1% Annual Chance	0	No		0.25	No	0.2
093000104	City of Andrews Southwest Andrews Playa Excavation	Proposed excavation in playa located South of FM 1930 and East of new SW Mustang Dr. Approximate 183,000 cu-yd. of removed earth material.	09000003, 09000004	Andrews		Channel	0.030186	Riverine, Local, Playa	Andrews	09000102	No	2914000	0.01489	0.008865	2	0	6	0	0	0	0.713858	0	19.44662	1	1	1	1	2	0	0	0	0	0	4.861654			Unknown	Unknown	25	No		0.25	No	0.6
093000105	Blackshear Drainage Improvements	The proposed project includes roadway widening improvements with taller curbs and valley gutters to divert flow into a proposed drainage channel.	09000006	Tom Green		Channel	0.073818	Local	San Angelo	09000131,00000261,00000284,09003257	No	6336216	0.038682	0.005318	163	19	1466	0	0	0	0.750741	0	0	26	26	26	26	69	0	0	0	0	0			Unknown	1% Annual Chance	0	No		0.9443	No	0.6
093000106	East Angelo Draw Drainage Improvements	The proposed project includes channel improvements spanning 0.6 miles and culvert capacity increase along two major channel crossings.	09000004	Tom Green		Channel	0.125676	Riverine	San Angelo	09000131,00000261,00000284,09003257	No	6926000	0.28	0.088947	118	23	123	0	0	4	2.979723	4	0	25	25	25	25	94	0	0	0	0	0			Unknown	1% Annual Chance	0	No		0.889	No	0.7

** This summary table is only applicable for the Technical Memorandum midpoint deliverable and shall include all identified potential flood mitigation projects.*

** Leave blank if too many for text field length (254 characters)*

** Should not include power-generating structures*

** For planning purposes, residential structures at flood risk will include residential buildings at flood risk that are greater than 500 square-feet unless the RFPGs have more specific information*

** Subset of critical facilities; provide the total number of EMS, Fire, Police, Medical and School structures*

** Estimated farm & ranch land at 100-year flood risk (acres) should only include farm and ranch land that are negatively impacted by flooding events and should not include land that benefits from floodplains for exemple rice fields.*

Appendix A-4

Exhibit C, Table 14
Potentially Feasible Flood Management Strategies
Identified by the
Regional Flood Planning Group

Table 14. Identified Potentially Feasible Flood Management Strategies

																Flood Risk								Reduction in Flood Risk														
FMS ID	FMS Name	Description	Associated Goals (ID)	County	Watershed Name	FMS Type	FMS Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Strategy Cost ($)	Non-recurring, Non-capital Cost ($)	Area in 1% annual Flood risk	Area in 0.2% annual Flood Risk	Estimated number of structures at 1% annual flood risk[3]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Emergency facilities at 1% annual flood risk (#)	Number of low water crossings in project area at 1% annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road closures (#)	Estimated active farm & ranch land at 1% annual flood risk (acres)[3]	Number of structures with reduced 1% annual Flood risk[4]	Number of structures removed from 1% annual Flood risk[4]	Number of structures removed from 0.2% annual Flood risk[4]	Residential structures removed from 1% annual Flood risk	Estimated Population removed from 1% annual Flood risk	Critical facilities removed from 1% annual Flood risk (#)	Number of low water crossings removed from 1% annual Flood risk (#)	Estimated length of roads removed from 1% annual flood risk (miles)	Estimated reduction in road closure occurrences	Estimated active farm & ranch land removed from 1% annual flood risk (acres)[3]	Estimated reduction in fatalities (if available)	Estimated reduction in injuries (if available)	Cost/ Structure removed	Percent Nature-based Solution (Y/N)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Water Supply Benefit (Y/N)
092000001	Andrews County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Andrews		Other	1495.2	Riverine, Local	Andrews County	00000102,09000118,00000151,00000152,00001154,09000174,00002772,09001828,09002972	No	$100,000	$75,000	210177.9	110.0	959	763	1463	0		3	173	0	7785.768	240	240	176	190	558	0	0	43	0	1946.4								No
092000002	Midland County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Midland		Other	898.3	Riverine, Local	Midland County	00000102,00000126,00000127,09000150,00000151,00000152,09000174,00002772,09000288,00000684,09000692,09001049,09002050,09002836,09002838	No	$100,000	$75,000	117458.3	59.3	8432	5663	23038	22		28	290	0	8189.256	2108	2108	1094	1415	9394	5	7	72	0	2047.3								No
092000003	Runnels County NFIP Application and compliance	Join the NFIP. Examine local flood ordinance to ensure minimum NFIP standards are included for program compliance and to consider possible higher regulatory standards.	09000011,09000017	Runnels		Other	1051.8	Riverine, Local	Runnels County	00000124,09000131,00000144,00000145,09000147,00000168,00000170,00002611,00002778,00002784,00003007,09000539,09002451,09003374,09003442	No	$30,000	$5,000	128515.8	35.3	164	41	178	0		18	125	0	39196.92	41	41	17	10	62	0	4	31	0	9799.2								No
092000004	Colorado City Ordinance Update SFHA regulation	permitting structures in the SFHA; Adopt no-rise in BFE	09000011	Mitchell		Other	5.3		Colorado City	00000172,00002778,09003443	No	$30,000	$5,000	500.9	0.2	143	93	353	2		1	10	0	37.86482	36	36	25	23	109	0	0	2	0	9.5								No
092000005	Colorado City Sediment Cleanout Program	cleaning debris from bridges, drains, and culverts.	09000004	Mitchell		Other	5.3		Colorado City	00000172,00002778,09003443	No	$25,000	$0	500.9	0.2	143	93	353	2		1	10	0	37.86482	36	36	25	23	109	0	0	2	0	9.5								No
092000006	Mitchell County DCM	Incorporate higher standards for hazard resistance in local application of the building code.	09000011	Mitchell		Other	913.2		Mitchell County	00000115,00000116,09000147,09000149,00000170,00000172,09001773,00002611,00002778,00002784,00003084,00000295,00000445,09003443,09003448,09003449	No	$100,000	$75,000	110277.9	29.2	344	206	737	2		11	108	0	16713.84	86	86	85	51	237	0	2	27	0	4178.5								No
092000007	Scurry County Ordinance Update SFHA	Increase freeboard requirements for structures in the SFHA; adopt a ""no-rise"" in BFE in the 100-year floodplain.	09000015	Scurry		Other	906.5		Scurry County	00000115,00000116,00000170,00000172,00001181,00002772,00002771,00002778,09000288,00000295,00003045,09003309	No	$100,000	$75,000	54305.2	14.1	606	324	1754	1		10	76	0	11692.57	152	152	30	81	537	0	2	19	0	2923.1								No
092000008	Mitchell County Flood Insurance Policy Program	Undertake an initiative to increase the number of flood insurance policies.	09000004	Mitchell		Other	913.2		Mitchell County	00000115,00000116,09000147,09000149,00000170,00000172,09001773,00002611,00002772,00002778,00002784,00003084,00000295,00000445,09003443,09003448,09003449	No	$30,000	$5,000	110277.9	29.2	344	206	737	2		11	108	0	16713.84	86	86	85	51	237	0	2	27	0	4178.5								No
092000009	Mitchell County Early Warning System	Purchase and install a flood early warning system along flood-prone waterways in unincorporated areas of the county.	09000006	Mitchell		Other	913.2		Borden County	00000115,00000116,09000147,09000149,00000170,00000172,09001773,00002611,00002772,00002778,00002784,00003084,00000295,00000445,09003443,09003448,09003449	No	$30,000	$5,000	110277.9	29.2	344	206	737	2		11	108	0	16713.84	86	86	85	51	237	0	2	27	0	4178.5								No
092000010	Scurry County Stormwater Channel Maintenance Program	Retain and maintain natural vegetation in stormwater channels	09000015	Scurry		Other	906.5		Scurry County	00000115,00000116,00000170,00000172,00001181,00002772,00002771,00002778,09000288,00000295,00003045,09003309	No	$30,000	$5,000	54305.2	14.1	606	324	1754	1		10	76	0	11692.57	152	152	30	81	537	0	2	19	0	2923.1								No
092000011	Town of Loraine NFIP Application	Join the NFIP.	09000011,09000017	Mitchell		Other	1.0		Mitchell County	00000172,00002778,09003448	No	$30,000	$5,000	105.9	0.1	9	7	6	0		0	5	0	1.215016	3	3	3	1	1	0	0	1	0	0.3								No
092000012	City of Blackwell NFIP Application	Join the NFIP.	09000011,09000017	Nolan,Coke		Other	0.6		Blackwell	09000147,09000170,09000261,09000278,09000499,09000852,09002581	No	$30,000	$5,000	23.0	0.0	2	3	14	0		0	0	0	0.000597	1	1	0	0	3	0	0	0	0	0.0								No
092000013	City of Westbrook NFIP Application	Join the NFIP	09000011,09000017	Mitchell		Other	0.4		Mitchell County	00000172,00002778,09003449	No	$30,000	$5,000	8.0	0.0	2	2	5	0		0	1	0	0.504985	1	1	0	0	1	0	0	0	0	0.1								No
092000014	Borden County NFIP Application	Application to join NFIP.	09000011,09000017	Borden		Other	903.0		Borden County	00000115,00000116,00000117,00000172,09001773,09001774,00001818,00001840,00002772,00002775,00002778,00000295,00000445	No	$30,000	$5,000	107897.0	29.4	69	9	20	0		2	26	0	10470.01	17	17	11	2	5	0	0	6	0	2617.5								No
092000015	Dawson County NFIP Application	Application to join NFIP	09000011,09000017	Dawson		Other	898.8		Dawson County	00000115,00000117,09000118,09000171,09001774,00000184,00000205,00002772,00002775,00000295,00003008,09002828,09002888,09003125,09003482,09003575	No	$30,000	$5,000	119189.1	57.1	474	9	710	0		9	538	0	76212.73	119	119	84	2	205	0	2	134	0	19053.2								No
092000016	Scurry County NFIP Application	Application to join NFIP	09000011,09000017	Scurry		Other	906.5		Scurry County	00000115,00000116,00000170,00000172,00001831,00002772,00002775,00002778,09000288,00000295,00003045,09003309	No	$30,000	$5,000	54305.2	14.1	606	324	1754	1		10	76	0	11692.57	152	152	30	81	537	0	2	19	0	2923.1								No
092000017	Borden County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Borden		Other	903.0		Borden County	00000115,00000116,00000117,00000172,09001773,09001774,00001818,00001840,00002772,00002775,00002778,00000295,00000445	No	$100,000	$75,000	107897.0	29.4	69	9	20	0		2	26	0	10470.01	18	18	11	2	5	0	0	6	0	2617.5								No
092000018	Andrews County NFIP Application	Application to join the NFIP.	09000011,09000017	Andrews		Other	1495.2		Andrews County	00000102,09000118,00000151,00000152,00001154,09000174,00002772,09001828,09002972	No	$30,000	$5,000	210177.9	110.0	959	763	1463	0		3	173	0	7785.768	240	240	176	190	558	0	0	43	0	1946.4								No
092000019	City of Ackerly NFIP Application	Application to join the NFIP.	09000011,09000017	Martin,Dawson		Other	0.3		Ackerly	00000117,09000174,00002772,09003575	No	$30,000	$5,000	12.7	0.0	2	2	2	0		0	2	0	0.291416	1	1	1	0	0	0	0	0	0	0.1								No
092000020	City of Andrews DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Andrews		Other	6.9		Andrews County	00000102,00002772,09002972	No	$100,000	$75,000	544.1	0.4	286	209	833	0		0	18	0	3.603397	72	72	105	52	312	0	0	4	0	0.9								No
092000021	City of Brownfield DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Terry		Other	6.5		Terry County	00000205,00000275,00000308,09003111	No	$100,000	$75,000	756.7	0.4	243	125	535	0		1	17	0	348.6923	61	61	51	31	212	0	0	4	0	87.2								No
092000022	City of Lamesa DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Dawson		Other	5.1		Lamesa	00000117,00002772,00003308,09003125	No	$100,000	$75,000	326.2	0.2	184	184	495	0		6	12	0	51.15264	46	46	45	46	132	0	1	3	0	12.8								No
092000023	City of Colorado City DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Mitchell		Other	5.3		Mitchell County	00000172,00002778,09003443	No	$100,000	$75,000	500.9	0.2	143	93	353	2		1	10	0	37.86482	36	36	25	23	109	0	0	2	0	9.5								No
092000024	City of Seminole DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Gaines		Other	3.8		Seminole	09000118,00002772,09001828,09003231	No	$100,000	$75,000	287.8	0.2	108	75	332	0		1	12	0	13.80502	27	27	36	18	118	0	0	3	0	3.5								No
092000025	City of Snyder DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Scurry		Other	8.9		Snyder	00000116,00000278,09002888,09003309	No	$100,000	$75,000	988.5	0.2	447	266	1634	1		3	21	0	60.07658	112	112	18	66	486	0	0	5	0	15.0								No
092000026	City of O'Donnell NFIP Application	Application to join the NFIP.	09000011,09000017	Lynn,Dawson		Other	0.9		O'Donnell	00000117,00000184,00000272,00000275,00000295,00003038,09003482	No	$30,000	$5,000	345.2	0.1	284	184	250	1		0	10	0	97.29911	71	71	17	46	97	0	0	2	0	24.3								No
092000027	City of Wellman NFIP Application	Application to join the NFIP.	09000011,09000017	Terry		Other	0.3		Wellman	00000205,00000275,09003112	No	$30,000	$5,000	3.8	0.0	9	9	99	0		0	0	0	0	3	3	0	2	24	0	0	0	0	0.0								No
092000028	Dawson County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Dawson		Other	898.8		Dawson County	00000115,00000117,09000118,09000171,09001774,00000184,00000205,00002772,00002775,00000295,00003008,09002828,09002888,09003125,09003482,09003575	No	$100,000	$75,000	119189.1	57.1	474	9	710	0		9	538	0	76212.73	119	119	84	2	205	0	2	134	0	19053.2								No
092000029	Gaines County NFIP Application	Application to join the NFIP.	09000011,09000017	Gaines		Other	1497.6		Gaines County	00000102,00000117,09000118,09000174,00000205,09000206,00002772,00002775,09002828,09002681,09003231	No	$30,000	$5,000	276508.7	132.6	1890	814	2679	1		5	434	0	145295.5	473	473	236	203	996	0	1	108	0	36323.9								No
092000030	Hockley County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Hockley		Other	906.7		Hockley County	00000184,00000186,00000187,00000205,09000206,00002775,00002951,00003038,09003169	No	$100,000	$75,000	9816.3	7.0	44	18	851	3		2	42	0	1350.755	11	11	11	4	216	0	0	10	0	337.7								No
092000031	Lynn County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Lynn		Other	890.2		Lynn County	00000115,00000117,00000183,00000184,00000186,00000205,00002772,00002775,00000295,00003038,00004045,09003482	No	$100,000	$75,000	32600.4	17.5	340	204	352	1		0	152	0	23560.42	85	85	16	51	123	0	0	38	0	5890.1								No
092000032	Martin County NFIP Application	Application to join the NFIP.	09000011,09000017	Martin		Other	912.1		Martin County	00000102,00000115,00000117,09000118,09000150,00000151,09001773,09001774,00002772,09000405,09002738,09002838,09003575	No	$30,000	$5,000	146375.3	66.8	902	451	2015	3		5	229	0	55702.27	226	226	64	112	728	0	1	57	0	13925.6								No
092000033	Nolan County Ordinance Update SFHA	construction, increase freeboard requirements for structures in the SFHA; adopt a "no-rise" in BFE in the 100-year floodplain. Update local flood ordinance to prohibit granting of variance in SFHA; Include "cumulative	09000011	Nolan		Other	910.7		Nolan County	00000116,00000145,09000147,00000168,00000170,00000172,00002611,00002778,00000284,00000295,09000499,09000852,09002581	No	$100,000	$75,000	44376.2	7.8	90	16	23	0		5	21	0	3888.377	23	23	2	4	7	0	1	5	0	972.1								No
092000034	Terry County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000011	Terry		Other	887.8		Terry County	00000117,09000118,00000184,00000186,00000187,00000205,09000206,00000272,00000275,00000295,00003008,09002828,09003111,09003112,09003317	No	$100,000	$75,000	130088.3	59.2	499	183	1052	0		6	634	0	84143.86	125	125	80	45	398	0	1	158	0	21036.0								No
092000035	Yoakum County NFIP Application	Application to join NFIP.	09000011,09000017	Yoakum		Other	797.7		Yoakum County	00000118,00000186,00000187,00000205,09000206,00002772,00002775,09001828,09002479,09002681	No	$30,000	$5,000	150121.5	68.1	543	263	799	0		2	292	0	63670.6	136	136	42	65	328	0	0	73	0	15917.7								No
092000036	Taylor County Detention Program	conjunction with development to address excessive stormwater / firefighting water source.	09000004	Taylor		Other	915.6		Taylor County	00000144,00000145,00000168,00000170,00000278,00000284,00000295,00003007	No	$100,000	$75,000	21048.6	4.3	70	51	46	0		10	18	0	3492.508	18	18	5	12	11	0	2	4	0	873.1								No
092000037	Taylor County New Ordinance - Wetlands and Watershed Ordinance	Adopt wetlands development regulations; Implement a Comprehensive Watershed Ordinance for new development.	09000006	Taylor		Other	915.6		Taylor County	00000144,00000145,00000168,00000170,00000278,00000284,00000295,00003007	No	$30,000	$5,000	21048.6	4.3	70	51	46	0		10	18	0	3492.508	18	18	5	12	11	0	2	4	0	873.1								No
092000038	Upper Colorado Building Codes Outreach Program	Outreach Program: Encourage communities to adopt current building codes, adopt new construction codes for setting the minimum floor elevation	09000011	Taylor,Nolan,Mitchell,Howard,Martin,Andrews,Borden,Scurry,Menard,Schleicher,Crockett,Irion,Concho,Reagan,Upton,Tom Green,Coleman,Runnels,Coke,Sterling,Glasscock,Midland,Ector,Winkler,Hockley,Cochran,Garza,Lynn,Terry,Yoakum,Dawson,Gaines		Other	21171.6		Upper Colorado River Authority	00000050,00000051,00000052,00000068,00000102,00000115,00000116,00000117,09000118,00000124,00000126,00000127,09000131,00000144,00000145,09000147,09000149,09000150,00000151,00000152,00000154,00000168,00000170,00002772,09000173,09000174,00000183,00000184	No	$25,000	$0	2893508.0	1127.2	36361	23637	81457	54		255	4338	0	719367.3	9090	9090	4318	5909	32721	13	63	1084	0	179841.8								No

Table 14. Identified Potentially Feasible Flood Management Strategies

														Flood Risk									Reduction in Flood Risk														
FMS ID	FMS Name	Description	Associated Goals (ID)	County	Watershed Name	FMS Type	FMS Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Strategy Cost ($)	Non-recurring, Non-capital Cost ($)	Area in 1% annual Flood risk	Area in 0.2% annual Flood Risk	Estimated number of structures at 1% annual flood risk[3]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Emergency facilities at 1% annual flood risk (#)	Number of low water crossings in project area at 1% annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road closures (#)	Estimated active farm & ranch land at 1% annual flood risk (acres)[3]	Number of structures with reduced 1% annual Flood risk[4]	Number of structures removed from 1% annual Flood risk[4]	Number of structures removed from 0.2% annual Flood risk[4]	Residential structures removed from 1% annual Flood risk	Estimated Population removed from 1% annual Flood risk	Critical facilities removed from 1% annual Flood risk (#)	Number of low water crossings removed from 1% annual Flood risk (#)	Estimated length of roads removed from 1% annual flood risk (miles)	Estimated reduction in road closure occurrences	Estimated active farm & ranch land removed from 1% annual flood risk (acres)[3]	Estimated reduction in fatalities (if available)	Estimated reduction in injuries (if available)	Cost/ Structure removed	Percent Nature-based Solution (Y/N)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Water Supply Benefit (Y/N)
092000039	Stormwater Maintenance	Outreach Program: Encourage maintenance programs on storm water infrastructure, Dams, ditches, and channels.	09000011	Taylor,Nolan,Mitchell,Howard,Martin,Andrews,Borden,Scurry,Menard,Schleicher,Crockett,Irion,Concho,Reagan,Upton,Tom Green,Coleman,Runnels,Coke,Sterling,Glasscock,Midland,Ector,Winkler,Hockley,Cochran,Garza,Lynn,Terry,Yoakum,Dawson,Gaines		Other	21171.6		Upper Colorado River Authority	00000050,00000051,00000052,09000068,00000102,00000115,00000116,00000117,09000138,00000124,00000126,00000127,09000131,00000144,00000145,09000147,09000149,09000150000001551,00000152,00000154,00000168,00000170,00000172,09000173,09000174,00000181,00000184	No	$25,000	$0	2893508.0	1127.2	36361	23637	81457	54		255	4338	0	719367.3	9090	9090	4318	5909	32721	13	63	1084	0	179841.8							No
092000040	Tom Green County Flood Insurance Awareness	Develop flood insurance and awareness program; disseminate materials with new permits and place in the library at City Hall	09000011	Tom Green		Other	1533.9		Tom Green County	00000150,00000051,09000068,00000124,09000131,00000145,00000261,00000278,00000284,09000496,09000497,09000539,09000775,09000969,09002069,09003257	No	$30,000	$5,000	211659.1	67.0	5164	3371	9948	7		46	253	0	48446.88	1291	1291	652	842	4008	1	11	63	0	12111.7							No
092000041	Cochran County Drainage Mainace	Create a maintenance program for the ditches and culverts throughout Cochran	09000002	Cochran		Other	773.6		Cochran County	00000186,00000187,00000205,09000206,00000295	No	$48,000	$23,000	64306.3	37.3	23	12	53	0		0	144	0	15614.36	6	6	1	3	13	0	0	36	0	3903.6							No
092000042	Cochran County Inundation Awareness	civic groups, and the general public about the dangers of flash flooding in the county; to include printed materials placed throughout the county	09000002	Cochran		Other	773.6		Cochran County	00000186,00000187,00000205,09000206,00000295	No	$30,000	$5,000	64306.3	37.3	23	12	53	0		0	144	0	15614.36	6	6	1	3	13	0	0	36	0	3903.6							No
092000043	Cochran County DCM	Commissioners Court Order prohibiting any dumping in ditches and culverts throughout Cochran County to ensure that flood waters don't accumulate and flood roadways or buildings.	09000004	Cochran		Other	773.6		Cochran County	00000186,00000187,00000205,09000206,00000295	No	$100,000	$75,000	64306.3	37.3	23	12	53	0		0	144	0	15614.36	6	6	1	3	13	0	0	36	0	3903.6							No
092000044	Concho County CTP Program	The CTP Program is an innovative approach to creating partnerships between FEMA and participating NFIP communities	09000002	Concho		Other	988.9		Concho County	00000150,00000051,00000124,09000131,00000144,00000145,00000261,00000278,00000284,00000301,00000307,09002653	No	$30,000	$5,000	57587.3	14.8	103	52	77	0		4	24	0	12259.07	26	26	15	13	19	0	1	6	0	3064.8							No
092000045	City of Goldsmith Mainace Program	Clear debris and street clean up streets in town after severe flood	09000002	Ector		Other	0.3		Goldsmith	00000152,00000272,09003576	No	$25,000	$0	99.0	1.0	9	9	99	0		0	0	0	0	3	3	0	2	24	0	0	0	0	0.0							No
092000046	City of Colorado City	Establish, adopt, and implement a "green infrastructure" program for parks, nature preserves, greenbelts, etc.	09000011	Mitchell		Other	5.4		Mitchell County	00000172,00000278,09003443	No	$30,000	$5,000	518.2	0.2	143	93	353	2		1	10	0	41.68165	36	36	26	23	109	0	0	2	0	10.4							No
092000047	City of Colorado City	for install backflow valves to prevent reverse flow floods.	09000011	Mitchell		Other	5.4		Mitchell County	00000172,00000278,09003443	No	$30,000	$5,000	518.2	0.2	143	93	353	2		1	10	0	41.68165	36	36	26	23	109	0	0	2	0	10.4							No
092000048	City of Westbrook	clearing debris from bridges, drains and culverts.	09000015	Mitchell		Other	0.4		Mitchell County	00000172,00000278,09003449	No	$25,000	$0	2.5	0.0	9	9	99	0		0	0	0	0	3	3	0	2	24	0	0	0	0	0.0							No
092000049	Nolan County	from drains, culverts and watershed streams for the purposes of flood reduction and to enhance water run-off throughout the County.	09000004	Nolan		Other	910.6		Nolan County	00000156,09000147,09000170,00000172,00000261,00000278,00000284,00000295,00000445,09000499,09000852,09002581	No	$30,000	$5,000	44368.9	7.8	90	16	23	0		5	21	0	3888.307	23	23	2	4	7	0	1	5	0	972.1							No
092000050	City of Blackwell	Establish, adopt and implement a "green infrastructure" program for parks, nature preserves, greenbelts, etc.	09000002	Nolan,Coke		Other	0.6		Blackwell	09000147,00000170,00000261,00000278,00000284,09000499,09000852,09002581	No	$30,000	$5,000	23.8	0.0	2	3	14	0		0	0	0	0	1	1	0	0	3	0	0	0	0	0.0							No
092000051	City of Blackwell Debris Program	Implement maintenance program for clearing debris from drains/culverts.	09000011	Nolan,Coke		Other	0.6		Blackwell	09000147,00000170,00000261,00000278,00000284,09000499,09000852,09002581	No	$60,000	$35,000	23.0	0.0	9	3	14	0		0	0	0	0.000597	3	3	0	0	3	0	0	0	0	0.0							No
092000052	City of Big Lake Debris Cleaning Program	clearing debris from bridges, drains and culverts.	09000999	Reagan		Other	2.4		Big Lake	09003500	No	$25,000	$0	95.0	0.1	75	53	142	0		2	2	0	3.935484	19	19	20	13	42	0	0	0	0	1.0							No
092000053	Reagan County Sediment Cleanout Program	Adopt and implement a program for clearing debris from bridges, drains and culverts.	09000004	Reagan		Other	1170.9		Reagan County	00000126,00000127,09000150,00000151,00000261,00000272,00000684,00002402,09003500	No	$30,000	$5,000	122272.6	59.8	161	79	200	0		2	39	0	13306.96	41	41	34	19	64	0	0	10	0	3326.7							No
092000054	Runnels County	Adopt and implement a program for clearing debris from bridges, drains and culverts.	09000002	Runnels		Other	1052.5		Runnels County	00000124,09000131,00000145,09000147,00000168,00000170,00000261,00000278,00000284,00000307,09000539,09002162,09002451,09003374,09003442	No	$25,000	$0	128592.5	35.4	164	41	178	0		18	125	0	39209.77	41	41	17	10	62	0	4	31	0	9802.4							No
092000055	Taylor County	Establish, adopt, and implement a "green infrastructure" program for parks, nature preserve, greenbelts, etc.	09000004	Taylor		Other	915.6		Taylor County	00000145,00000168,00000170,00000278,00000284,00000295,00000307	No	$30,000	$5,000	21048.0	4.3	70	51	46	0		10	18	0	3492.162	18	18	5	12	11	0	2	4	0	873.0							No
092000056	Taylor County	program by providing FEMA/NFIP materials to mortgage lenders, real agents and insurance agents and place in local libraries.	09000015	Taylor		Other	915.6		Taylor County	00000145,00000168,00000170,00000278,00000284,00000295,00000307	No	$30,000	$5,000	21048.0	4.3	70	51	46	0		10	18	0	3492.162	18	18	5	12	11	0	2	4	0	873.0							No
092000057	Taylor County	Update FIS and FIRM maps once BLE is available	09000004	Taylor		Other	915.6		Taylor County	00000145,00000168,00000170,00000278,00000284,00000295,00000307	No	$30,000	$5,000	21048.0	4.3	70	51	46	0		10	18	0	3492.162	18	18	5	12	11	0	2	4	0	873.0							No
092000058	Taylor County Debris Clearing Program	clearing debris from bridges, drains and culverts.	09000999	Taylor		Other	915.6		Taylor County	00000168	No	$151,200	$126,200	21048.6	4.3	70	51	46	0		10	18	0	3492.508	18	18	5	12	11	0	2	4	0	873.1							No
092000059	Taylor County Gauge/Flood Barrier Program	Install automated creek rain gauges and automated barriers for flooded roadways.	09000002	Taylor		Other	915.6		Taylor County	00000168	No	$151,200	$126,200	21048.6	4.3	70	51	46	0		10	18	0	3492.508	18	18	5	12	11	0	2	4	0	873.1							No
092000060	Nolan County Warning Siren Program	sirens for any emergency of natural and/or man-made hazardous events. The warning sirens would be strategically placed in the following locations within the County: Cities of Sweetwater, Roscoe, Blackwell, Nolan, Maryn	09000999	Nolan		Other	910.7		Nolan County	00000170	No	$367,972	$342,972	44376.2	7.8	90	16	23	0		5	21	0	3888.377	23	23	2	4	7	0	1	5	0	972.1							No
092000061	City of Odessa Rain Guage Program	Install Rain gauges at eight (8) locations around city to collect data and improve warning system.	09000006	Midland,Ector		Other	51.1		Odessa	00000151,00000152,00000272,09000288,09001698,09002836,09002838	No	$30,000	$5,000	6956.9	4.2	6774	5481	25984	10		26	167	0	45.75022	1694	1694	854	1370	10384	2	6	42	0	11.4							No
092000062	Cochran County Road Signs Program	signs to warn motorists of a potential hazard or dangers on or near the roadway, which could be rapidly positioned by County personnel	09000006	Cochran		Other	773.6		Cochran County	00000187,09000206,00000275,00000295	No	$48,000	$23,000	64303.4	37.3	23	12	53	0		0	144	0	15614.11	6	6	1	3	13	0	0	36	0	3903.5							No
092000063	Coke County NFIP Application	Application to join the NFIP	09000011,09000017	Coke		Other	924.6		Coke County	09000147	No	$100,000	$75,000	110299.9	22.9	245	104	124	0		14	55	0	5435.483	62	62	50	26	43	0	3	14	0	1358.9							No
092000064	Reagan County NFIP Application	Join the National Flood Insurance Program (NFIP).	09000011,09000017	Reagan		Other	1170.9		Reagan County	00000126	No	$30,000	$5,000	122272.1	59.8	161	79	200	0		2	39	0	13305.97	40	40	34	19	64	0	0	10	0	3326.5							No
092000065	City of Robert Lee Flood Insurance Awareness Program	regarding availability of flood insurance by disseminating brochures in public places, such as City Hall.	09000004	Coke		Other	1.2		Robert Lee	09000147,00000261,00000284,09002685	No	$30,000	$5,000	103.3	0.0	42	33	37	0		0	2	0	1.121107	11	11	2	8	9	0	0	0	0	0.3							No
092000066	Concho County Flood Awareness Program	benefits of flood insurance as it pertains to elevating structures in the SFHA and in accordance with the local Floodplain Ordinance	09000011	Concho		Other	989.0		Concho County	00000124,09000131,00000144,00000145,00000261,00000278,00000284,00000301,00002653	No	$30,000	$5,000	57590.0	14.8	103	52	77	0		4	24	0	12260.43	26	26	15	13	19	0	1	6	0	3065.1							No
092000067	Crockett County Flood Warning System	water district with rainfall observer. Educate community on dangers of low water crossings.	09000006	Crockett		Other	2795.7		Crockett County	00000051,00000052,09000068,00000126,00000127,00000261,00000272,00000284,00000684	No	$30,000	$5,000	7257.3	1.5	9	9	99	0		0	1	0	5.348695	3	3	0	2	24	0	0	0	0	1.3							No
092000068	Crockett County Flood Insurance Awareness Program	regarding availability of flood insurance by disseminating brochures in public places, such as City Hall.	09000004	Crockett		Other	2795.7		Crockett County	00000051,00000052,09000068,00000126,00000127,00000261,00000272,00000284,00000684	No	$30,000	$5,000	7257.3	1.5	9	9	99	0		0	1	0	5.348695	3	3	0	2	24	0	0	0	0	1.3							No
092000069	City of Goldsmith TADD Program	(TADD)	09000006	Ector		Other	0.3		Goldsmith	00000152,00000272,09003576	No	$30,000	$5,000	99.0	1.0	9	9	99	0		0	0	0	0	3	3	0	2	24	0	0	0	0	0.0							No
092000070	City of Odessa NFIP Education Program	pamphlets to owners of flood-prone properties. Conduct workshops for local lending agencies, insurance agents, surveyors and title companies to promote availability of and understanding of flood insurance.	09000011,09000017	Midland,Ector		Other	44.3		Odessa	00000151,00000152,00000272,09002836	No	$25,000	$0	5885.9	3.7	6574	5476	24987	10		26	155	0	25.71767	1644	1644	745	1369	10133	2	6	39	0	6.4							No
092000071	City of Mertzon Local Ordinance Evaluation	Examine local flood ordinance to ensure minimum NFIP standards are included for program compliance and to consider possible higher regulatory standards.	09000999	Irion		Other	1.5		Mertzon	09002400	No	$30,000	$5,000	161.1	0.1	96	46	83	0		4	2	0	0.685018	24	24	10	11	25	0	1	0	0	0.2							No
092000072	Irion County Flood Warning System	Draft flood warning system	09000008,09000011	Irion		Other	1047.5		Irion County	09000068,00000126,09000131,00000261,00000284,00001240,09002400	No	$30,000	$5,000	133921.6	23.8	354	104	235	0		8	48	0	2458.436	89	89	32	26	72	0	2	12	0	614.6							No
092000073	Irion County Flood Insurance Education Program	benefits of flood insurance as it pertains to elevating structures in the SFHA and in accordance with the local Floodplain Ordinance	09000011	Irion		Other	1047.5		Irion County	09000068,00000126,09000131,00000261,00000284,00001240,09002400	No	$30,000	$5,000	133921.6	23.8	354	104	235	0		8	48	0	2458.436	89	89	32	26	72	0	2	12	0	614.6							No
092000074	Irion County NFIP Compliance Evaluation	language of flood ordinance to ensure minimum NFIP compliance standards and develop higher regulatory standards for permitting in flood prone areas of the County.	09000011,09000017	Irion		Other	1047.5		Irion County	09000068,00000126,09000131,00000261,00000284,00001240,09002400	No	$100,000	$75,000	133921.6	23.8	354	104	235	0		8	48	0	2458.436	89	89	32	26	72	0	2	12	0	614.6							No
092000075	Irion County CTP Program	Draft CTP program	09000002	Irion		Other	1047.5		Irion County	09000068,00000126,09000131,00000261,00000284,00001240,09002400	No	$30,000	$5,000	133921.6	23.8	354	104	235	0		8	48	0	2458.436	89	89	32	26	72	0	2	12	0	614.6							No
092000076	Lynn County Portable Pumps Program	pumps that can be deployed as needed to mitigate the potential impacts of future flood events.	09000004	Lynn		Other	890.2		Lynn County	00000184,00000186,00000205,00000272,00000275,00000295,00000308,00000441,09003482	No	$250,000	$225,000	32600.3	17.5	340	204	352	1		0	152	0	23560.16	85	85	16	51	123	0	0	38	0	5890.0							No
092000077	City of Westbrook TADD Program	low water crossings through the installation of warning signs and promotion of "Turn Around, Don't Drown" (TADD) Program.	09000006	Mitchell		Other	0.4		Mitchell County	00000172,00000278,09003449	No	$30,000	$5,000	2.5	0.0	9	9	99	0		0	0	0	0	3	3	0	2	24	0	0	0	0	0.0							No
092000078	Town of Loraine Flood Awareness Program	regarding availability of flood insurance by disseminating brochures in public places, such as City Hall.	09000004	Mitchell		Other	1.0		Mitchell County	00000172,00000278,09003448	No	$30,000	$5,000	102.3	0.0	8	6	5	0		0	5	0	1.255103	2	2	3	1	1	0	0	1	0	0.3							No
092000079	Nolan County Flood Awareness Program	program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation meaasures to reduce injuries, fatalities, and property damages.	09000006	Nolan		Other	910.6		Nolan County	00000156,09000147,00000170,00000172,00000261,00000278,00000284,00000295,00000445,09000499,09000852,09002581	No	$30,000	$5,000	44368.9	7.8	90	16	23	0		5	21	0	3888.307	23	23	2	4	7	0	1	5	0	972.1							No

Table 14. Identified Potentially Feasible Flood Management Strategies

														Flood Risk									Reduction in Flood Risk															
FMS ID	FMS Name	Description	Associated Goals (ID)	County	Watershed Name	FMS Type	FMS Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Strategy Cost ($)	Non-recurring, Non-capital Cost ($)	Area in 1% annual Flood risk	Area in 0.2% annual Flood Risk	Estimated number of structures at 1% annual flood risk[4]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Emergency facilities at 1% annual flood risk (#)	Number of low water crossings in project area at 1% annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road closures (#)	Estimated active farm & ranch land at 1% annual flood risk (acres)[5]	Number of structures with reduced 1% annual Flood risk[6]	Number of structures removed from 1% annual Flood risk[6]	Number of structures removed from 0.2% annual Flood risk[6]	Residential structures removed from 1% annual Flood risk	Estimated Population removed from 1% annual Flood risk	Critical facilities removed from 1% annual Flood risk (#)	Number of low water crossings removed from 1% annual Flood risk (#)	Estimated length of roads removed from 1% annual flood risk (miles)	Estimated reduction in road closure occurrences	Estimated active farm & ranch land removed from 1% annual flood risk (acres)[5]	Estimated reduction in fatalities (if available)	Estimated reduction in injuries (if available)	Cost/ Structure removed	Percent Nature-based Solution (Y/N)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Water Supply Benefit (Y/N)
092000080	City of Blackwell Flood Insurance Awareness Program	Implement a public awareness program regarding availability of flood insurance.	09000004	Nolan,Coke		Other	0.6		Blackwell	09000147,00000170,00000261,00000278,00000284,09000499,09000852,09002581	No	$30,000	$5,000	23.8	0.0	2	3	14	0		0	0	0	0	1	1	0	0	3	0	0	0	0	0.0							No
092000081	City of Big Lake Flood Warning System	Implement an education program to inform and notify residents of evacuation routes and dangers of driving into flooded roads and low-water crossings	09000006	Reagan		Other	1.3		Big Lake	00000126,00000261,00001240,09003500	No	$30,000	$5,000	44.9	0.1	68	49	138	0		2	2	0	0.09561	17	17	19	12	40	0	0	0	0	0.0							No
092000082	City of Big Lake CTP Program	Draft CTP program	09000002	Reagan		Other	1.3		Big Lake	00000126,00000261,00001240,09003500	No	$30,000	$5,000	44.9	0.1	68	49	138	0		2	2	0	0.09561	17	17	19	12	40	0	0	0	0	0.0							No
092000083	Reagan County Flood Awareness Program	Develop flood education and awareness program; disseminate materials with new permits and place in the library at City Hall	09000004	Reagan		Other	1170.9		Reagan County	00000126,00000127,09000150,00000151,00000261,00000272,00000684,00001240,09003500	No	$30,000	$5,000	122272.6	59.8	161	79	200	0		2	39	0	13306.96	41	41	34	19	64	0	0	10	0	3326.7							No
092000084	Reagan County CTP Program	Draft CTP program	09000002	Reagan		Other	1170.9		Reagan County	00000126,00000127,09000150,00000151,00000261,00000272,00000684,00001240,09003500	No	$30,000	$5,000	122272.6	59.8	161	79	200	0		2	39	0	13306.96	41	41	34	19	64	0	0	10	0	3326.7							No
092000085	City of Miles Flood Awareness Program	Draft flood awareness program	09000006	Runnels		Other	1.5		Miles	00000145,00000278,00000284,09000539,09003442	No	$30,000	$5,000	132.8	0.0	9	9	99	0		2	3	0	21.90781	3	3	0	2	24	0	0	1	0	5.5							No
092000086	City of Winters Flood Awareness Program	program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages.	09000006	Runnels		Other	2.2		Winters	00000145,00000278,00000284,09003374,09003442	No	$30,000	$5,000	212.4	0.1	1	1	14	0		0	2	0	33.34377	1	1	0	0	3	0	0	0	0	8.3							No
092000087	Runnels County Flood Awareness Program	program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages.	09000006	Runnels		Other	1052.5		Runnels County	00000124,09000131,00000145,09000147,00000168,00000170,00000261,00000278,00000284,00003072,09000539,09002162,09002451,09003374,09003442	No	$30,000	$5,000	128592.5	35.4	164	41	178	0		18	125	0	39209.77	41	41	17	10	62	0	4	31	0	9802.4							No
092000088	Runnels County Higher Standareds Program	Adopt higher floodplain standards. Restrict future development in high risk areas.	09000011	Runnels		Other	1052.5		Runnels County	00000124,09000131,00000145,09000147,00000168,00000170,00000261,00000278,00000284,00003072,09000539,09002162,09002451,09003374,09003442	No	$100,000	$75,000	128592.5	35.4	164	41	178	0		18	125	0	39209.77	41	41	17	10	62	0	4	31	0	9802.4							No
092000089	City of Ballinger Flood Awareness Program	Building Inspectors and Code Enforcement officer regarding NFIP Compliance regulations pertaining to permitting and inspections.	09000006	Runnels		Other	3.4		Ballinger	00000145,00000278,00000284,09002451	No	$30,000	$5,000	810.5	0.1	13	7	127	0		0	15	0	99.60306	4	4	0	1	32	0	0	4	0	24.9							No
092000090	City of Ballinger DCM	Consider stormwater criteria for infrastructure and floodplain ordinances to avoid new exposure to flood hazards.	09000999	Runnels		Other	3.4		Ballinger	00000145,00000278,00000284,09002451	No	$100,000	$75,000	810.5	0.1	13	7	127	0		0	15	0	99.60306	4	4	0	1	32	0	0	4	0	24.9							No
092000091	City of Ballinger NFIP Cross-Train Program	hazard information center for use by local residents and schools to educate the public about the top natural hazards affecting the CVCOG region.	09000011	Runnels		Other	3.4		Ballinger	00000145,00000278,00000284,09002451	No	$33,000	$8,000	810.5	0.1	13	7	127	0		0	15	0	99.60306	4	4	0	1	32	0	0	4	0	24.9							No
092000092	El Dorado Flood Awareness Program	Promote flood education and dangers of driving into flooded roadways through Turn Around Don't Drown program.	09000006	Schleicher		Other	1.4		Eldorado	00000051,00000261,00000284,09003113	No	$30,000	$5,000	78.6	0.0	20	10	173	0		0	3	0	1.419526	3	5	6	2	45	0	0	0	0	0.4							No
092000093	Schleicher County Flood Insurance Education Program	Draft flood insurance education program	09000002	Schleicher		Other	1310.0		Schleicher County	00000051,00000052,09000668,09000131,00000261,00000284,00003072,09003113	No	$30,000	$5,000	41425.6	7.5	99	40	191	0		2	17	0	1263.989	25	25	12	10	62	0	0	4	0	316.0							No
092000094	Schleicher County CTP Program	Mapping updates.	09000999	Schleicher		Other	1308.8		Schleicher County	00000051	No	$30,000	$5,000	41420.6	7.5	99	40	191	0		2	17	0	1263.989	25	25	12	10	62	0	0	4	0	316.0							No
092000095	Snyder Flood Insurance Awareness Program	Implement a public awareness program to inform the public about the availability of flood insurance.	09000004	Scurry		Other	8.3		Snyder	00000116,00000278,09000288,09003309	No	$30,000	$5,000	915.0	0.1	445	266	1633	1		3	21	0	41.68422	112	112	18	66	485	0	0	5	0	10.4							No
092000096	Scurry County New Development Criteria	Require new public buildings to be sited on low risk parcels.	09000011	Scurry		Other	906.5		Scurry County	00000115,00000116,00000183,00000272,00000275,00000278,00000288,00003295,00003445,09003309	No	$30,000	$5,000	54305.5	14.1	606	324	1754	1		10	76	0	11692.49	152	152	30	81	537	0	2	19	0	2923.1							No
092000097	Scurry County Flood Awareness Program	program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages	09000006	Scurry		Other	906.5		Scurry County	00000115,00000116,00000183,00000272,00000275,00000278,00000288,00003295,00003445,09003309	No	$30,000	$5,000	54305.5	14.1	606	324	1754	1		10	76	0	11692.49	152	152	30	81	537	0	2	19	0	2923.1							No
092000098	Sterling Flood Insurance Education Program	Draft flood insurance education program	09000011	Sterling		Other	1.0		Sterling City	00000149,00000261,00000284,09002715	No	$30,000	$5,000	140.4	0.1	132	90	156	0		7	5	0	1.592261	33	33	14	22	57	0	1	1	0	0.4							No
092000099	Sterling TADD Program	regarding dangers of driving across low water crossings through Turn Around Don't Drown.	09000006	Sterling		Other	1.0		Sterling City	00000149,00000261,00000284,09002715	No	$30,000	$5,000	140.4	0.1	132	90	156	0		7	5	0	1.592261	33	33	14	22	57	0	1	1	0	0.4							No
092000100	City of San Angelo LWC Awareness Program	Draft flood awareness program	09000006	Tom Green		Other	61.9		San Angelo	00000131,00000261,00000284,09003309	No	$110,000	$85,000	6785.9	3.8	2587	1821	7934	6		27	94	0	300.458	647	647	409	455	2928	1	6	24	0	75.1							No
092000101	Cochran County NFIP Application	Join the National Flood Insurance Program (NFIP).	09000011,09000017	Cochran		Other	773.6		Cochran County	00000187	No	$30,000	$5,000	64306.3	37.3	23	12	53	0		0	144	0	15614.36	6	6	1	3	13	0	0	36	0	3903.6							No
092000102	Coke County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Coke		Other	924.6		Coke County	09000147	No	$100,000	$75,000	110299.9	22.9	245	104	124	0		14	55	0	5435.483	62	62	50	26	43	0	3	14	0	1358.9							No
092000103	Town of Bronte Flood Insurance Awareness Program	program; disseminate materials with new permits and place in the library at City Hall.	09000999	Coke		Other	1.4		Bronte	09003477	No	$30,000	$5,000	193.5	0.1	38	17	20	0		2	2	0	6.052694	10	10	13	4	7	0	0	0	0	1.5							No
092000104	Concho County NFIP Application	Join the National Flood Insurance Program (NFIP).	09000999	Concho		Other	988.9		Concho County	00000124	No	$30,000	$5,000	57587.3	14.8	103	52	77	0		4	24	0	12259.07	26	26	15	13	19	0	1	6	0	3064.8							No
092000105	Concho County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Concho		Other	988.9		Concho County	00000124	No	$100,000	$75,000	57587.3	14.8	103	52	77	0		4	24	0	12259.07	26	26	15	13	19	0	1	6	0	3064.8							No
092000106	Town of Paint Rock NFIP Application	Join the National Flood Insurance Program (NFIP).	09000999	Concho		Other	1.6		Paint Rock	09002653	No	$30,000	$5,000	445.2	0.2	9	7	7	0		1	1	0	139.3244	3	3	3	4	1	1	0	0	0	34.8							No
092000107	Crockett County DCM	Outreach Program: Discuss Drainage Criteria Manual	09000999	Crockett		Other	2797.1		Crockett County	00000052	No	$100,000	$75,000	7259.2	1.5	9	9	99	0		0	1	0	5.348695	3	3	0	2	24	0	0	0	0	1.3							No
092000108	Ector County DCM	Outreach Program: Discuss Drainage Criteria Manual	09000999	Ector		Other	899.6		Ector County	00000152	No	$100,000	$75,000	91524.2	33.8	13045	10079	32288	13		14	306	0	150.4829	3261	3261	1296	2519	13281	3	8	76	0	37.6							No
092000109	Gaines County DCM	Outreach Program: Discuss Drainage Criteria Manual	09000999	Gaines		Other	1497.6		Gaines County	09000118	No	$100,000	$75,000	276508.7	132.6	1890	814	2679	1		5	434	0	145295.5	473	473	236	203	996	0	1	108	0	36323.9							No
092000110	Glasscock County NFIP Application	Join the National Flood Insurance Program (NFIP).	09000011,09000017	Glasscock		Other	897.2		Glasscock County	09000150	No	$30,000	$5,000	105929.6	47.4	141	3	74	0		0	34	0	25211.56	36	36	14	0	21	0	0	8	0	6302.9							No
092000111	Glasscock County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Glasscock		Other	897.2		Glasscock County	09000150	No	$100,000	$75,000	105929.6	47.4	141	3	74	0		0	34	0	25211.56	36	36	14	0	21	0	0	8	0	6302.9							No
092000112	Howard County NFIP Application	Application to join the NFIP.	09000011,09000017	Howard		Other	900.7		Howard County	09000173	No	$30,000	$5,000	117504.4	42.7	1372	662	3981	1		20	196	0	35444.84	343	343	224	165	1248	0	5	49	0	8861.2							No
092000113	Howard County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Howard		Other	900.7		Howard County	09000173	No	$100,000	$75,000	117504.4	42.7	1372	662	3981	1		20	196	0	35444.84	343	343	224	165	1248	0	5	49	0	8861.2							No
092000114	City of Mertzon NFIP Application	Join The NFIP.	09000011,09000017	Irion		Other	1.5		Mertzon	09002400	No	$30,000	$5,000	161.1	0.1	96	46	88	0		4	2	0	0.685018	24	24	24	10	11	25	0	1	0	0.2							No
092000115	Irion County NFIP Application	Join The NFIP.	09000011,09000017	Irion		Other	1047.5		Irion County	09000068	No	$30,000	$5,000	133920.5	23.8	354	104	235	0		8	48	0	2458.542	89	89	32	26	72	0	2	12	0	614.6							No
092000116	Martin County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Martin		Other	912.1		Martin County	09000174	No	$100,000	$75,000	146375.3	66.8	902	451	2015	3		5	229	0	55702.27	226	226	64	112	728	0	1	57	0	13925.6							No
092000117	City of Blackwell Warning System	siren to notify residents of severe weather events and implement area-wide telephone Emergency Notification System ("Reverse 911").	09000011	Nolan,Coke		Other	0.6		Blackwell	09000147,00000170,00000261,00000278,00000284,09000499,09000852,09002581	No	$60,000	$35,000	23.0	0.0	9	3	14	0		0	0	0	0.000597	3	3	0	0	3	0	0	0	0	0.0							No
092000118	Reagan County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Reagan		Other	1170.9		Reagan County	00000126	No	$100,000	$75,000	122272.1	59.8	161	79	200	0		2	39	0	13305.97	41	41	34	19	64	0	0	10	0	3326.5							No
092000119	Runnels County CRS Participation	Join the FEMA Community Rating System.	09000999	Runnels		Other	1051.8		Runnels County	00000145	No	$30,000	$5,000	128515.8	35.3	164	41	178	0		18	125	0	39196.92	41	41	17	10	62	0	4	31	0	9799.2							No
092000120	Schleicher County NFIP Application	Join the National Flood Insurance Program (NFIP).	09000011,09000017	Schleicher		Other	1308.8		Schleicher County	00000051	No	$30,000	$5,000	41420.6	7.5	99	40	191	0		2	17	0	1263.989	25	25	12	10	62	0	0	4	0	316.0							No
092000121	Schleicher County DCM	Consider stormwater criteria for infrastructure and floodplain ordinances to avoid new exposure to flood hazards.	09000999	Schleicher		Other	1308.8		Schleicher County	00000051	No	$100,000	$75,000	41420.6	7.5	99	40	191	0		2	17	0	1263.989	25	25	12	10	62	0	0	4	0	316.0							No
092000122	Sterling County NFIP Application	Join the National Flood Insurance Program (NFIP).	09000011,09000017	Sterling		Other	919.2		Sterling County	09000149	No	$30,000	$5,000	103861.9	18.6	179	97	180	0		7	30	0	2288.687	45	45	19	24	69	0	1	8	0	572.2							No
092000123	Sterling County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Sterling		Other	919.2		Sterling County	09000149	No	$100,000	$75,000	103861.9	18.6	179	97	180	0		7	30	0	2288.687	45	45	19	24	69	0	1	8	0	572.2							No
092000124	Sterling County CTP Program	Draft CTP program	09000999	Sterling		Other	919.2		Sterling County	09000149	No	$30,000	$5,000	103861.9	18.6	179	97	180	0		7	30	0	2288.687	45	45	19	24	69	0	1	8	0	572.2							No
092000125	Town of Meadow NFIP Application	Application to join NFIP. Encourage adopting minimum FEMA Standards	09000011,09000017	Terry		Other	1.6		Meadow	09003317	No	$30,000	$5,000	297.4	0.2	14	5	9	0		0	2	0	267.8905	4	4	3	1	3	0	0	0	0	67.0							No
092000126	Upton County NFIP Application	(NFIP).	09000011,09000017	Upton		Other	1235.9		Upton County	00000127	No	$30,000	$5,000	64197.4	51.2	41	16	23	0		1	34	0	6036.394	11	11	5	4	8	0	0	8	0	1509.1							No
092000127	Upton County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Upton		Other	1235.9		Upton County	00000127	No	$100,000	$75,000	64197.4	51.2	41	16	23	0		1	34	0	6036.394	11	11	5	4	8	0	0	8	0	1509.1							No
092000128	Yoakum County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Yoakum		Other	797.7		Yoakum County	09000206	No	$100,000	$75,000	150121.5	68.1	543	263	799	0		2	292	0	63670.6	136	136	42	65	328	0	0	73	0	15917.7							No
092000129	Upper Colorado Playa Lake Preservation Program	Improve the health of playa lakes via collaborative effort between communities in the region.	09000999	Andrews,Borden,Cochran,Coke,Coleman,Concho,Crockett,Dawson,Ector,Gaines,Garza,Glasscock,Hockley,Howard,Irion,Lynn,Martin,Menard,Midland,Mitchell,Nolan,Reagan,Runnels,Schleicher,Scurry,Sterling,Taylor Terry,Tom Green,Upton,Winkler,Yoakum		Other	21171.6		Upper Colorado River Authority	09000999	No	$25,000	$0	2893508.0	1127.2	36361	23637	81457	54		255	4338	0	719367.3	9090	9090	4318	5909	32721	13	63	1084	0	179841.8							No
092000130	Tom Green County DCM	Outreach Program: Discuss Stormwater Criteria Design Manual	09000999	Tom Green		Other	1533.9		Tom Green County	09000131	No	$100,000	$75,000	211746.4	66.9	5166	3373	9948	7		47	253	0	48498.69	1292	1292	653	843	4008	1	11	63	0	12124.7							No
092000132	Midland County Panel B Projects	playas, drainage basins, and caliche pits, connecting to a culvert under I-20 through to a constructed ditch	09000999	Midland		Other	15.5		Midland County	00000151	No	$25,000	$0	2709.8	2.1	1109	720	2381	0		0	33	0	12.21667	278	278	117	180	1050	0	0	8	0	3.1							No
092000133	Midland County Panel C Projects	flow from I-20 to large playa south of Odessa	09000999	Midland		Other	13.8		Midland County	00000151	No	$25,000	$0	3065.0	1.4	138	22	490	0		0	12	0	17.91893	35	35	14	5	133	0	0	3	0	4.5							No
092000134	Midland County Panel D Projects	Floodway definition, easements, and a constructed channel	09000999	Midland		Other	85.4		Midland County	00000151	No	$25,000	$0	13260.3	8.3	352	114	246	0		1	12	0	136.1694	88	88	47	28	110	0	0	3	0	34.0							No
092000135	Midland County Panel E Projects	Proposed easements to protect playa to the west of South County Road 1232	09000999	Midland		Other	76.1		Midland County	00000151	No	$25,000	$0	10876.4	5.6	259	139	253	0		1	10	0	652.3766	65	65	32	34	84	0	0	2	0	163.1							No
092000136	Midland County Panel G Projects	North of I20 through caliche pit and second small playa, terminating in a large deep playa west of South County Road 1210 (Midkiff Road). System of ditches to connect three caliche pits to ease flooding on Midkiff Road	09000999	Midland		Other	12.6		Midland County	00000151	No	$25,000	$0	1398.3	0.8	525	258	960	0		0	16	0	19.15266	132	132	66	64	346	0	0	4	0	4.8							No

Table 14. Identified Potentially Feasible Flood Management Strategies

														Flood Risk										Reduction in Flood Risk																	
FMS ID	FMS Name	Description	Associated Goals (ID)	County	Watershed Name	FMS Type	FMS Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Strategy Cost ($)	Non-recurring, Non-capital Cost ($)	Area in 1% annual Flood risk	Area in 0.2% annual Flood Risk	Estimated number of structures at 1% annual flood risk[3]	Residential structures at 1% annual flood risk	Estimated Population at 1% annual flood risk	Critical facilities at 1% annual flood risk (#)	Emergency facilities at 1% annual flood risk (#)	Number of low water crossings in project area at 1% annual flood risk (#)	Estimated length of roads at 1% annual flood risk (miles)	Estimated number of road closures (#)	Estimated active farm & ranch land at 1% annual flood risk (acres)[4]	Number of structures with reduced 1% annual Flood risk[5]	Number of structures removed from 1% annual Flood risk[5]	Number of structures removed from 0.2% annual Flood risk[5]	Residential structures removed from 1% annual Flood risk	Estimated Population removed from 1% annual Flood risk	Critical facilities removed from 1% annual Flood risk (#)	Number of low water crossings removed from 1% annual Flood risk (#)	Estimated length of roads removed from 1% annual flood risk (miles)	Estimated reduction in road closure occurrences	Estimated active farm & ranch land removed from 1% annual flood risk (acres)[4]	Estimated reduction in fatalities (if available)	Estimated reduction in injuries (if available)	Cost/ Structure removed	Percent Nature-based Solution (Y/N)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Water Supply Benefit (Y/N)
092000137	Midland County Panel H Projects	Draw from Cotton Flad Road to FM 715. Proposed solutions to be further developed in Flood Planning Study.	09000999	Midland		Other	20.8		Midland County	00000151	No	$25,000	$0	1906.1	0.9	750	346	1904	0		2	13	0	209.7224	188	188	71	86	788	0	0	3	0	52.4							No
092000138	Midland County Panel I Projects	Potential projects identified on South Draw near its confluence with Midland Draw. Proposed solutions to be further developed in Flood Planning Study.	09000999	Midland		Other	20.0		Midland County	00000151	No	$25,000	$0	2506.5	1.7	463	182	2446	2		7	20	0	439.0398	116	116	66	45	736	0	1	5	0	109.8							No
092000139	Midland County Panel F Projects	Potential Projects identified in Monahans draw near confluence of Midland Draw. Proposed solutions to be further developed in Flood Planning Study.	09000999	Midland		Other	83.1		Midland County	00000151	No	$25,000	$0	12999.6	6.0	212	101	131	0		1	13	0	1193.407	53	53	23	25	54	0	0	3	0	298.4							No
092000144	Upper Colorado Stream Gauge Analysis	The placement of 10 additional stream gauges across the region in San Angelo, Big Spring, Snyder, and in Irion County to better monitor the flooding occuring.	09000002	Howard, Irion, Scurry, Tom Green		Flood Measurement and Warning	396.0	Riverine	RFPG Upper Colorado	09000068	No	$150,000	$0	0.0	0.0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0.0							No
092000145	Ector County Flood Early Warning System	Purchase and install a flood early warning system along flood-prone waterways in unincorporated areas of the county.	09000006	Ector		Other	906.4		Ector County	00000152	No	$30,000	$5,000	0.0	0.0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0.0							No

** This summary table is only applicable for the Technical Memorandum midpoint deliverable and shall include all identified potential flood mitigation projects.*

A. Estimated farm & ranch land at 100-year flood risk (acres) should only include farm and ranch land that are negatively impacted by flooding events and should not include land that benefits from floodplains for example rice fields.

** Should not include power generating structures*

Appendix A-5

Draft Minutes
Region 9 Regional Flood Planning Group
Meeting on December 10, 2025

Upper Colorado Regional Flood Plan

Technical Consultant Update for Second Cycle

Agenda Item No. 10

December 10, 2025

Technical Consultant Updates

1 Cycle 1 - Amendment

2 Region 9 Website

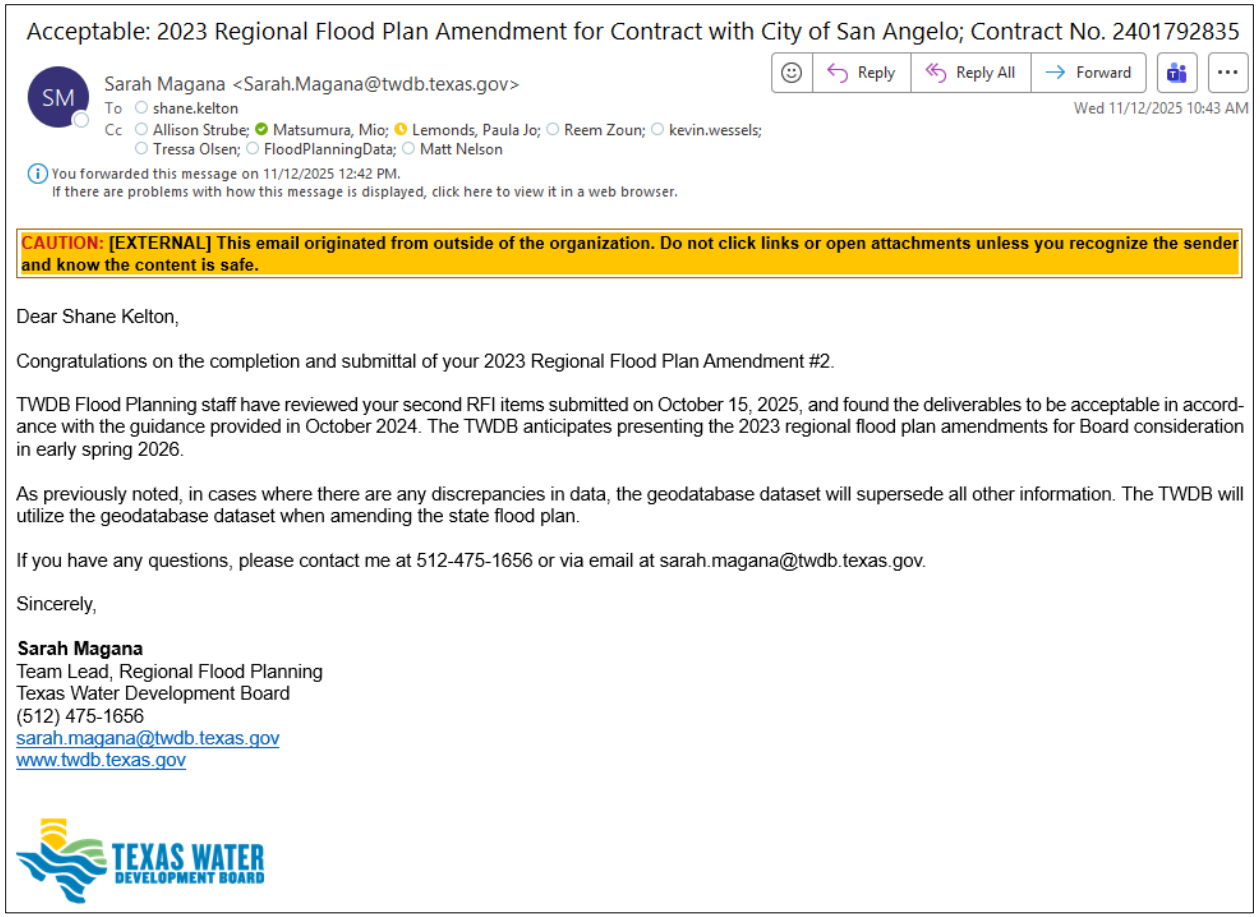
3 Schedule & Next Steps

1

Cycle 1 – Amendment 2

Cycle 1 – Amendment 2

- Accepted November 12, 2025
- Two (2) FMEs added
  - Mineral Wells Road LWC
  - Post Oak Road LWC



Acceptable: 2023 Regional Flood Plan Amendment for Contract with City of San Angelo; Contract No. 2401792835

SM Sarah Magana <Sarah.Magana@twdb.texas.gov>

Reply | Reply All | Forward

To shane.kelton

Cc Allison Strube; Matsumura, Mio; Lemonds, Paula Jo; Reem Zoun; kevin.wessels; Tressa Olsen; FloodPlanningData; Matt Nelson

Wed 11/12/2025 10:43 AM

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CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Shane Kelton,

Congratulations on the completion and submittal of your 2023 Regional Flood Plan Amendment #2.

TWDB Flood Planning staff have reviewed your second RFI items submitted on October 15, 2025, and found the deliverables to be acceptable in accordance with the guidance provided in October 2024. The TWDB anticipates presenting the 2023 regional flood plan amendments for Board consideration in early spring 2026.

As previously noted, in cases where there are any discrepancies in data, the geodatabase dataset will supersede all other information. The TWDB will utilize the geodatabase dataset when amending the state flood plan.

If you have any questions, please contact me at 512-475-1656 or via email at sarah.magana@twdb.texas.gov.

Sincerely,

Sarah Magana
Team Lead, Regional Flood Planning
Texas Water Development Board
(512) 475-1656
sarah.magana@twdb.texas.gov
www.twdb.texas.gov

TEXAS WATER DEVELOPMENT BOARD

2

Region 9 Website

Region 9 Website

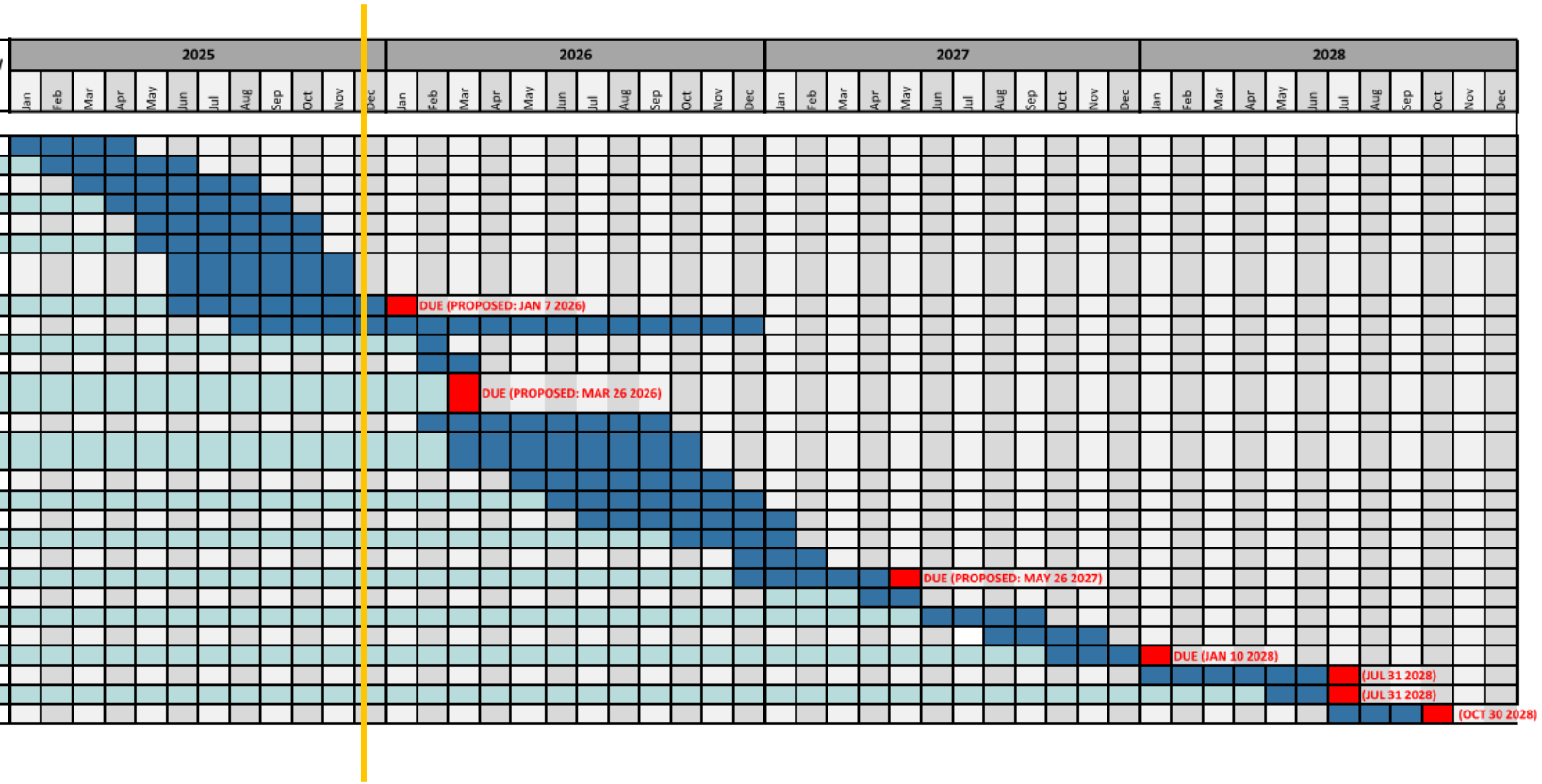
uppercoloradoflood.org

3

Schedule & Next Steps

Schedule

Item	Entity	Activity	Planning SOW Task #
2028 Region Flood Plan			
12	RFPG	Planning Area Description	1
13	RFPG	Existing Condition Flood Risk Analyses	2A
14	RFPG	Future Condition Flood Risk Analyses	2B
15	RFPG	Evaluation and Recommendations on Floodplain Management Practices	3A
16	RFPG	Flood Mitigation Need Analysis	3B
17	RFPG	Flood Mitigation and Floodplain Management Goals	3C
18	RFPG	Identification and Evaluation of Potential Flood Management Evaluations and Potentially Feasible Flood Mitigation Projects and Flood Management Strategies	4A
19	RFPG	Preparation and Submission of Technical Memorandum to the TWDB	4B
20	RFPG	Performance of FMEs	4C
21	TWDB	Issue Notice-to-Proceed on Task 5	
22	RFPG	Recommendation of FMEs, FMSs, and FMPs	5A
23		Recommend and Submit a List of Flood Management Evaluations to be Performed by TWDB	5B
24	RFPG	Impacts of Regional Flood Plan	6A
25	RFPG	Contributions to and Impacts on Water Supply Development and the State Water Plan	6B
26	RFPG	Flood Response Information and Activities	7
27	RFPG	Administrative, Regulatory, and Legislative Recommendations	8
28	RFPG	Flood Infrastructure Financing Analysis	9
29	RFPG	Implementation and Comparison to Previous Regional Flood Plan	11
30	RFPG	Public Participation and Plan Adoption	10
31	RFPG	Prepare and Submit Draft RFP to TWDB	Contract
32	RFPG	Public Input on Draft RFP	All
33	TWDB	TWDB Review and Comment on the Draft RFP	All
34	RFPG	Incorporate TWDB & Public Input into Final RFP	All
35	RFPG	Adopt and Submit the 2028 RFP to the TWDB	All
36	TWDB/Sponsor	Contract expiration	Contract
37	TWDB/Sponsor	Last day that work performed is eligible for reimbursement	Contract
38	TWDB/Sponsor	Last day that the final payment request may be submitted for reimbursement	Contract



Upper Colorado Regional Flood Plan

Discussion and action on definition of “Rural Applicant”

Agenda Item No. 11

December 10, 2025

“Rural Applicant” Definition

- **Municipality** with a population of 10,000 or less; OR located wholly in a county in which no urban area has a population of more than 50,000
- **County** in which no urban center has a population of more than 50,000; with the exception of the County being the applicant for a study or project wholly located in an unincorporated community or communities with a population of 10,000 or less per community

Task 5B – Recommend FMEs to be Performed by the TWDB

- For this task, RFPGs are expected to prioritize FMEs for small and rural communities that lack the resources and staff to develop, perform, or review FMEs independently.
- Technical Conference Q&A: How is TWDB defining small/rural communities (preferred for FMEs)?
  - Response: RFPGs will be responsible for identifying the metrics they use to define small and rural communities with limited resources. The TWDB utilized a definition of "rural applicant" for the FIF IUP (2024-2025) which may be a helpful reference. **Metrics must be approved at a regular RFPG meeting and submitted to TWDB for review.**

FIF IUP (2024-2025) – "Rural Applicant" Definition

Rural Applicant – An applicant that is:

(A) a nonprofit water supply or sewer service corporation created and operating under Chapter 67 of the Texas Water Code or a district or authority created under Section 52, Article III, or Section 59, Article XVI, Texas Constitution, no part of the service area of which is located in an urban area with a population of more than 50,000;

(B) a municipality:

(i) with a population of 10,000 or less; or

(ii) located wholly in a county in which no urban area has a population of more than 50,000;

(C) a county in which no urban area has a population of more than 50,000; or

(D) an entity that:

(i) is a nonprofit water supply or sewer service corporation created and operating under Chapter 67 of the Texas Water Code, a district or authority created under Section 52, Article III, or Section 59, Article XVI, Texas Constitution, a municipality, county, or other political subdivision of the state, or an interstate compact commission to which the state is a party; and

(ii) demonstrates in a manner satisfactory to the board that the entity is rural or the area to be served by the project is a wholly rural area despite not otherwise qualifying under Paragraph (A), (B), or (C).